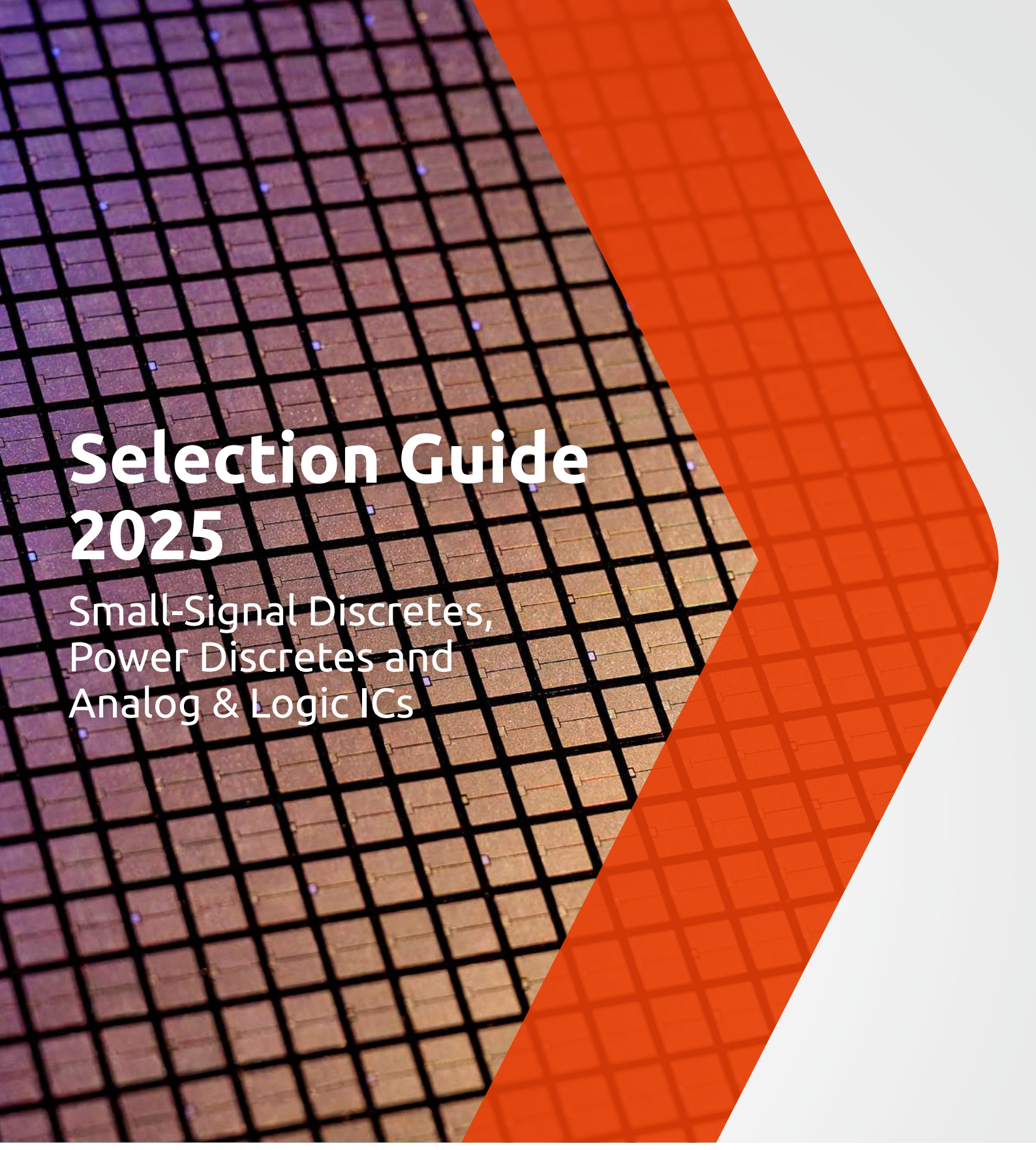


Selection Guide 2025

Small-Signal Discretes, Power Discretes and Analog & Logic ICs

nexperia

MORE EXPERTISE


Bipolar transistors


Diodes


ESD protection, TVS, signal conditioning


MOSFETs


SiC MOSFETs


GaN FETs


IGBTs


Analog & logic ICs

Every piece of electronics in the world can benefit from Nexperia efficiency. That's every design, from the simplest phone charger or light switch to the most complex hybrid automobile. Efficiency means we produce the world's most essential semiconductors, the finishing touches that empower electronic designs everywhere. That's all we do, **more or less.**

LESS COMPLEXITY

Introduction

Welcome to the 2025 edition of the Nexperia Selection Guide. Here we present all our Small-Signal Discretes, Power Discretes and Analog & Logic ICs in one single document to give you a complete overview. We aim to make it even easier for you to find the best product for your design.

Our extensive portfolio offers a wide range of general purpose devices and those that meet the stringent standards set by the automotive industry. They are housed in some of the most advanced, industry-leading small packages that combine power and thermal efficiency with best-in-class quality levels.

Alongside quality and efficiency, Nexperia customers value reliability and a consistent supply they can trust. We produce consistently reliable semiconductor components at high volume (Over 100 billion annually) and we work at every step to safeguard the long-term availability of our manufacturing processes and products, to ensure secure supply for all our customers.

We have a long history and broad experience. That ensures we can support you with the dedicated in-house technical support you need - from simplifying selection via quick-reference material to simple-to-use design tools and application insights. All to help drive up efficiency in your designs.

All the functionality you need in one spot

Just like on our website, you will find the Selection Guide is split into our six key product areas. There is also a dedicated section on packages, highlighting the latest package innovations and packing options.

Bipolar transistors
- Resistor-equipped, low V_{CEsat} and small-signal transistors
- Standard SMD, leadless and clip-bond packages

Diodes
- Broad choice of Zener, Schottky and switching diodes
- Ultra-small, low-profile surface-mount package options
- SiC Schottky diodes in surface-mount and through hole package options

ESD protection, filtering and signal conditioning
- Extensive range of protection in ultra-small form factors
- Optimized for signal integrity, robustness and system protection

MOSFETs
- Low $R_{DS(on)}$ devices from < 20 V to > 200 V
- Industry-leading, high-quality, highly robust, copper-clip SMD packaging, LFPAK

SiC MOSFETs
- High-performance 1200 V SiC MOSFETs for superior efficiency
- Optimized for high-speed switching and reduced losses
- Available in well-established 3-pin & 4-pin TO-247 package, 7-pin TO-263 package & top side cooling X.PAK package
- Robust and reliable performance in demanding power applications

Power GaN FETs
- Efficient and effective power FETs from 100 - 650 V
- Cascode and e-mode configurations
- Industry-standard TO-247, DFN, WLCSP and LGA packages
- High-quality, highly robust copper-clip surface mount package technology, CCPAK

IGBTs
- 650V portfolio for industrial applications
- High power density & high ruggedness reliability
- Industry-standard packaging (TO-247)
- Low conduction & switching losses

Analog & logic ICs
- Comprehensive portfolio of Logic, Translator and Analog switch functions
- Expending portfolio of I²C GPIO, Battery Booster and Energy Harvesting products
- Unrivalled package innovation for various pin counts with low power solutions

Packages
- The next generation of packaging for volume production
- Package cross-reference and packing options

As an innovative company we are continually adding to our product portfolio, so to discover all our latest product information you should visit our website – www.nexperia.com

Our commitment:

quality and reliability

AEC-Q100/Q101 qualified

We qualify our products according to the automotive AEC-Q100/Q101 standard and even exceed its requirements, for instance when doing extended lifetime testing.

Go for quality

All our processes and manufacturing plants are subject to regular international and internal audits, including the following:

- ISO9001
- IATF 16949 for automotive sites
- ISO14001
- OHSAS18001

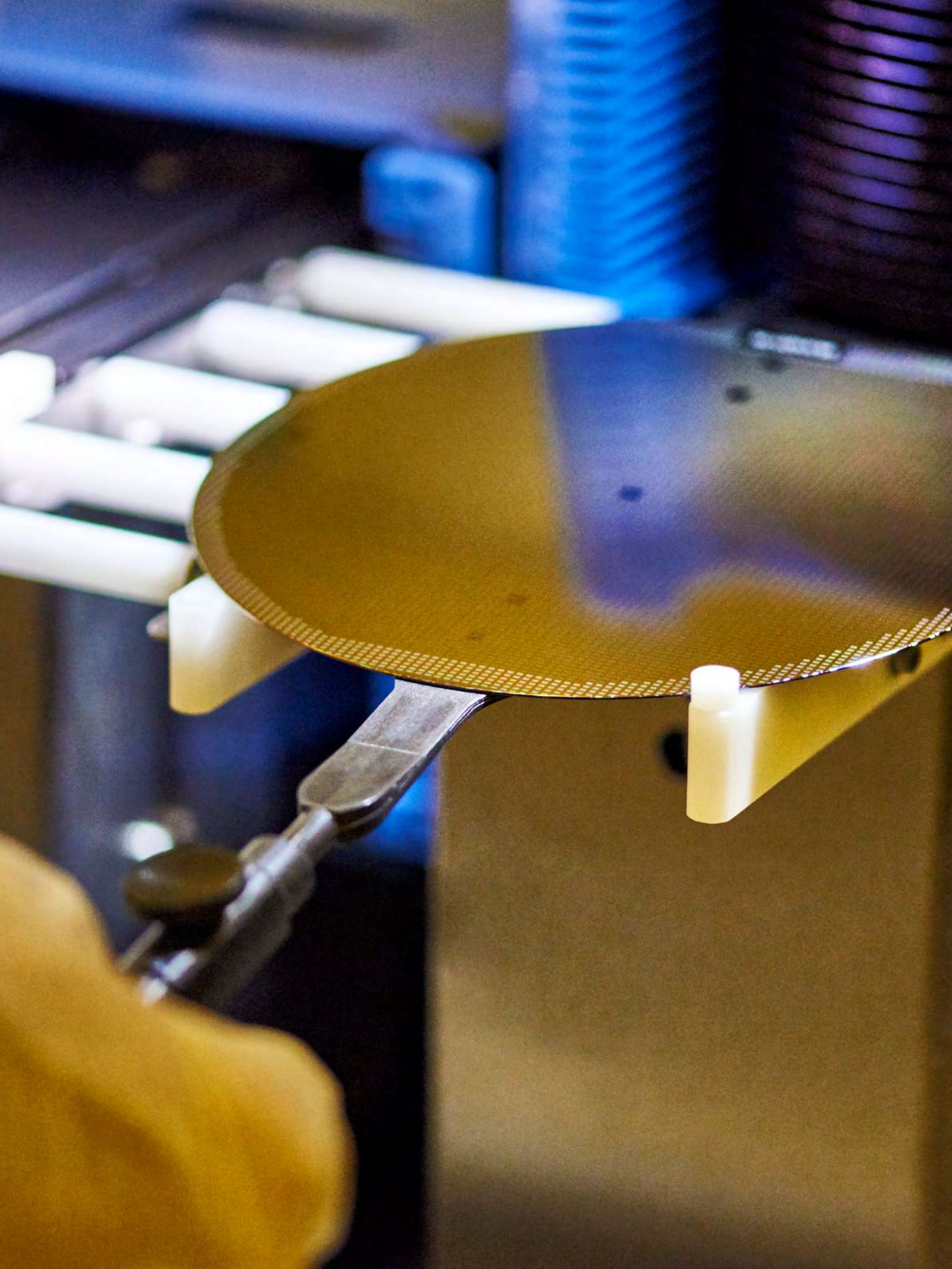
Design for excellence

Nexperia's Design for Excellence (DfX) program ensures that each new development builds on past learning and that best practices are always employed. The result is continual product improvement.

Zero defects

Zero defects is our standard through the organisation. A rigorous 8-discipline approach and thorough 5-why analysis ensure strong improvements are constantly made to our products and processes.

Rigorous attention to detail and commitment to quality have yielded a very low product failure rate of a single-digit part per billion (ppb).



Selection Guide 2025

Small-Signal Discretes, Power Discretes and Analog & Logic ICs

Contents

New products

As an innovative company we invest significantly in R&D, and continually expand our portfolio with the latest generation of technology and products. Here is a snapshot of our most recent releases, but don't forget to visit the website for the most up-to-date information - www.nexperia.com

Bipolar transistors

Category	Products	Description	Page
General purpose bipolar transistors	**PMBT2227AYS-Q**	40 V, 600 mA, NPN/PNP double switching transistor	**25**
	BCM847BSH-Q	45 V, 100 mA NPN/NPN matched double transistor	**26**
	BC846SH-Q	65 V, 100 mA NPN/NPN general-purpose double transistor	**26**
	BC847BSH-Q	45 V, 100 mA NPN/NPN general-purpose double transistor	**26**
	BC846BSH-Q	65 V, 100 mA NPN/NPN general-purpose double transistor	**26**
	BCM846BSH-Q	65 V, 100 mA NPN/NPN matched double transistor	**26**
	BCM857BSH-Q	45 V, 100 mA PNP/PNP matched double transistor	**26**
	BC856SH-Q	65 V, 100 mA PNP/PNP general-purpose double transistor	**26**
	BC857BSH-Q	45 V, 100 mA PNP/PNP general-purpose double transistor	**26**
	BC856BSH-Q	65 V, 100 mA PNP/PNP general-purpose double transistor	**26**
	BCM856BSH-Q	65 V, 100 mA PNP/PNP matched double transistor	**26**
	BC847BPNH-Q	45 V, 100 mA NPN/PNP general-purpose double transistor	**26**
	BC846BPNH-Q	65 V, 100 mA NPN/PNP general-purpose double transistor	**26**
	PUMD6H-Q	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistor; R1 = 4.7 kΩ, R2 = open	**26**
	PUMH7H-Q	50 V, 100 mA NPN/NPN Resistor-Equipped double Transistor; R1 = 4.7 kΩ, R2 = open	**26**
	PUMB3H-Q	50 V, 100 mA PNP/PNP Resistor-Equipped double Transistor; R1 = 4.7 kΩ, R2 = open	**26**
	BC56PAST(-Q)	80 V, 1 A NPN medium power transistors	**26**
	BC56-10PAST (-Q)	80 V, 1 A NPN medium power transistors	**26**
	BC56-16PAST (-Q)	80 V, 1 A NPN medium power transistors	**26**
	BC53PAST (-Q)	80 V, 1 A PNP medium power transistors	**26**
	BC53-10PAST (-Q)	80 V, 1 A PNP medium power transistors	**26**
	BC53-16PAST (-Q)	80 V, 1 A PNP medium power transistors	**26**
	MJPE2873(-Q)		**27**
	MJPE44H11		**27**
	MJPE44H11-Q		**27**
	MJPE45H11		**27**
	MJPE45H11-Q		**27**
	MJPE31C		**27**
	MJPE31C-Q		**27**
	MJPE31CH(-Q)*		**27**
	MJPE32C		**27**
	MJPE32C-Q		**27**
	PMP3906AYS-Q	40 V, 200 mA PNP/PNP matched double transistor	**30**
Low V_{CEsat} transistors	**PBSS4350PAS (-Q)**	50 V, 3 A NPN low VCEsat transistor	**32**
	PBSS5250PAS (-Q)	50 V, 2 A PNP low VCEsat transistor	**34**
	PBSS5350PAS (-Q)	50 V, 3 A PNP low VCEsat transistor	**34**
Resistor equipped transistors (RETs)	**PDTC123YQB(-Q)**	50 V, 100 mA, NPN RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN1110D-3 (SOT8015)	**40**
	PDTA123YQB(-Q)	50 V, 100 mA, PNP RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN1110D-3 (SOT8015)	**41**
	PIMN31PAS-Q	50 V, 500 mA, NPN/NPN double RET; R1 = 1 kΩ, R2 = 10 kΩ in a small DFN2020D-6 (SOT1118D)	**43**
	PIMC31PAS-Q	50 V, 500 mA, NPN/PNP double RET; R1 = 1 kΩ, R2 = 10 kΩ in a small DFN2020D-6 (SOT1118D)	**43**
	PIMP31PAS-Q	50 V, 500 mA, PNP/PNP double RET; R1 = 1 kΩ, R2 = 10 kΩ in a small DFN2020D-6 (SOT1118D)	**43**
	PIMN31PA	50 V, 500 mA, NPN/NPN double RET; R1 = 1 kΩ, R2 = 10 kΩ in a small DFN2020-6 (SOT1118)	**43**
	PIMC31PA	50 V, 500 mA, NPN/PNP double RET; R1 = 1 kΩ, R2 = 10 kΩ in a small DFN2020-6 (SOT1118)	**43**
	PIMP31PA	50 V, 500 mA, PNP/PNP double RET; R1 = 1 kΩ, R2 = 10 kΩ in a small DFN2020-6 (SOT1118)	**43**
	PIMN32PAS-Q	50 V, 500 mA, NPN/NPN double RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN2020D-6 (SOT1118D)	**43**
	PIMC32PAS-Q	50 V, 500 mA, NPN/PNP double RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN2020D-6 (SOT1118D)	**43**
	PIMP32PAS-Q	50 V, 500 mA, PNP/PNP double RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN2020D-6 (SOT1118D)	**43**
	PIMN32PA	50 V, 500 mA, NPN/NPN double RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN2020-6 (SOT1118)	**43**
	PIMC32PA	50 V, 500 mA, NPN/PNP double RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN2020-6 (SOT1118)	**43**
	PIMP32PA	50 V, 500 mA, PNP/PNP double RET; R1 = 2.2 kΩ, R2 = 10 kΩ in a small DFN2020-6 (SOT1118)	**43**

Diodes

Category	Products	Description	Page
Zener diodes	**HPZR-Q series**	High power dissipation 5.5W Zener in CFP3 with Tj 175°C	**53**
	HPZR series	High power dissipation 4.1W Zener in CFP3 with Tj 150°C	**53**
Switching diodes	**BAS116LS (-Q)**	Low-leakage 85V, 325mA switching diode	**58**
Recovery rectifiers	**PNS40010AER (-Q)**	400 V, 1 A high power density, standard switching time recovery rectifier	**59**
	PNU650100EJ (-Q)	650 V, 10 A Ultrafast recovery rectifier in D2PAK R2P	**59**
	PNE650100EJ (-Q)	650 V, 10 A Hyperfast recovery rectifier in D2PAK R2P	**59**
	PNU650150EJ (-Q)	650 V, 15 A Ultrafast recovery rectifier in D2PAK R2P	**59**
	PNE650150EJ (-Q)	650 V, 15 A Hyperfast recovery rectifier in D2PAK R2P	**59**
	PNU650200EJ (-Q)	650 V, 20 A Ultrafast recovery rectifier in D2PAK R2P	**59**
	PNE650200EJ (-Q)	650 V, 20 A Hyperfast recovery rectifier in D2PAK R2P	**59**
	PNU650150AEJ (-Q)	650 V, 15 A Ultrafast recovery rectifier in D2PAK R2P	**59**
	PNU650200AEJ (-Q)	650 V, 20 A Ultrafast recovery rectifier in D2PAK R2P	**59**
	PNU650300AEJ (-Q)	650 V, 30 A Ultrafast recovery rectifier in D2PAK R2P	**59**
SiC Schottky diodes	**PSC1065H-Q**	650 V, 10 A SiC Schottky diode in DPAK R2P	**61**
	PSC0665K	650 V, 6 A SiC Schottky diode in TO-220-2 R2P	**61**
	PSC1665J	650 V, 16 A SiC Schottky diode in D2PAK R2P	**61**
	PSC2065J	650 V, 20 A SiC Schottky diode in D2PAK R2P	**61**
	PSC1665L	650 V, 16 A SiC Schottky diode in TO-247 R2P	**61**
	PSC2065L	650 V, 20 A SiC Schottky diode in TO-247 R2P	**61**
Schottky diodes and rectifiers	**BAT32ALS (-Q)**	Low-leakage 30V, 200mA Schottky diode	**63**
	BAT32LS (-Q)	General-purpose 30V, 200mA Schottky diode	**63**
	PMEG2010EXD (-Q)		**66**
	PMEG3010EXD (-Q)	30 V, 1 A Schottky barrier rectifier	**66**
	PMEG4010EXD (-Q)	40 V, 1 A Schottky barrier rectifier	**66**
	PMEG6010EXD (-Q)	60 V, 1 A Schottky barrier rectifier	**66**
	PMEG2020CER (-Q)	20 V, 2 A Schottky barrier rectifier	**66**
	PMEG2020EXD (-Q)		**66**
	PMEG3020CER (-Q)	30 V, 2 A Schottky barrier rectifier	**66**
	PMEG3020EXD (-Q)		**66**
	PMEG4020CER (-Q)	40 V, 2 A Schottky barrier rectifier	**66**
	PMEG4020EXD (-Q)		**66**
	PMEG6020CER (-Q)	60 V, 2 A Schottky barrier rectifier	**66**
	PMEG6020EXD (-Q)		**66**
	PMEG2030CER (-Q)	20 V, 3 A Schottky barrier rectifier	**66**
	PMEG3030CEP (-Q)		**66**
	PMEG3030CER (-Q)	30 V, 3 A Schottky barrier rectifier	**66**
	PMEG4030CEP (-Q)		**66**
	PMEG4030CER (-Q)	40 V, 3 A Schottky barrier rectifier	**66**
	PMEG6030AEXE (-Q)	60 V, 3 A Schottky barrier rectifier	**67**
	PMEG6030CEP (-Q)		**67**
	PMEG6030CELP (-Q)		**67**
	PMEG6030EXE (-Q)	60 V, 3 A Schottky barrier rectifier	**67**
	PMEG6030CER (-Q)	60 V, 3 A Schottky barrier rectifier	**67**
	PMEG10030CELP (-Q)		**67**
	PMEG3050CEP (-Q)		**67**
	PMEG4050CEP (-Q)		**67**
	PMEG6050CEP (-Q)		**67**
	PMEG6050ELP (-Q)		**67**
	PMEG10050ELP (-Q)		**67**

ESD protection, TVS, filtering and signal conditioning

Category	Products	Description	Page
Automotive ESD protection and TVS	**PESD1CANFD24LS-Q**	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD30LS-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD33LS-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD36LS-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD24L-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD30L-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD33L-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD1CANFD36L-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CAN24T-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CAN24LT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CAN24XLT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD54VT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD54LT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD60VT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD60LT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD72VT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD72LT-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**74**
	PESD2CANFD33UQB-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD2CANFD36UQB-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD2CANFD36VQB-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD2CANFD36LQB-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD2CANFD36UQC-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD2CANFD36VQC-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD2CANFD36LQC-Q	Automotive in-vehicle networks (CAN/LIN/CAN-FD/Flex-ray) ESD protection	**75**
	PESD1ETH10LS-Q	Automotive Open Alliance Ethernet 100BaseT1 ESD protection	**75**
	PESD1ETH10L-Q	Automotive Open Alliance Ethernet 100BaseT1 ESD protection	**75**
	PESD4USB3BBTBR-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB3BCTBR-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB5BBTBR-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB3UCTBR-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB5UBTBR-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB3BBTBS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB5BBTBS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB3UBTBS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB5UBTBS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB3BBTTS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB5BBTTS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB3UBTTS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD4USB5UBTTS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V0C1ULS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V0C1BLS-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V5C1UL-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V5C1BL-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V0C2UM-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V0H1BLL-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V0H1BLG-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD5V0H2BFG-Q	Automotive high speed interfaces and infotainment ESD protection	**76**
	PESD18VF1BLS-Q	Automotive high speed interfaces and infotainment ESD protection	**77**
	PESD24VF1BLS-Q	Automotive high speed interfaces and infotainment ESD protection	**77**
	PESD30VF1BLS-Q	Automotive high speed interfaces and infotainment ESD protection	**77**
	PESD32VF1BLS-Q	Automotive high speed interfaces and infotainment ESD protection	**77**
	MMBZ5V6A-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ6V2A-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ6V8A-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ9V1A-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ10VA-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ12VA-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ15VA-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ16VA-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ18VA-T	Low capacitance unidirectional double ESD protection diode	**78**

ESD protection, TVS, filtering and signal conditioning

Category	Products	Description	Page
Automotive ESD protection and TVS	**MMBZ20VA-T**	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ27VA-T	TVS device for surge protection of interface and supply lines	**78**
	MMBZ33VA-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ5V6AT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ6V2AT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ6V8AT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ9V1AT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ10VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ12VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ15VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ16VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ18VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ20VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ27VAT-Q	TVS device for surge protection of interface and supply lines	**78**
	MMBZ33VAT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ27VS-T	Low capacitance bidirectional single ESD protection diode	**78**
	MMBZ33VS-T	Low capacitance bidirectional single ESD protection diode	**78**
	MMBZ27VST-Q	Low capacitance bidirectional single ESD protection diode	**78**
	MMBZ33VST-Q	Low capacitance bidirectional single ESD protection diode	**78**
	MMBZ27VC-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ33VC-T	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ27VCT-Q	Double ESD protection diode	**78**
	MMBZ33VCT-Q	Low capacitance unidirectional double ESD protection diode	**78**
	MMBZ27VB-U	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ33VB-U	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ27VBU-Q	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ33VBU-Q	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ27VZ-LS	Low capacitance bidirectional single line ESD protection diode	**79**
	MMBZ33VZ-LS	Low capacitance bidirectional single line ESD protection diode	**79**
	MMBZ27VZLS-Q	Low capacitance bidirectional single line ESD protection diode	**79**
	MMBZ33VZLS-Q	Low capacitance bidirectional single line ESD protection diode	**79**
	MMBZ27VB-QC	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ33VB-QC	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ27VBQC-Q	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ33VBQC-Q	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ27VB-QB	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ33VB-QB	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ27VBQB-Q	Low capacitance bidirectional dual line ESD protection diode	**79**
	MMBZ33VBQB-Q	Low capacitance bidirectional dual line ESD protection diode	**79**
ESD protection	**PESD5V5C1UBSF**	Very low capacitance unidirectional ESD protection diode	**80**
	PESD15VW1UCSF	15V unidirectional ESD protection for very fast data lines like USB2	**80**
	PESD5V5C1UL	Extremely low clamping, low Vt1 unidirectional ESD protection diode for very fast data lines	**80**
	PESD3V3X2UT	Low capacitance low clamping ESD protection in SOT23	**80**
	PESD3V3F2UT	Low capacitance low clamping ESD protection in SOT23	**80**
	PESD5V0X2UT	Low capacitance low clamping ESD protection in SOT23	**80**
	PESD5V0F2UT	Low capacitance low clamping ESD protection in SOT23	**80**
	PESD2V0Y1BXM	Very thin very low clamping and Vt1 ESD protection for fast data lines	**80**
	PESD1V0Y1BBSF	USB4 retimer/redriver and other ultrafast data line ESD protection	**80**
	PESD1V0R1BESF	Extremely low capacitance bidirectional ESD protection diode	**80**
	PESD1V0R1BFSF	Extremely low capacitance bidirectional ESD protection diode	**80**
	PESD1V2Y1BSF	Extremely low clamping and low Vt1, extremely low capacitance ESD protection diode	**80**
	PESD2V8Y1BSF	USB4 retimer/redriver and other ultrafast data line ESD protection	**80**
	PESD4V0Y1BBSF	Extremely low clamping, low Vt1 ESD protection diode for very fast data lines like USB2/3	**80**
	PESD4V0Y1BCSF	ESD protection for USB4 retimer/redriver, HDMI2.1 TMDS/FRL and other ultrafast data lines	**80**
	PESD4V0Y1BHSF	ESD protection for very fast data lines like HDMI2.1 TMDS/FRL applications	**80**
	PESD5V0Y1BCSF		**80**
	PESD5V0R1BCSF	USB4 / antenna ESD protection	**80**
	PESD5V0R1BDSF	USB4 / antenna ESD protection	**80**
	PESD5V5C1BBSF	Extremely low capacitance bidirectional ESD protection diode	**81**
	PESD7V1R1BCSF	Extremely low clamping bidirectional ESD protection diode	**81**

ESD protection, TVS, filtering and signal conditioning

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ESD protection	**PESD7V1R1BDSF**	Extremely low clamping bidirectional ESD protection diode	**81**
	PESD9V0C1BSF	9V ESD protection for very fast data lines like USB3	**81**
	PESD9V0Z1BDSF	9V ESD protection for very fast data lines like USB3	**81**
	PESD9V0W1BDSF	9V ESD protection for very fast data lines like USB2/3	**81**
	PESD12VY1BSF	12V ESD protection for very fast data lines like USB3	**81**
	PESD12VW1BCSF	12V ESD protection for very fast data lines like USB2/3	**81**
	PESD15VY1BSF	15V antenna and ultrafast data line ESD protection	**81**
	PESD15VW1BCSF	15V bidirectional ESD protection for very fast data lines like USB2/3	**81**
	PESD15VW1ACSF	+15V/-3.3 V asymmetric ESD protection for very fast data lines like USB2/3	**81**
	PESD18VF1BBSF	18V low C ESD protection for NFC, WiFi antenna	**81**
	PESD24VY1BSF	24V antenna and ultrafast data line ESD protection	**81**
	PESD24VY1BBSF		**81**
	PESD24VF1BBSF	Extremely low capacitance bidirectional ESD protection diode	**81**
	PESD30VF1BSF	Extremely low capacitance bidirectional ESD protection diode	**81**
	PESD30VY1BSF		**81**
	PESD1V0Y1BIF	Extremely low clamping bidirectional ESD protection diode	**81**
	PESD18VY1BBIF	18V antenna and ultrafast data line ESD protection	**81**
	PESD5V5C1BL	Very low clamping, Vt1, capacitance, low InsertionLoss ESD protection in SOD882	**81**
	PESD18VF1BBL	18V low C ESD protection for NFC, WiFi antenna and very fast data lines	**81**
	PESD24VF1BBL	24V low C ESD protection for NFC, WiFi antenna and very fast data lines	**81**
	PESD30VF1BBL	30V low C ESD protection for NFC, WiFi antenna and very fast data lines	**81**
	PESD3V3C2UM	Extremely low capacitance unidirectional ESD protection diode array	**81**
	PESD4V0X2UM	High surge, low clamping low capacitance ESD protection array in SOT883	**81**
	PESD5V0C2UM	Low clamping low capacitance ESD protection array in SOT883	**81**
	PESD5V0C2BDF	Extremely low clamping low capacitance ESD protection array in DFN0603-3	**82**
	PESD4V0Z2BCDF	Extremely low clamping low capacitance ESD protection array in DFN0603-3	**82**
	PHDMI2FC4	Very low capacitance unidirectional ESD protection diode array	**82**
	PUSB3FS4	Very low clamping unidirectional ESD protection array in SOT1176 for fast data lines like USB3	**82**
	PUSB3BB4	Very low clamping bidirectional ESD protection array in SOT1176 for fast data lines like USB3	**82**
	PUSB3CB4	Very low clamping bidirectional ESD protection array in SOT1176 for fast data lines like USB3	**82**
	PHDMI2FS4	Very low clamping unidirectional ESD protection array in SOT1176 for fast data lines like HDMI2.1	**82**
	PHDMI2BB4	Very low clamping bidirectional ESD protection array in SOT1176 for fast data lines like HDMI2.1	**82**
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	PESD12VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD15VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD18VV1BASF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD20VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD22VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD24VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD24VV1BBSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD27VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD30VV1BSF	Very low capacitance high voltage bidirectional ESD protection diode	**84**
	PESD33VV1ASF	Very low capacitance high voltage asymmetric bidirectional ESD protection diode	**84**
	PESD36VV1ASF	Very low capacitance high voltage asymmetric bidirectional ESD protection diode	**84**
	PESD24VV1BL	Bidirectional 24 V ESD protection diode	**85**
	PESD27VV1BL	Bidirectional 27 V ESD protection diode	**85**
	PESD48VV2BT	ESD protection for 48V lines	**86**
	PESD3V3L4BHC	4-fold bidirectional ESD protection array	**86**
EMI solutions with integrated protection	**PCMF1HDMI2BA-C**	Protected Common Mode Filter for very fast data lines like HDMI2.1, one line pair	**87**
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Surge Suppressor (TVS)	**PTVS5V0Z1UCL**	Transient Voltage Suppressor	**88**
	PTVS5V0D1UCL	Transient Voltage Suppressor	**88**
	PTVS6V3Z1UCL	Transient Voltage Suppressor	**88**
	PTVS6V3D1UCL	Transient Voltage Suppressor	**88**
	PTVS20VD1UL	Ultra compact Transient Voltage Suppressor	**88**
	PTVS5V5Z1UPC	Transient Voltage Suppressor	**88**
	PTVS6V3Z1UPC	Transient Voltage Suppressor	**88**
	PTVS30VZ1UPA	Transient Voltage Suppressor	**88**
	PTVS9V0P1BPL	600 W Transient Voltage Suppressor	**92**

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Surge Suppressor (TVS)	**PTVS10VP1BPL**	600 W Transient Voltage Suppressor	**92**
	PTVS11VP1BPL	600 W Transient Voltage Suppressor	**92**
	PTVS12VP1BPL	600 W Transient Voltage Suppressor	**92**
	PTVS13VP1BPL	600 W Transient Voltage Suppressor	**92**
	PTVS14VP1BPL	600 W Transient Voltage Suppressor	**92**
	PTVS15VP1BPL	600 W Transient Voltage Suppressor	**92**
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	PTVS90VP1BPL	600 W Transient Voltage Suppressor	**92**
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	PTVS130VP1BPL	600 W Transient Voltage Suppressor	**92**
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MOSFETs

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	BUK7Y3R1-80M	N-channel 80 V, 3.1 mOhm, Standard level MOSFET in LFPAK56	**103**
	BUK9K12-80L	Dual N-channel 80 V, 12 mOhm logic level MOSFET in LFPAK56D	**103**
	BUK9K49-80L	Dual N-channel 80 V, 49 mOhm logic level MOSFET in LFPAK56D	**103**
	BUK7J2R4-80M	N-channel 80 V, 2.4 mOhm, Standard level MOSFET in LFPAK56E	**103**
	BUK9M13-80L	N-channel 80 V, 13 mOhm logic level MOSFET in LFPAK33	**103**
	BUK9M24-80L	N-channel 80 V, 24 mOhm logic level MOSFET in LFPAK33	**103**
	BUK9M48-80L	N-channel 80 V, 48 mOhm logic level MOSFET in LFPAK33	**103**
	BUK9K35-100L		**104**
	BUK9M16-100L	N-channel 100 V, 16 mOhm logic level MOSFET in LFPAK33	**105**
	BUK9M60-100L	N-channel 100 V, 60 mOhm logic level MOSFET in LFPAK33	**105**
	PMDPB30XNA	20 V, dual N-channel Trench MOSFET	**108**
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	PSMNR90-40YSN	N-channel 40 V, 0.97 mOhm, 320 A, standard level MOSFET in LFPAK56	**112**
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	PSMN2R0-40YLB	N-channel 40 V, 2.1 mOhm, 180 A logic level MOSFET in LFPAK56	**112**
	PSMN2R2-40YSB	N-channel 40 V, 2.2 mOhm, 180 A standard level MOSFET in LFPAK56	**112**
	PSMN2R5-40YLB	N-channel 40 V, 2.6 mOhm, 160 A logic level MOSFET in LFPAK56	**112**
	PSMN2R8-40YSB	N-channel 40 V, 2.8 mOhm, 160 A standard level MOSFET in LFPAK56	**112**
	PSMN3R2-40YLB	N-channel 40 V, 3.3 mOhm, 120 A logic level MOSFET in LFPAK56	**112**
	PSMN3R5-40YSB	N-channel 40 V, 3.5 mOhm, 120 A standard level MOSFET in LFPAK56	**112**
	PSMN6R8-40HS	N-channel 40 V, 6.8 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN8R0-40HL	N-channel 40 V, 9.4 mOhm, logic level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN8R5-40HS	N-channel 40 V, 8.5 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN014-40HLD	N-channel 40 V, 13.6 mOhm, logic level MOSFET in LFPAK56D using NextPowerS3 technology	**113**
	PSMN013-40VLD	Dual N-channel 40 V, 13 mOhm logic level MOSFET in LFPAK56D (half-bridge configuration)	**113**
	PSMN9R3-60HS	N-channel 60 V, 9.3 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN013-60HS	N-channel 60 V, 10 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN011-60HL	N-channel 60 V, 11.5 mOhm, logic level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN012-60HL	N-channel 60 V, 12.5 mOhm, logic level MOSFET in LFPAK56D using TrenchMOS technology enhanced for repetitive avalanche	**113**
	PSMN013-60HL	N-channel 60 V, 12.5 mOhm, logic level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PSMN014-60HS	N-channel 60 V, 14 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**113**
	PXN5R7-60QLA	N-channel 60 V, 5.7 mOhm, logic level Trench MOSFET in MLPAK33	**113**
	PXN6R2-60QLA	N-channel 60 V, 6.2 mOhm, logic level Trench MOSFET in MLPAK33	**113**
	PXN6R8-60QLA	N-channel 60 V, 6.8 mOhm, logic level Trench MOSFET in MLPAK33	**113**
	PXN7R7-60QLA	N-channel 60 V, 7.7 mOhm, logic level Trench MOSFET in MLPAK33	**113**
	PXN9R1-60QLA	N-channel 60 V, 9.1 mOhm, logic level Trench MOSFET in MLPAK33	**113**
	PXN011-60QLA	N-channel 60 V, 11 mOhm, logic level Trench MOSFET in MLPAK33	**113**
	PXN014-60QLA	N-channel 60 V, 14 mOhm, logic level Trench MOSFET in MLPAK33	**113**
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	PSMNR90-80ASF	NextPower 80 V, 0.85 mOhm, N-channel MOSFET in CCPAK1212 package	**114**
	PSMNR90-80ASE	N-channel, 80 V, 0.9 mOhm, MOSFET with enhanced SOA in CCPAK1212 package	**114**
	PSMN1R0-100ASF	NextPower 100 V, 0.99 mOhm, N-channel MOSFET in CCPAK1212 package	**114**
	PSMN1R0-100ASE	N-channel, 100 V, 1.04 mOhm, MOSFET with enhanced SOA in CCPAK1212 package	**114**
	PSMN1R1-80ASF	NextPower 80 V, 1.11 mOhm, N-channel MOSFET in CCPAK1212 package	**114**
	PSMN1R2-80ASE	N-channel, 80 V, 1.18 mOhm, MOSFET with enhanced SOA in CCPAK1212 package	**114**
	PSMN1R3-100ASF	NextPower 100 V, 1.3 mOhm, N-channel MOSFET in CCPAK1212 package	**114**
	PSMN1R4-100ASE	N-channel, 100 V, 1.36 mOhm, MOSFET with enhanced SOA in CCPAK1212 package	**114**
	PSMNR90-80CSF	NextPower 80 V, 0.9 mOhm, N-channel MOSFET in CCPAK1212i package	**114**
	PSMN1R0-80CSE	N-channel, 80 V, 0.95 mOhm, MOSFET with enhanced SOA in CCPAK1212i package	**114**
	PSMN1R0-100CSF	NextPower 100 V, 1.04 mOhm, N-channel MOSFET in CCPAK1212i package	**114**
	PSMN1R1-100CSE	N-channel, 100 V, 1.09 mOhm, MOSFET with enhanced SOA in CCPAK1212i package	**114**
	PSMN1R1-80CSF	NextPower 80 V, 1.16 mOhm, N-channel MOSFET in CCPAK1212i package	**114**
	PSMN1R2-80CSE	N-channel, 80 V, 1.18 mOhm, MOSFET with enhanced SOA in CCPAK1212i package	**114**
	PSMN1R4-100CSF	NextPower 100 V, 1.35 mOhm, N-channel MOSFET in CCPAK1212i package	**114**
	PSMN1R4-100CSE	N-channel, 100 V, 1.42 mOhm, MOSFET with enhanced SOA in CCPAK1212i package	**114**
	PSMN2R6-80YSF	NextPower 80 V, 2.4 mOhm, 231 A, N-channel MOSFET in LFPAK56E package	**114**
	PSMN3R5-80YSF	NextPower 80 V, 3.5 mOhm, 150 A, N-channel MOSFET in LFPAK56E package	**114**
	PSMN4R2-80YSE	N-channel 80 V, 4.2 mOhm MOSFET with enhanced SOA in LFPAK56E	**114**
	PSMN3R9-100YSF	NextPower 100 V, 4.3 mOhm, 120 A, N-channel MOSFET in LFPAK56E package	**114**
	PSMN4R8-100YSE	N-channel 100 V, 4.8 mOhm MOSFET with enhanced SOA in LFPAK56E	**114**
	PSMN3R3-80YSF	NextPower 80 V, 3.1 mOhm, 160 A, N-channel MOSFET in LFPAK56 package	**115**
	PSMN4R5-80YSF	NextPower 80 V, 4.5 mOhm N-channel MOSFET in LFPAK56	**115**
	PSMN5R5-100YSF	NextPower 100 V, 5.6 mOhm N-channel MOSFET in LFPAK56 package	**115**
	PSMN7R2-100YSF	NextPower 100 V, 6.9 mOhm N-channel MOSFET in LFPAK56 package	**115**
	PSMN8R7-100YSF	NextPower 100 V, 9 mΩ N-channel MOSFET in LFPAK56 package	**115**
	PSMN9R8-100YSF	NextPower 100 V, 10.2 mOhm N-channel MOSFET in LFPAK56 package	**115**
	PSMN012-100YSF	NextPower 100 V, 11.8 mOhm N-channel MOSFET in LFPAK56 package	**115**
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	PSMN025-100HS	N-channel 100 V, 24.5 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**115**
	PSMN029-100HL	N-channel 100 V, 29 mOhm, logic level MOSFET in LFPAK56D using TrenchMOS technology	**115**
	PSMN028-100HS	N-channel 100 V, 27.5 mOhm, standard level MOSFET in LFPAK56D using TrenchMOS technology	**115**
	PSMN033-100HL	N-channel 100 V, 31 mOhm, logic level MOSFET in LFPAK56D using TrenchMOS technology	**115**
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	PSMN1R8-80SSF	NextPower 80 V, 1.8 mOhm, 270 Amp, N-channel MOSFET in LFPAK88 package	**116**
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	PSMN2R3-80SSF	NextPower 80 V, 2.3 mOhm, 240 Amp, N-channel MOSFET in LFPAK88 package	**116**
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	PSMN3R3-100SSF	NextPower 100 V, 3.3 mOhm, 180 Amp, N-channel MOSFET in LFPAK88 package	**116**
	PXN011-100QL	N-channel 100 V, 11 mOhm, logic level Trench MOSFET in MLPAK33	**116**
	PXN011-100QS	N-channel 100 V, 11 mOhm, standard level Trench MOSFET in MLPAK33	**116**
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	PXP700-150QS	150 V, P-channel Trench MOSFET	**117**

Power GaN FETs

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	GANE2R7-100CBA	100 V, 2.7 mΩ Gallium Nitride (GaN) FET in a Wafer Level Chip-Scale Package (WLCSP)	**137**
	GANE1R8-100QBA	100 V, 1.8 mΩ Gallium Nitride (GaN) FET in a Wafer Level Chip-Scale Package (WLCSP)	**137**
	GANE3R9-150QBA	150 V, 3.9 mOhm Gallium Nitride (GaN) FET in a 4.0 mm x 6.0 mm Very-Thin-Profile Quad Flat No-Lead Package (VQFN)	**137**
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	GANE240-700BBA	700 V, 240 mΩ Gallium Nitride (GaN) FET in a DPAK package	**137**
	GANE350-700BBA	700 V, 350 mΩ Gallium Nitride (GaN) FET in a DPAK package	**137**
	GANB1R2-040QBA	40 V, 1.2 mΩ bi-directional Gallium Nitride (GaN) High Electron-Mobility-Transistor (HEMT)	**137**
	GANB4R8-040CBA	40 V, 4.8 mOhm bi-directional Gallium Nitride (GaN) FET in a 2.1 mm x 2.1 mm Wafer Level Chip-Scale Package (WLCSP)	**137**
	GANB8R0-040CBA	40 V, 8.0 mΩ bi-directional Gallium Nitride (GaN) High Electron-Mobility-Transistor (HEMT)	**137**
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Bipolar Discretes Q-portfolio

Introducing a new semiconductor quality that is addressing the growing support levels enhanced by ACES and prepares Bipolar Discretes for future automotive designs.

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- Essential quality of all components is key for mission-critical functions and amplified by regulatory pressures and reduces prospective service cost or even the risk of personal injuries.

Nexperia introduces future-proof automotive portfolio for Bipolar Discretes | The Q-Portfolio

- On top of all automotive standards (e.g. AEC-Q101) Nexperia always enhanced its preeminent quality level by close consultation of its industry leading customer base (e.g. via regular audits).
- With our dedicated automotive portfolio of Bipolar Discretes (e.g. BAV99-Q) we gear up to address the growing quality and support levels enhanced by ACES.
- Moreover, we offer an additional option of standard types if an automotive grade is not required.

Quality | Moving beyond AEC-Q101
Continuously adopting the latest quality standards exceeding AEC-Q101 by new mission profiles (VDE ITG MN5.7), extended firewalls and more.

Supply | Incorporate particular industry needs
Guaranteed longevity of >10 years, <2 years date code, supply prioritization, IATF Certification and use of VDA A-rated in-house front- and backend.

Service | Unique support for unique customers
Additional support offer including PPAPs, extended PCN implementation time and more.

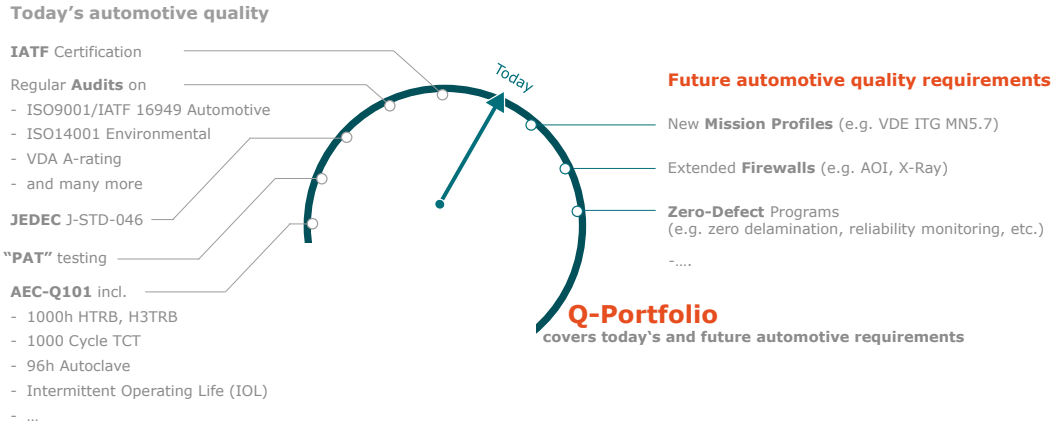
Performance | Tailored investments to suit automotive needs
Drive CAPEX investments into dedicated automotive portfolio executed via BCamX Product Creation Process compliant to automotive APQP.

Our promise:

- With our Q-Portfolio you automatically benefit from the adoption of future automotive standards.
- We continue to guarantee all performance specifications stated in the datasheets.
- The transfer to Q-Portfolio has no impact on (1) confirmed shipments, (2) product supply chain or (3) negotiated contract prices.

The Q-portfolio – Q for Quality

Based on today's automotive requirements, the Q-portfolio will adopt future quality standards



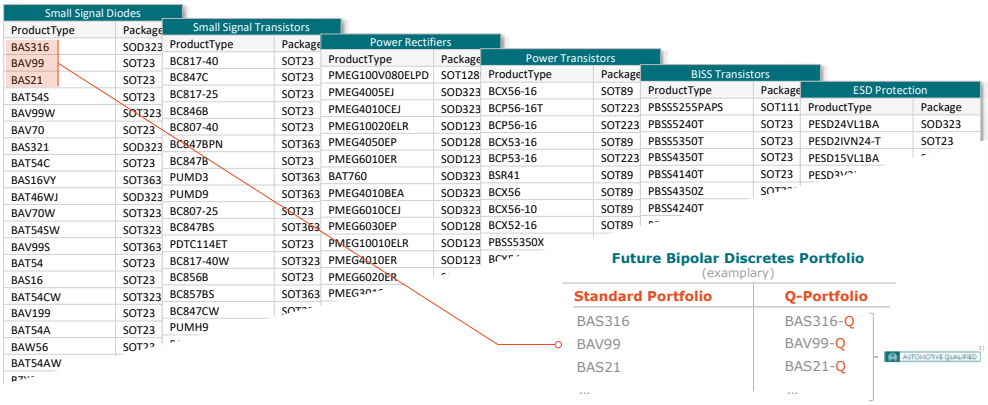
Service options

With the introduction of the Q-portfolio, Bipolar Discretes offers 2 portfolio options, depending on each customer service level requirement.

Q-Portfolio		Standard Portfolio
• 2x JEDEC | 180 days [1)]	PCN handling	• JEDEC | 90 days
• Supported	PPAP	• Not supported
• Minimum of 10 years	Longevity	• Minimum of 5 years
• <2 years	Date Code	• <4 years
• Very high	Supply Priority[2)]	• High

Product overview

Q-portfolio types will be offered across all Bipolar Discretes product groups. Types can be recognized by the -Q ending of the part name.




100
60
140
km/h
40
180
20
220
260
0
217 km
0
1/2
(P)

Bipolar transistors

1

Small signal transistors single NPN

Package					Automotive-qualified				
					SOT23	SOT323 (SC-70)	DFN1412D-3 (SOT8009)	DFN1110D-3 (SOT8015)	DFN1006-3 (SOT883)
					Leaded SMD		DFN		
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.47	1.1 x 1.0 x 0.47	1.0 x 0.6 x 0.5
P_{tot} (mW)					250	200	360	340	250
V_{CEO} (V)	I_C (mA)	h_{FE} min/typ	h_{FE} max	f_T min (MHz)					
25	100	450	1200	100		PMST5089			
30	100	110 - 200	450 - 800	100	BC848B (-Q)	BC848W (-Q)			
		350	900	100		PMST5088			
32	100	110	220	100	BCW31				
		200	450	100	BCW32				
		420	800	100	BCW33				
		180	310	100	BCW60B				
		250	460	100	BCW60C				
		380	630	100	BCW60D				
45	100	110	800	100	BC847 (-Q)	BC847W (-Q)			
		110	220	100	BC847A (-Q)	BC847AW (-Q)	BC847AQC (-Q)	BC847AQB (-Q)	BC847AM (-Q)
		200	450	100	BC847B (-Q)	BC847BW (-Q)	BC847BQC (-Q)	BC847BQB (-Q)	BC847BM (-Q)
		420	800	100	BC847C (-Q)	BC847CW (-Q)	BC847CQC (-Q)	BC847CQB (-Q)	BC847CM (-Q)
		120	220	100	BCX70G				
		180	310	100	BCX70H				
		250	460	100	BCX70J				
		380	630	100	BCX70K				
		110	220	100	BCW71				
		200	450	100	BCW72				
		500	1250	100	PMBT6429	PMST6429			
50	100	210	340	100 - 150	2PD601ART (-Q)				
		210	340	100 - 150	2PD601ARL	2PD601ARW (-Q)			
		290	460	100 - 150	2PD601ASL	2PD601ASW (-Q)			
		250	650	100	PMBT6428	PMST6428			
60	100	110	220	100	BCV71 (-Q)				
		200	450	100	BCV72 (-Q)				
65	100	110	450	100	BC846 (-Q)	BC846W (-Q)			
		110	220	100	BC846A (-Q)	BC846AW (-Q)	BC846AQC (-Q)	BC846AQB (-Q)	
		200	450	100	BC846B (-Q)	BC846BW (-Q)	BC846BQC (-Q)	BC846BQB (-Q)	BC846BM (-Q)
50	150	120	270	100		2PC4081Q (-Q)			2PC4617QMB
		180	390	100		2PC4081R (-Q)			2PC4617RMB
		270	560	100		2PC4081S (-Q)			
	200	210	340	100	2PD601BRL				
		290	460	100	2PD601BSL				
45	500	100	600	100	BC817 (-Q)	BC817W (-Q)			
		100	250	100	BC817-16 (-Q)	BC817-16W (-Q)	BC817-16QC (-Q)	BC817-16QB (-Q)	
		160	400	100	BC817-25 (-Q)	BC817-25W (-Q)	BC817-25QC (-Q)	BC817-25QB (-Q)	
		250	600	100	BC817-40 (-Q)	BC817-40W (-Q)	BC817-40QC (-Q)	BC817-40QB (-Q)	
		100	600	100	BCX19 (-Q)				
50	500	85	170	140 - 180	2PD602AQL (-Q)				
		120	240	140 - 180	2PD602ARL	2PD1820AR (-Q)			
		170	340	140 - 180	2PD602ASL (-Q)	2PD1820AS (-Q)			
60	500	50	-	100		PMSTA05 (-Q)			
80	500	100	-	50	PMBTA06 (-Q)	PMSTA06 (-Q)			
80	500	100	250	100	BC816-16 (-Q)	BC816-16W (-Q)			
		160	400	100	BC816-25 (-Q)	BC816-25W (-Q)			
45	800	100	250	100	BCW66F				
		160	400	100	BCW66G				
		250	630	100	BCW66H				

Small signal transistors single PNP

Package					Automotive-qualified				
					SOT23	SOT323 (SC-70)	DFN1412D-3 (SOT8009)	DFN1110D-3 (SOT8015)	DFN1006-3 (SOT883)
					Leaded SMD		DFN		
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.47	1.1 x 1.0 x 0.47	1.0 x 0.6 x 0.5
P_{tot} (mW)					250	200	360	340	250
V_{CEO} (V)	I_C (mA)	h_{FE} min/typ	h_{FE} max	f_T min (MHz)					
30	100	125 - 220	500 - 800	100	BC858B (-Q)	BC858BW (-Q)			
32	100	120	260	100	BCW29				
		215	500	100	BCW30				
		180	310	100	BCW61B				
		250	460	100	BCW61C				
		380	630	100	BCW61D				
45	100	210	340	70	2PB709ART (-Q)				
		210	340	70	2PB709ARL (-Q)	2PB709ARW			
		290	460	70	2PB709ASL (-Q)	2PB709ASW			
		180	310	100	BCX71H (-Q)				
		250	460	100	BCX71J (-Q)				
		380	630	100	BCX71K (-Q)				
		120	260	100	BCW69				
		215	500	100	BCW70				
		125	800	100	BC857 (-Q)	BC857W (-Q)			
		125	250	100	BC857A (-Q)	BC857AW (-Q)	BC857AQC (-Q)	BC857AQB (-Q)	BC857AM (-Q)
		220	475	100	BC857B (-Q)	BC857BW (-Q)	BC857BQC (-Q)	BC857BQB (-Q)	BC857BM (-Q)
		420	800	100	BC857C (-Q)	BC857CW (-Q)	BC857CQC (-Q)	BC857CQB (-Q)	BC857CM (-Q)
60	100	120	260	150	BCW89				
65	100	125	475	100	BC856 (-Q)				
		125	250	100	BC856A (-Q)	BC856AW (-Q)	BC856AQC (-Q)	BC856AQB (-Q)	
		220	475	100	BC856B (-Q)	BC856BW	BC856BQC (-Q)	BC856BQB (-Q)	BC856BM (-Q)
100	100	30	-	100	BSS63 (-Q)				
50	150	120	270	100		2PA1576Q (-Q)			2PA1774QM (-Q)
		180	390	100		2PA1576R (-Q)			2PA1774RM (-Q)
		270	560	100		2PA1576S (-Q)			2PA1774SM (-Q)
	200	200	340	100	2PB709BRL (-Q)				
		290	460	100	2PB709BSL				
25	500	100	600	80	BCX18				
45	500	100	600	80	BC807 (-Q)	BC807W (-Q)			
		100	250	80	BC807-16 (-Q)	BC807-16W (-Q)	BC807-16QC (-Q)	BC807-16QB (-Q)	
		160	400	80	BC807-25 (-Q)	BC807-25W (-Q)	BC807-25QC (-Q)	BC807-25QB (-Q)	
		250	600	80	BC807-40 (-Q)	BC807-40W (-Q)	BC807-40QC (-Q)	BC807-40QB (-Q)	
		100	600	80	BCX17 (-Q)				
50	500	40	240	100 - 40	2PB710ARL (-Q)				
		40	240	100 - 40	2PB710ASL (-Q)				
		100	-	100 - 40		2PB1219AQ			
		120	-	100 - 40		2PB1219AR			
		140	-	100 - 40		2PB1219AS			
60	500	100	-	50		PMSTA55 (-Q)			
80	500	100	-	50	PMBTA06 (-Q)	PMSTA06 (-Q)			
80	500	100	250	80	BC806-16 (-Q)	BC806-16W (-Q)			
		160	400	80	BC806-25 (-Q)	BC806-25W (-Q)			
45	800	100	250	80	BCW68F				
			400	80	BCW68G				
		250	600	80	BCW68H				

High performance transistors (superior power dissipation)

Package							Automotive-qualified
							SOT23
							
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							775
Polarity	V_{CEO} (V)	V_{ebo} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)	
NPN	45	5	0.5	100	250	100	BC817K-16
				160	400	100	BC817K-25
				250	600	100	BC817K-40
PNP	45	5	0.5	100	250	80	BC807K-16
				160	400	80	BC807K-25
				250	600	80	BC807K-40

Small signal transistors double

Package						Automotive-qualified			
						SOT457 (SC-74)	SOT363 (SC-88)	DFN1412-6 (SOT1268)	DFN1010B-6 (SOT1216)
									
Size (mm)						2.9 x 1.5 x 1.0	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.5	1.0 x 1.0 x 0.37
P_{tot} (mW)						750	300	480	350
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)				
NPN	40	100	120	450	100		PUMX1 (-Q)		
	45	100	200	450	100	BC847DS (-Q)	BC847BS (-Q)	BC847RA	BC847QAS
	65	100	110	-	100		BC846S (-Q)		
			200	450	100	BC846DS (-Q)	BC846BS (-Q)		
	50	150	120	560	100		PUMX2 (-Q)		
	45	500	160	400	80	BC817DS (-Q)		BC817RA	
PNP	40	100	120	450	100	PIMT1 (-Q)	PUMT1 (-Q)		
	45	100	200	450	100		BC857BS (-Q)	BC857RA	BC857QAS
	65	100	110	-	100		BC856S (-Q)		
			200	450	100		BC856BS (-Q)		
	45	500	160	400	80	BC807DS (-Q)		BC807RA	
NPN / PNP	40	100	120	450	100		PUMZ1 (-Q)		
	45	100	200	450	100		BC847BPN (-Q)	BC847RAPN	BC847QAPN
	50	100	120	560	100	PIMZ2 (-Q)	PUMZ2 (-Q)		
	65	100	200	450	100		BC846BPN (-Q)		
	45	500	160	160	100 / 800	BC817DPN (-Q)		BC817RAPN	

Small signal switching transistors single

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT23	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1010D-3 (SOT1215)
												
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.5	1.1 x 1.0 x 0.37
P_{tot} (mW)							1700	1300	250	200	250	440
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)	t_{off} (ns)						
NPN	40	200	100	300	300	250			PMBS3904 (-Q)			
					180	1200				PMSS3904		
	15	200	40	120	500	20			PMBT2369 (-Q)	PMST2369 (-Q)		
	40	200	100	300	300	250			MMBT3904 (-Q)			
									PMBT3904 (-Q)	PMST3904 (-Q)	PMBT3904M (-Q)	PMBT3904QA
	30	600	100	300	250	250			PMBT2222 (-Q)	PMST2222 (-Q)		
	40	600	100	300	250	250	PZT4401	PXT4401	PMBT4401 (-Q)	PMST4401 (-Q)		
					300	250			MMBT2222A (-Q)			
							PZT2222A	PXT2222A	PMBT2222A (-Q)	PMST2222A (-Q)		
					340 [1]						PMBT2222AM (-Q)	PMBT2222AQA
	40	800	100	300	300	250			BSR14 (-Q)			
PNP	40	100	100	300	150	700			PMBS3906 (-Q)	PMSS3906		
	40	200	100	300	250	300			MMBT3906 (-Q)			
									PMBT3906 (-Q)	PMST3906 (-Q)	PMBT3906M (-Q)	
	40	600	100	300	200	350	PZT4403	PXT4403	PMBT4403 (-Q)	PMST4403 (-Q)		
						365			PMBT2907 (-Q)			
	60	600	100	300	200	300				PMST2907A (-Q)		
						365			BSR16 (-Q)			
							PZT2907A	PXT2907A	PMBT2907A (-Q)			
					210 [1]						PMBT2907AM (-Q)	PMBT2907AQA

[1] f_T Typ

Small signal switching transistors double

Types in **bold** represent new products

Package							SOT363 (SC-88)	SOT457 (SC-74)	DFN1412-6 (SOT1268)
									
Size (mm)							2.0 x 1.25 x 0.95	2.9 x 1.5 x 1.0	1.4 x 1.2 x 0.5
P_{tot} (mW)							300	750	480
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min(MHz)	t_{off} (ns)			
NPN	40	200	100	300	300	250	PMBT3904YS (-Q)		PMBT3904RA
	40	600	100	300	250	250	PMBT4401YS (-Q)		
					300	250	PMBT2222AYS (-Q)		
PNP	40	200	100	300	250	300	PMBT3906YS (-Q)		
	40	600	100	300	200	350	PMBT4403YS (-Q)		
	60	600	100	300	200	365	PMBT2907AYS (-Q)		
NPN / PNP	40	200	100	300	300 / 250	250 / 300	PMBT3946YPN (-Q)		
	40 / 60	600	100	300	300 / 200	250 / 365		NMB2227A	
	40 / 60	600	100	300	300 / 200	250 / 365	**PMBT2227AYS-Q**		

175 °C capable products

Types in **bold** represent new products

Package									Automotive-qualified				
									SOT223 (SC-73)	SOT23			SOT363 (SC-88)
													
Size (mm)									6.5 x 3.5 x 1.65	2.9 x 1.3 x 1.0			2.0 x 1.25 x 0.95
P_{tot} (mW)									1700	415	950	675	300
Polarity	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	h_{FE} min	h_{FE} max	f_T min (MHz)	hFE1/ hFE2	VBE1 - VBE2 (mV)					
NPN	45	6	0.1	200	450	100	0.9 [1]	2					**BCM847BSH-Q**
		7	0.5	100	250	250					BC817K-16H (-Q)		
				160	400	400					BC817K-25H (-Q)		
				250	600	600					BC817K-40H (-Q)		
	65	6	0.1	110	-	100	0.9	2					**BC846SH-Q**
				200	450								**BC847BSH-Q**
													BC846BSH-Q
													BCM846BSH-Q
	80	7	1	63	250	100			BCP56H (-Q)				
					160	100			BCP56-10H (-Q)				
				100	250	100			BCP56-16H (-Q)				
			0.5	100	250	100				BC816-16H (-Q)			
				160	400	100				BC816-25H (-Q)			
PNP	45	5	0.1	200	450	100	0.9 [1]	2					**BCM857BSH-Q**
		7	0.5	100	250	80						BC807-16H (-Q)	
				160	400	80						BC807-25H (-Q)	
				250	600	80						BC807-40H (-Q)	
	65	5	0.1	110	-	100	0.9	2					**BC856SH-Q**
		6		200	450	100							**BC857BSH-Q**
													BC856BSH-Q
													BCM856BSH-Q
	80	7	1	63	250	100			BCP53H (-Q)				
					100	100			BCP53-10H (-Q)				
				100	250	100			BCP53-16H (-Q)				
		8	0.5	100	250	80				BC806-16H (-Q)			
				160	400	80				BC806-25H (-Q)			
NPN/PNP	45	7	0.1	200	450	100							**BC847BPNH-Q**
	65	6											**BC846BPNH-Q**
	50	5			-	only R1 (4.7kΩ)							**PUMD6H-Q**
NPN/NPN	50	5	0.1	200	-								**PUMH7H-Q**
PNP/PNP													**PUMB3H-Q**

[1] IC1 / IE2

Power transistors

Types in **bold** represent new products

Package						Automotive-qualified			
						SOT223 (SC-73)	SOT89 (SC-62)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
									
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)						1700	1300	1300	1300
Polarity	V_{CEO} (V)	I_C (A)	h_{FE} min	h_{FE} max	f_T min (MHz)				
NPN	20	2	85 - 160	375	40	BCP68 (-Q) / -25 (-Q)	BC868 (-Q) / -25 (-Q)	BC68PA (-Q)/ BC68-25PA (-Q)	BC68PAS (-Q) / BC68-25PAS (-Q)
	45	1	63 - 100	160 - 250	100	BCP54 (-Q) / -10 (-Q) / -16 (-Q) BCP54T (-Q) / -10T (-Q) / -16T (-Q)	BCX54 (-Q) / -10 (-Q) / -16 (-Q) BCX54T / -10T / -16T	BC54PA (-Q) / BC54-10PA (-Q) / BC54-16PA (-Q)	BC54PAS (-Q) / BC54-10PAS (-Q) / BC54-16PAS (-Q)
	60	1	63 - 100	160 - 250	100	BCP55 (-Q) / -10 (-Q) / -16 (-Q) BCP55T (-Q) / -10T (-Q) / -16T (-Q)	BCX55 (-Q) / -10 (-Q) / -16 (-Q) BCX55T / -10T / -16T	BC55PA (-Q) / BC55-10PA (-Q) / BC55-16PA (-Q)	BC55PAS (-Q) / BC55-10PAS (-Q) / BC55-16PAS (-Q)
			100	300	100	BSP41 (-Q)	BSR41(-Q)		
	80	1	63 - 100	160 - 250	100	BCP56 (-Q) / -10 (-Q) BCP56T(-Q) / -10T (-Q) / -16T (-Q)	BCX56 / -10 / -16 BCX56T / -10T / -16T	BC56PA (-Q) / BC56-10PA (-Q) / BC56-16PA (-Q)	BC56PAS(-Q) / BC56-10PAS (-Q)/ BC56-16PAS(-Q) **BC56PAST(-Q) / BC56-10PAST (-Q) / BC56-16PAST (-Q)**
			40 - 100	120 - 300	100	BSP43 (-Q)	BSR43 (-Q)		
PNP	20	2	85 - 160	250 - 375	40	BCP69 / -16 / -25 (-Q)	BC869 / -16 (-Q) / -25	BC69PA (-Q) / BC69-16PA (-Q) / BC69-25PA (-Q)	BC69PAS (-Q) / BC569-16PAS (-Q) / BC69-25PAS (-Q)
	45	1	63 - 100	160 - 250	115 [1] - 145 [1]	BCP51 / -10 / -16 BCP51T (-Q) / -10T (-Q) / -16T (-Q)	BCX51 / -10 / -16 BCX51T / -10T / -16T	BC51PA (-Q)/ BC51-10PA / BC51-16PA	BC51PAS (-Q) / BC51-10PAS (-Q) / BC51-16PAS (-Q)
	60	1	63 - 100	160 - 250	100	BCP52 / -10 / -16 BCP52T (-Q) / -10T (-Q)/ -16T (-Q)	BCX52 / -10 / -16 BCX52T / -10T / -16T	BC52PA (-Q) / BC52-10PA (-Q) / BC52-16PA (-Q)	BC52PAS (-Q) / BC52-10PAS (-Q) / BC52-16PAS (-Q)
			40 - 100	120 - 300	100	BSP31 (-Q)	BSR30 (-Q) / 31 (-Q)		
	80	1	63 - 100	160 - 250	115 [1] - 145 [1]	BCP53 / -10 / -16 BCP53T / -10T / -16T	BCX53 / -10 / -16 BCX53T / -10T / -16T	BC53PA (-Q)/ BC53-10PA(-Q) / BC53-16PA (-Q)	BC53PAS (-Q) / BC53-10PAS (-Q) / BC53-16PAS (-Q) **BC53PAST (-Q) / BC53-10PAST (-Q) / BC53-16PAST (-Q)**
			40 - 100	120 - 300	100	BSP32 / 33	BSR33 (-Q)		

[1] Typical value

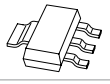
General purpose power transistors

Types in **bold** represent new products

Package									DPAK (SOT428C)	
										
Size (mm)									6.1 x 6.6	6.8 x 4.3
P_{tot} (mW)									1750	2150
V_{CEO} (V)	I_C (A)	h_{FE} min	h_{FE} max	@ I_C (A)	@V_{CE} (V)	f_T min MHz	Polarity	Automotive-qualified		
45	4	85	375	0,5	1	3	NPN	Yes	MJD148(-Q)	
50	2	120	360	0,5	2	65	NPN	Yes	MJD2873(-Q)	**MJPE2873(-Q)**
80	8	60	-	2	1	typ: 160	NPN	No	MJD44H11	**MJPE44H11**
								Yes	MJD45H11	**MJPE44H11-Q**
				2	1	typ: 80	PNP	No	MJD44H11A	**MJPE45H11**
								Yes	MJD45H11A	**MJPE45H11-Q**
100	3	25	-	1	4	3	NPN	No	MJD31C	**MJPE31C**
							NPN	Yes	MJD32C	**MJPE31C-Q**
		120	-	0,02	60		NPN	Yes	MJD31CA	**MJPE31CH(-Q)***
		25	-	1	4		PNP	No	MJD31CH-Q*	**MJPE32C**
							PNP	Yes	MJD32CA	**MJPE32C-Q**
	6	30	-	0,3	4		NPN	Yes	MJD41C(-Q)	
				0,3	4		PNP	Yes	MJD42C(-Q)	

* high gain version

General purpose high voltage transistors

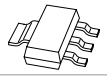
						Automotive-qualified				
Package						SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	SOT23	SOT323 (SC-70)
										
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)						1700	1300	750	250	200
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)					
NPN	140	300	60	250	100				PMBT5550 (-Q)	PMST5550 (-Q)
	160	300	80	250	100				PMBT5551 (-Q) / BSR19A(-Q)	PMST5551 (-Q)
	250	100	50		60	BF722 (-Q)	BF622 (-Q)		BF822(-Q)	
	300	100	50		60	BF720 (-Q)	BF620 (-Q)		BF820(-Q)	BF820W (-Q)
			40		50	PZTA42 (-Q)	PXTA42 (-Q)		PMBTA42 MMBTA42 (-Q)	PMSTA42 (-Q)
	350	100	40		70	BSP19 (-Q)	BST39 (-Q)			
	400	300	50	200	20	PZTA44(-Q)			PMBTA44 (-Q)	
PNP	100	100	30		50				BSS63 (-Q)	
	250	100	50		60	BF723 (-Q)				
			50		60		BF623 (-Q)		BF823 (-Q)	
	300	100	50		60		BF621 (-Q)		BF821 (-Q)	
			40		50	PZTA92 (-Q)	PXTA92 (-Q)		PMBTA92(-Q)	PMSTA92 (-Q)
2 x NPN	300	100	40		50			PMBTA42DS (-Q)		

For high-voltage transistors with increased performance please refer to our high-voltage low V_{CEsat} transistor portfolio on page 38.

PNP LED driver

			Automotive-qualified	
Package			SOT457	SOT23
				
Size (mm)			2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0
P_{tot} (mW)			750	480
Maximum supply voltage Vs max (V)	Typical stabilized output current I_{out} typ (mA)	Maximum stabilized output current I_{out} max (mA)		
18	10	-		NCR401T
	20	-		NCR402T
40	10	65	NCR401U	
	20	65	NCR402U	
	50	65	NCR405U	

NPN LED driver

				Automotive-qualified		
Package				SOT457 (SC-74)	SOT223 (SC-73)	DFN2020D-6 (SOT1118D)
						
Size (mm)				2.9 x 1.5 x 1.0	6.5 x 3.5 x 1.65	2 x 2 x 0.62
P_{tot} (mW)				750	1250	530
Maximum supply voltage Vs max (V)	Maximum Enable voltage VEN max (V)	Typical stabilized output current I_{out} typ (mA)	Maximum stabilized output current I_{out} max (mA)			
16	25	10	250	NCR320U		
	4.5			NCR321U		
40	40	10	150	NCR420U		
	4.5			NCR421U		
16	25	10	250		NCR320Z	
	4.5				NCR321Z	
40	40	10	150		NCR420Z	
	4.5				NCR421Z	
16	25	10	250			NCR320PAS
	4.5					NCR321PAS
40	40	10	150			NCR420PAS
	4.5					NCR421PAS

Constant current source

	Automotive-qualified				
Package	SOT353 (SC-88A)				
					
Size (mm)	2.0 x 1.25 x 0.95				
P_{tot} (mW)	335				
Type	PSSI2021SAY				
Description	Maximum supply voltage	Maximum supply current	Typical stabilized output current	Minimum stabilized output current	Maximum stabilized output current
Parameter	V_S max (V)	I_S max (mA)	I_{out} typ (µA)	I_{out} min (mA)	I_{out} max (mA)
Value	75	2.2	15	0.015	50

Darlington transistors

Package					Automotive-qualified		
					SOT223 (SC-73)	SOT89 (SC-62)	SOT23
							
Size (mm)					6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0
P_{tot} (mW)					1700	1300	250
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	f_T min (MHz)			
NPN	30	500	10000	125			PMBTA13 (-Q)
			20000		PZTA14 (-Q)	PXTA14	PMBTA14
				220		BCV29	BCV27 (-Q)
	45	1000	2000	200	BSP50 (-Q)	BST50 (-Q)	
	60	500	10000	220		BCV49 (-Q)	BCV47 (-Q)
		1000	2000	200	BSP51 (-Q)	BST51 (-Q)	
	80				BSP52 (-Q)	BST52 (-Q)	
PNP	30	500	20000	125			PMBTA64
				220		BCV28	BCV26 (-Q)
	45	1000	2000	200	BSP60 (-Q)	BST60 (-Q)	
	60	500	10000	220		BCV48 (-Q)	BCV46 (-Q)
		1000	2000	200	BSP61 (-Q)	BST61 (-Q)	
	80				BSP62 (-Q)	BST62 (-Q)	

Schmitt-triggers

Package							Automotive-qualified
							SOT143B
							
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							250
Polarity	V_{CEO} (V) TR1	V_{CEO} (V) TR2	I_C (mA)	h_{FE} min	h_{FE} max	V_{CEsat} typ (mV)	
NPN	30	6	100	110	800	250	BCV63 / B
PNP	30	6	100	220	475	250	BCV64B

Low noise transistors

Package							Automotive-qualified	
							SOT23	SOT323 (SC-70)
								
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)							250	200
Polarity	V_{CEO} (V)	I_C (mA)	Noise figure max (dB)	h_{FE} min	h_{FE} max	f_T min (MHz)		
NPN	30	100	4	200	450	100	BC849B	BC849BW
				420	800	100	BC849C	BC849CW
	45	100	4	200	450	100	BC850B	BC850BW
				420	800	100	BC850C	BC850CW
PNP	30	100	4	220	475	100	BC859B	BC859BW
				420	800	100	BC859C	BC859CW
	45	100	4	220	475	100	BC860B	BC860BW
				420	800	100	BC860C	BC860CW

Matched pair transistors - part 1

Package							Automotive-qualified			
							SOT143B	SOT457 (SC-74)		LFPAK56D (SOT1205)
										
Size (mm)							2.9 x 1.3 x 1.0	2.9 x 1.5 x 1.0		5 x 6 x 1.1
P_{tot} (mW)							250	750		1250
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	h_{FE1}/h_{FE2}	$V_{BE1} - V_{BE2}$ (mV)				
NPN	30	100	110	800	0.7 [1]	n.a.	BCV61/A/B/C			
	45	100	200	450	0.9 [1]	n.a.	BCM61B			
						2			BCM847DS	
	80	1000	63	250	0.95	n.a.		BCM56DS		
	100	3000	150	-	0.95	n.a.				PHPT610035NK
	Configuration									
PNP	30	100	100	800	0.7 [1]	n.a.	BCV62/A/B/C			
	45	100	200	450	0.9 [1]	n.a.	BCM62B			
						2			BCM857DS	
	65	100	200	450	0.9	2			BCM856DS	
	80	1000	63	250	0.95	n.a.		BCM53DS		
	100	3000	150	-	0.9	n.a.				PHPT610035PK
	Configuration									

[1] I_{C1} / I_{E2}

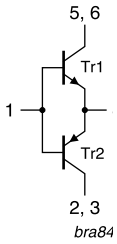
Matched pair transistors - part 2

Types in **bold** represent new products

Package							Automotive-qualified				
							SOT353 (SC-88A)	SOT363 (SC-88)		SOT1216 (DFN1010B-6)	
											
Size (mm)							2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95		1.1x 1.0 x 0.37	
P_{tot} (mW)							300	300		350	
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	h_{FE1}/h_{FE2}	$V_{BE1} - V_{BE2}$ (mV)					
NPN	45	100	200	450	0.9 [1]	2		BCM847BS			
					0.95	2	PMP4501G		PMP4501Y	BCM847QAS	PMP4501QAS
					0.98	2	PMP4201G		PMP4201Y		
	65	100	200	450	0.9	2		BCM846BS			
	Configuration										
	40	200	100	300	0.98	2			**PMP3906AYS-Q**		
PNP	45	100	200	450	0.9 [1]	2		BCM857BS			
					0.95	2	PMP5501G		PMP5501Y	BCM857QAS	PMP5501QAS
					0.98	2	PMP5201G		PMP5201Y		
	65	100	200	450	0.9	2		BCM856BS			
	Configuration										

[1] I_{C1} / I_{E2}

MOSFET driver

			Automotive-qualified			
V_{CEO} (V)	I_C (A)	I_{cm} [A]	Type	Package	Remark	Configuration
30	0.1	0.2	BCV65	 SOT143B	General-purpose transistors	
40	0.6	1	PMD2001D	 SOT457	Switching transistors with reduced storage time	
	1	2	PMD3001D		Low V_{CEsat}	

Medium frequency transistors

						Automotive-qualified	
Package						SOT23	SOT323 (SC-70)
							
Size (mm)						2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)						250	200
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T typ (MHz)		
NPN	15	100	40	-	500	BF570	
	20	25		85	>275	BFS20	BFS20W
		30	65	225	260	BFS19	
	40	25	67	220	380	BF840	
PNP	30	25	25	50	250	BF824	BF824W
	40		50	-	>325	BF550	

Low V_{CEsat} transistors single NPN up to 2000 mW

Types in **bold** represent new products

Package							Automotive-qualified				
							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020D-3 (SOT1061D)	DFN2020-3 (SOT1061)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)							1700	1650	750	1300	1300
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A					
10	3	5	325 / -	0.5	2	25 (max value)				PBSS4310PAS-Q	
12	5.3	10.6	300 / 530	0.5	2	18		PBSS301NX (-Q)			
	5.8	11.6	300 / 530	0.5	2	18	PBSS301NZ				
20	3	5	220 / 390	0.5	2	40		PBSS4320X			
	4	15	300 / 450	0.5	2	30			PBSS301ND PBSS4420D (-Q)		
	5	10	300 / 450	0.5	2	35		PBSS4520X (-Q)			
	5.3	10.6	300 / 570	0.5	2	20		PBSS302NX (-Q)			
	5.8	10.2	300 / 570	0.5	2	20	PBSS302NZ (-Q)				
	6	7	280 / 440	0.5	2	20					PBSS4620PA (-Q)
	7	15	300 / 550	0.5	2	12		PBSS4021NX			
	8	20	300 / 550	0.5	2	9	PBSS4021NZ (-Q)				
30	3	5	300 / 490	0.5	2	45		PBSS4330X			
	3	5	300 / 465	0.5	2	40				PBSS4330PAS (-Q) [2]	PBSS4330PA
	3.5	6	300 / 500	0.5	2	70			PBSS4032ND [3]		
	4.7	10	300 / 500	0.5	2	57		PBSS4032NX [3]			
	5.1	10.2	300 / 480	0.5	2	20		PBSS303NX (-Q)			
	5.4	10	300 / 500	0.5	2	57	PBSS4032NZ [3]				
	5.5	11	300 / 480	0.5	2	20	PBSS303NZ				
	6	7	280 / 450	0.5	2	21					PBSS4630PA
40	2	3	300 / –	0.5	5	140		PBSS4240X			
	4	15	300 / 520	0.5	2	35			PBSS302ND (-Q)		
		10	300 / 500	0.5	2	21		PBSS4540X (-Q)			
	5	10	300 / 500	0.5	2	25	PBSS4540Z (-Q)				
50	2	5	300 / –	0.5	2	90 [2]		PBSS4250X			
	3	5	200 / 280	0.5	2	65			PBSS4350D (-Q)		
			300 / 460	0.5	2	50		PBSS4350X		**PBSS4350PAS (-Q)**	
			200 / 280	0.5	2	60 [1]	PBSS4350Z (-Q)				
60	1	2	170 / –	0.5	10	200 [2]		PBSS4160X (-Q)			
	3	6	200 / 360	0.5	5	45				PBSS4360PAS (-Q) [2]	
			200 / –	0.5	5	45	PBSS4360Z (-Q)	PBSS4360X (-Q)			
			345 / 570	0.5	2	40			PBSS303ND		
	4.7	9.4	300 / 520	0.5	2	25		PBSS304NX (-Q)			
	5.2	10.4	300 / 520	0.5	2	25	PBSS304NZ				
	6	7	280 / 440	0.5	2	22					PBSS4560PA
	6.2	15	300 / 500	0.5	2	17		PBSS4041NX			
	7	15	300 / 500	0.5	2	13	PBSS4041NZ (-Q)				
80	3	6	240 / 360	0.5	2	40			PBSS304ND		
	4	10	250 / 400	0.5	2	25		PBSS4480X (-Q)			
	4.6	9.2	300 / 470	0.5	2	25		PBSS305NX (-Q)			
	5.1	10.2	300 / 470	0.5	2	25	PBSS305NZ				
	5.6	7	270 / 425	0.5	2	25					PBSS4580PA
100	1	3	150 / 290	0.25	10	75			PBSS8110D		
			150 / 290	0.25	10	73		PBSS8110X			
			150 / 290	0.25	10	73	PBSS8110Z (-Q)				
	3	4	170 / 275	0.5	2	45			PBSS305ND		
	4.5	9	200 / 330	0.5	2	27		PBSS306NX (-Q)			
	5.1	10.2	200 / 330	0.5	2	27	PBSS306NZ				
	5.2	6	180 / 285	0.5	2	30					PBSS8510PA

[1] I_C / I_B = 20 [2] V_{CEsat} (max) [3] Optimized for high-speed switching
[2] 175°C capable

Low V_{CEsat} transistors single NPN up to 750 mW

Package							Automotive-qualified				
							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
											
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)							480	350	430	250	750
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A					
15	0.5	1	200 / 325	0.01	2	-				PBSS2515MB	
20	1	3	350 / 470	0.1	2	110 [2]	PBSS4120T (-Q)				
	2	5	220 / 330	0.1	2	45	PBSS4320T (-Q)				
	4.3	8	300 / 550	0.5	2	21	PBSS4021NT (-Q)				
30	1	1.5	230 / 380	0.5	2	90					PBSS4130QA (-Q)
		3	300 / 450	0.5	2	120 [2]	PBSS4130T (-Q)				
	2	3	300 / 450	0.5	2	70	PBSS4230T (-Q)				
			230 / 380	0.5	2	75					PBSS4230QA (-Q)
	2.6	5	300 / 500	0.5	2	80	PBSS4032NT [3]				
40	0.5	1	200 / 550	0.01	2	200 [2]				PBSS2540MB (-Q)	
	1	2	300 / 440	0.5	5	130		PBSS4140U (-Q)			
			300 / 510	0.5	5	120	PMMT491A				
			300 / 420	0.5	5	130	PBSS4140T (-Q)				
	2	3	350 / 470	0.1	2	70			PBSS4240Y		
			300 / 450	0.5	2	70	PBSS4240T (-Q)				
50	2	5	300 / 495	0.5	2	60	PBSS4350T (-Q)				
60	1	1.5	150 / 240	0.5	2	90					PBSS4160QA (-Q)
		2	200 / 420	0.5	5	120		PBSS4160U (-Q)			
			200 / 350	0.5	5	110	PBSS4160T (-Q)				
	2	3	150 / 240	0.5	2	75					PBSS4260QA (-Q)
	3.8	8	300 / 500	0.5	2	29	PBSS4041NT (-Q)				
100	1	3	150 / 400	0.25	10	80			PBSS8110Y		
			150 / 300	0.25	10	70	PBSS8110T (-Q)				

[1] I_C / I_B = 20 [2] V_{CEsat} (max) [3] Optimized for high-speed switching

Low V_{CEsat} transistors single PNP up to 2000 mW

Types in **bold** represent new products

Package							Automotive-qualified				
							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020D-3 (SOT1061D)	DFN2020-3 (SOT1061)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)							1700	1650	750	1300	1300
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A					
12	5.3	10.6	250 / 400	0.5	2	20		PBSS301PX (-Q)			
	5.7	11.4	250 / 400	0.5	2	20	PBSS301PZ				
20	3	5	200 / –	0.5	2	80 [2]			PBSS5320D		
			220 / 450	0.5	2	50		PBSS5320X			
	4	15	250 / 400	0.5	2	35			PBSS301PD PBSS5420D		
	5	10	300 / 430	0.5	2	45		PBSS5520X (-Q)			
	5.1	10.2	250 / 370	0.5	2	25		PBSS302PX (-Q)			
	5.5	11	250 / 370	0.5	2	25	PBSS302PZ				
	6	7	230 / 345	0.5	2	25					PBSS5620PA
	6.2	15	250 / 400	0.5	2	18		PBSS4021PX (-Q)			
	6.6	20	250 / 400	0.5	2	16	PBSS4021PZ (-Q)				
30	2.7	5	200 / 350	0.5	2	87			PBSS4032PD [3]		
	3	5	200 / 380	0.5	2	50		PBSS5330X			
			200 / 320	0.5	2	45				PBSS5330PAS [2]	PBSS5330PA
	4.2	10	200 / 350	0.5	2	70		PBSS4032PX [3]			
	4.4	10	200 / 350	0.5	2	70	PBSS4032PZ [3]				
	5.1	10.2	250 / 400	0.5	2	25		PBSS303PX (-Q)			
	5.3	10.6	250 / 400	0.5	2	25	PBSS303PZ				
	6	7	200 / 335	0.5	2	25					PBSS5630PA
40	2	3	215 / –	0.5	5	170		PBSS5240X			
	4	15	200 / 310	0.5	2	46			PBSS302PD		
		10	250 / 370	0.5	2	33		PBSS5540X (-Q)			
	5		250 / 350	0.5	2	40 [1]	PBSS5540Z (-Q)				
50	2	5	200 / –	0.5	2	90 [2]		PBSS5250X		**PBSS5250PAS (-Q)**	
	3	5	200 / 300	0.5	2	70			PBSS5350D (-Q)		
			200 / 375	0.5	2	70		PBSS5350X		**PBSS5350PAS (-Q)**	
			200 / 300	0.5	2	70	PBSS5350Z (-Q)				
60	3	6	130 / 220	0.5	5	55				PBSS5360PAS (-Q) [2]	
			130 / –	0.5	5	55	PBSS5360Z (-Q)	PBSS5360X (-Q)			
			180 / 265	0.5	2	55			PBSS303PD (-Q)		
	4.2	8.4	200 / 295	0.5	2	35		PBSS304PX (-Q)			
	4.5	9	200 / 295	0.5	2	35	PBSS304PZ				
	5	6	170 / 260	0.5	2	35					PBSS5560PA
	5	15	200 / 300	0.5	2	30		PBSS4041PX			
	5.7		200 / 300	0.5	2	22	PBSS4041PZ (-Q)				
80	3	5	155 / 225	0.5	2	55			PBSS304PD		
	4		180 / 265	0.5	2	40					PBSS5580PA
		10	200 / 300	0.5	2	35		PBSS5480X (-Q)			
		8	200 / 280	0.5	2	36		PBSS305PX (-Q)			
	4.5	9	200 / 280	0.5	2	36	PBSS305PZ				
100	1	3	150 / 350	0.5	5	100			PBSS9110D		
			150 / 350	0.5	5	90		PBSS9110X			
			150 / –	0.5	5	90	PBSS9110Z (-Q)				
	2	3	175 / 275	0.5	2	65			PBSS305PD		
	2.7	4	180 / 295	0.5	2	45					PBSS9410PA
	3.7	7.4	200 / 300	0.5	2	45		PBSS306PX (-Q)			
	4.1	8.2	200 / 300	0.5	5	45	PBSS306PZ				

[1] I_C / I_B = 20 [2] V_{CEsat} (max) [3] Optimized for high-speed switching
[2] 175°C capable

Low V_{CEsat} transistors single PNP up to 750 mW

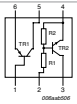
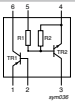
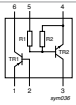
Package							Automotive-qualified				
							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
											
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)							480	350	430	250	750
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A					
15	0.5	1	200 / 260	0.01	2	150				PBSS3515MB	
20	1	2	300 / 450	0.1	2	125 [2]	PBSS5120T (-Q)				
	2	3	225 / –	0.5	2	80 [2]	PBSS5220T (-Q)				
		5	220 / 420	0.5	2	50	PBSS5320T (-Q)				
	3.5	8	250 / 400	0.5	2	35	PBSS4021PT (-Q)				
30	1	3	260 / 350	0.5	2	110	PBSS5130T (-Q)				
	2	3	300 / 450	0.1	2	70	PBSS5230T (-Q)				
	2.4	5	200 / 320	0.5	2	95	PBSS4032PT [3]				
40	0.5	1	200 / 380	0.01	2	220				PBSS3540MB	
	1	2	300 / 520	0.1	5	130		PBSS5140U (-Q)			
			300 / 800	0.1	5	130	PMMT591A				
			300 / 510	0.1	5	130	PBSS5140T (-Q)				
	2	3	300 / –	0.1	2	110 [2]			PBSS5240Y		
			300 / 450	0.1	2	70	PBSS5240T (-Q)				
50	2	3	200 / –	0.5	2	90 [2]	PBSS5250T (-Q)				
							PBSS5250TH (-Q)				
	3	3	200 / –	0.5	2	90 [2]	PBSS5350TH (-Q)				
		5	200 / 360	0.5	2	55	PBSS5350T (-Q)				
60	1	1.5	120 / 185	0.5	2	125					PBSS5160QA
		2	150 / 250	0.5	5	135		PBSS5160U			
			150 / 250	0.5	5	120	PBSS5160T (-Q)				
	1.7	2.5	120 / 185	0.5	2	105					PBSS5260QA (-Q)
	2.7	8	200 / 300	0.5	2	49	PBSS4041PT (-Q)				
100	1	3	150 / –	0.25	5	93			PBSS9110Y		
			150 / 350	0.5	5	95	PBSS9110T (-Q)				

[1] IC / IB = 20 [2] V_{CEsat} (max) [3] Optimized for high-speed switching

Low V_{CEsat} transistors double

										Automotive-qualified			
Package										SOT457 (SC-74)	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)	SOT363 (SC-88)
													
Size (mm)										2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62	2.0 x 1.25 x 0.95
P_{tot} (mW)										750	1300	1300	430
V_{CEO} (V)	I_C (A)	Polarity	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)				
15	0.5	NPN/PNP	200	0.1	2	-	250	0.5	0.05				PBSS2515YPN (-Q)
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05			PBSS4220PANS (-Q)	
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05			PBSS5220PAPS (-Q)	
30	1	NPN / NPN	210	0.5	2	75	100	0.5	0.05		PBSS4130PAN (-Q)		
		PNP / PNP	170	0.5	2	85	140	0.5	0.05		PBSS5130PAP (-Q)		
		NPN / PNP	210 / 170	0.5	2	75 / 85	100 / 140	0.5	0.05		PBSS4130PANP (-Q)		
	2	NPN / NPN	230	0.5	2	60	80	0.5	0.05		PBSS4230PAN (-Q)		
		PNP / PNP	210	0.5	2	75	110	0.5	0.05		PBSS5230PAP (-Q)		
		NPN / PNP	230 / 210	0.5	2	60 / 75	80 / 100	0.5	0.05		PBSS4230PANP		
40	1	NPN / PNP	300 / 250	0.5	5	130 / 150	500	1	0.1	PBSS4140DPN (-Q)			
	2	NPN / PNP	300 / 250	0.5	5	80 / 100	400 / 530	2	0.2	PBSS4240DPN			
55	2	PNP/ PNP	140 / 200	0.5	2	80 / 120	300 / 450	2	0.2			PBSS5255PAPS (-Q)	
60	1	2 x NPN	200	0.5	5	115	250	1	0.1	PBSS4160DS (-Q)			
		2 x PNP	150	0.5	5	120	330	1	0.1	PBSS5160DS (-Q)			
		NPN / PNP	200 / 150	0.5	5	115 / 120	250 / 330	1	0.1	PBSS4160DPN			
	1	NPN / NPN	150	0.5	2	90	120	0.5	0.05		PBSS4160PAN (-Q)	PBSS4160PANS (-Q)	
		PNP / PNP	120	0.5	2	125	180	0.5	0.05		PBSS5160PAP (-Q)	PBSS5160PAPS (-Q)	
		NPN / PNP	150 / 120	0.5	2	90 / 125	120 / 180	0.5	0.05		PBSS4160PANP (-Q)	PBSS4160PANPS	
	2	NPN / NPN	210	0.5	2	70	90	0.5	0.05		PBSS4260PAN (-Q)	PBSS4260PANS (-Q)	
		PNP / PNP	140	0.5	2	100	140	0.5	0.05		PBSS5260PAP (-Q)	PBSS5260PAPS (-Q)	
		NPN / PNP	210 / 140	0.5	2	70 / 100	90 / 140	0.5	0.05		PBSS4260PANP (-Q)	PBSS4260PANPS (-Q)	
120	1	NPN / NPN	240	0.1	2	90	120	0.5	0.05		PBSS4112PAN (-Q)		
		PNP / PNP	190	0.1	2	150	220	0.5	0.05		PBSS5112PAP		
		NPN / PNP	240 / 190	0.1	2	90 / 150	120 / 220	0.5	0.05		PBSS4112PANP (-Q)		

Low V_{CEsat} transistors load switches

Package				Automotive-qualified		
				SOT457 (SC-74)		SOT363 (SC-88)
						
Size (mm)				2.9 x 1.5 x 1.0		2.0 x 1.25 x 0.95
P_{tot} (mW)				750 [1]	600 [1]	300 [2]
V_{CEO} (V)	I_C (A)	V_{CEsat} max (mV); I_C = 0.5 A; I_B = 0.05 A	R1, R2 (kΩ)			
15	0.5	250	2.2			PBLS1501Y
			4.7			PBLS1502Y
			10			PBLS1503Y
			22			PBLS1504Y (-Q)
20	1	150	2.2		PBLS2001D	
			4.7		PBLS2002D	
			10		PBLS2003D	
			22		PBLS2004D	
	1.8	70	2.2	PBLS2021D		
			4.7	PBLS2022D		
			10	PBLS2023D		
			22	PBLS2024D		
40	0.5	350	2.2			PBLS4001Y
			4.7			PBLS4002Y (-Q)
			10			PBLS4003Y (-Q)
			22			PBLS4004Y
			47			PBLS4005Y (-Q)
	1	170	2.2		PBLS4001D	
			4.7		PBLS4002D	
			10		PBLS4003D	
			22		PBLS4004D	
			47		PBLS4005D	
60	1	180	2.2		PBLS6001D	
			4.7		PBLS6002D (-Q)	
			10		PBLS6003D (-Q)	
			22		PBLS6004D	
			47		PBLS6005D	
	1.5	100	2.2	PBLS6021D (-Q)		
			4.7	PBLS6022D (-Q)		
			10	PBLS6023D (-Q)		
			22	PBLS6024D (-Q)		

[1] Device mounted on a ceramic PCB, Al2O3, standard footprint
[2] Device mounted on an FR4 PCB, single-sided copper, tin-plated, and standard footprint

Low V_{CEsat} high voltage transistors

Package					Automotive-qualified			
					SOT223 (SC-73)	SOT89 (SC-62)	DFN1010D-3 (SOT1215)	SOT23
								
Size (mm)					6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	1.1 x 1.0 x 0.37	2.9 x 1.3 x 1.0
P_{tot} (mW)					1700	1300	750	250
Polarity	V_{CEO} [max] (V)	I_C (A)	hFE [min]	hFE [max]				
NPN	150	0.5	100				PBHV8515QA	
		1	70	300				PBHV8115TLH (-Q)
			100					PBHV8115T (-Q)
						PBHV8115X (-Q)		
					PBHV8115Z (-Q)			
		2	100		PBHV8215Z (-Q)			
	180	1	100					PBHV8118T (-Q)
	400	0.5	100		PBHV8540Z (-Q)	PBHV8540X (-Q)		PBHV8540T (-Q)
		1	100		PBHV8140Z (-Q)			
	500	0.15	50			PBHV8550X (-Q)		
								PMBTA45 (-Q)
	600	0.1	70		PBHV2160Z (-Q)			
		0.5	70		PBHV8560Z (-Q)			
PNP	140	4	100		PBHV9414Z (-Q)			
	150	0.5	100				PBHV9515QA	
		1	70	300				PBHV9115TLH (-Q)
			100					PBHV9115T (-Q)
						PBHV9115X (-Q)		
					PBHV9115Z (-Q)			
		2	100		PBHV9215Z (-Q)			
	400	0.25	100					PBHV9040T (-Q)
						PBHV9040X (-Q)		
					PBHV9040Z (-Q)			
		0.5	100		PBHV9540Z (-Q)			
			140	450		PBHV9540X (-Q)		
	500	0.15	100					PBHV9050T (-Q)
		0.25	100		PBHV9050Z (-Q)			
	600	0.1	70		PBHV3160Z (-Q)			
		0.5	70		PBHV9560Z (-Q)			

Low V_{CEsat} transistors PNP - N-channel MOSFET combination

Package											Automotive-qualified
											DFN2020-6 (SOT1118)
											
Size (mm)											2.0 x 2.0 x 0.62
P_{tot} (mW)											1300
V_{CEO} (V)	I_C (A)	h_{FE} min	h_{FE} max	@ I_C (mA)	@ V_{CE} (V)	R_{CEsat} typ (mΩ)	V_{DS} (V)	V_{GS} (V)	I_D (A)	R_{Dson} typ (mΩ)	
40	2	300	800	100	5	240	30	0.7	0.66	390	PBSM5240PF
		100	-	100	5	240	30	0.7	0.66	390	PBSM5240PFH

Low V_{CEsat} power transistors single (175 °C capable)

Package								LFPAK56 (SOT669)
								
Size (mm)								5 x 6 x 1.1
P_{tot} (mW)								1250
V_{CEO} (V)	I_C (A)	I_{CM} [max] (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	Polarity	Automotive-qualified	
40	6	14	230 / 350	0.5	2	NPN	Yes	PHPT60406NY (-Q)
		12	210 / 300	0.5	2	PNP	Yes	PHPT60406PY (-Q)
	10	20	230 / 370	0.5	2	NPN	Yes	PHPT60410NY (-Q)
			240 / 350	0.5	2	PNP	Yes	PHPT60410PY (-Q)
	15	30	250 / 410	0.5	2	NPN	Yes	PHPT60415NY (-Q)
			200 / 340	0.5	2	PNP	Yes	PHPT60415PY (-Q)
60	3	8	200 / 400	0.5	2	NPN	Yes	PHPT60603NY (-Q)
			250 / 250	0.5	2	PNP	Yes	PHPT60603PY (-Q)
	6	14	240 / 390	0.5	2	NPN	Yes	PHPT60606NY (-Q)
		12	120 / 200	0.5	2	PNP	Yes	PHPT60606PY (-Q)
	10	20	240 / 410	0.5	2	NPN	Yes	PHPT60610NY (-Q)
			120 / 215	0.5	2	PNP	Yes	PHPT60610PY (-Q)
100	2	6	150 / 250	0.5	10	NPN	No	PHPT61002NYC (-Q)
			150 / 220	0.5	10	PNP	No	PHPT61002PYC (-Q)
			120/220	0.5	10	NPN	No	PHPT61002NYCLH (-Q)
		5	100/180	0.5	10	PNP	No	PHPT61002PYCLH (-Q)
	3	8	150 / 250	0.5	10	NPN	Yes	PHPT61003NY (-Q)
			150 / 220	0.5	10	PNP	Yes	PHPT61003PY (-Q)
	6	12	140 / 260	0.5	2	NPN	Yes	PHPT61006NY (-Q)
			170 / 305	0.5	2	PNP	Yes	PHPT61006PY (-Q)
	10	20	150 / 275	0.5	2	NPN	Yes	PHPT61010NY (-Q)
			180 / 330	0.5	2	PNP	Yes	PHPT61010PY (-Q)

Low V_{CEsat} power transistors double (175 °C capable)

											Automotive-qualified
Package											LFPAK56D (SOT1205)
											
Size (mm)											5 x 6 x 1.1
P_{tot} (mW)											1250
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)	Polarity	h_{FE1}/h_{FE2}	
100	3	6	150	0.5	10	50	300	3	0.2	2XNPN	-	PHPT610030NK (-Q)
			220			70	400	3	0.2	2XPNP	-	PHPT610030PK (-Q)
			250			50 / 70	300 / 400	3	0.2	NPN/PNP	-	PHPT610030NPK (-Q)
			250			50	300	3	0.2	2XNPN	0.95	PHPT610035NK (-Q)
			220				400	3	0.2	2XPNP	0.9	PHPT610035PK (-Q)

50 V/100 mA single NPN RETs

Types in **bold** represent new products

Package					Automotive-qualified				
					SOT23	SOT323 (SC-70)	DFN1412D-3 (SOT8009)	DFN1110D-3 (SOT8015)	DFN1006-3 (SOT883)
					Leaded SMD		DFN		
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.47	1.1 x 1.0 x 0.47	1.0 x 0.6 x 0.5
P_{tot} (mW)					250	200	360	340	250
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN				
50	100	R1 = R2	2.2	2.2	PDTC123ET (-Q)	PDTC123EU (-Q)			PDTC123EM
			4.7	4.7	PDTC143ET (-Q)	PDTC143EU (-Q)	PDTC143EQC (-Q)	PDTC143EQB (-Q)	PDTC143EM
			10	10	PDTC114ET (-Q)	PDTC114EU (-Q)	PDTC114EQC (-Q)	PDTC114EQB (-Q)	PDTC114EM (-Q)
			22	22	PDTC124ET (-Q)	PDTC124EU (-Q)	PDTC124EQC (-Q)	PDTC124EQB (-Q)	PDTC124EM
			47	47	PDTC144ET (-Q)	PDTC144EU (-Q)	PDTC144EQC (-Q)	PDTC144EQB (-Q)	PDTC144EM (-Q)
			100	100	PDTC115ET (-Q)	PDTC115EU (-Q)			PDTC115EM (-Q)
		R1 ≠ R2	2.2	10	PDTC123YT (-Q)	PDTC123YU (-Q)		**PDTC123YQB(-Q)**	PDTC123YM
			2.2	47	PDTC123JT (-Q)	PDTC123JU (-Q)	PDTC123JQC (-Q)	PDTC123JQB (-Q)	PDTC123JM
			4.7	10	PDTC143XT (-Q)	PDTC143XU (-Q)	PDTC143XQC (-Q)	PDTC143XQB (-Q)	PDTC143XM
			4.7	47	PDTC143ZT (-Q)	PDTC143ZU (-Q)	PDTC143ZQC (-Q)	PDTC143ZQB (-Q)	PDTC143ZM (-Q)
			10	47	PDTC114YT (-Q)	PDTC114YU (-Q)	PDTC114YQC (-Q)	PDTC114YQB (-Q)	PDTC114YM (-Q)
			22	47	PDTC124XT (-Q)	PDTC124XU (-Q)	PDTC124XQC (-Q)	PDTC124XQB (-Q)	PDTC124XM
			47	10	PDTC144VT (-Q)	PDTC144VU (-Q)			PDTC144VM
			47	22	PDTC144WT (-Q)	PDTC144WU (-Q)			PDTC144WM
		Only R1	2.2	-	PDTC123TT (-Q)	PDTC123TU			PDTC123TM
			4.7	-	PDTC143TT (-Q)	PDTC143TU (-Q)			PDTC143TM (-Q)
			10	-	PDTC114TT (-Q)	PDTC114TU (-Q)			PDTC114TM
			22	-	PDTC124TT	PDTC124TU			PDTC124TM
			47	-	PDTC144TT	PDTC144TU (-Q)			PDTC144TM
			100	-	PDTC115TT	PDTC115TU			PDTC115TM

50 V/100 mA single PNP RETs

Types in **bold** represent new products

Package					Automotive-qualified				
					SOT23	SOT323 (SC-70)	DFN1412D-3 (SOT8009)	DFN1110D-3 (SOT8015)	DFN1006-3 (SOT883)
					Leaded SMD		DFN		
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.47	1.1 x 1.0 x 0.47	1.0 x 0.6 x 0.5
P_{tot} (mW)					250	200	360	340	250
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	PNP				
50	100	R1 = R2	1	1	PDTA113ET	PDTA113EU			PDTA113EM
			2.2	2.2	PDTA123ET (-Q)	PDTA123EU (-Q)			PDTA123EM
			4.7	4.7	PDTA143ET (-Q)	PDTA143EU (-Q)	PDTA143EQC (-Q)	PDTA143EQB (-Q)	PDTA143EM
			10	10	PDTA114ET (-Q)	PDTA114EU (-Q)	PDTA114EQC (-Q)	PDTA114EQB (-Q)	PDTA114EM
			22	22	PDTA124ET (-Q)	PDTA124EU (-Q)	PDTA124EQC (-Q)	PDTA124EQB (-Q)	PDTA124EM
			47	47	PDTA144ET (-Q)	PDTA144EU (-Q)	PDTA144EQC (-Q)	PDTA144EQB (-Q)	PDTA144EM
			100	100	PDTA115ET (-Q)	PDTA115EU (-Q)			PDTA115EM
		R1 ≠ R2	1	10	PDTA113ZT (-Q)	PDTA113ZU (-Q)			PDTA113ZM
			2.2	10	PDTA123YT (-Q)	PDTA123YU (-Q)		**PDTA123YQB(-Q)**	PDTA123YM
			2.2	47	PDTA123JT (-Q)	PDTA123JU (-Q)	PDTA123JQC (-Q)	PDTA123JQB (-Q)	PDTA123JM
			4.7	10	PDTA143XT (-Q)	PDTA143XU	PDTA143XQC (-Q)	PDTA143XQB (-Q)	PDTA143XM
			4.7	47	PDTA143ZT (-Q)	PDTA143ZU (-Q)	PDTA143ZQC (-Q)	PDTA143ZQB (-Q)	PDTA143ZM
			10	47	PDTA114YT (-Q)	PDTA114YU (-Q)	PDTA114YQC (-Q)	PDTA114YQB (-Q)	PDTA114YM
			22	47	PDTA124XT (-Q)	PDTA124XU (-Q)		PDTA124XQC (-Q)	PDTA124XM
			47	10	PDTA144VT (-Q)	PDTA144VU			PDTA144VM
			47	22	PDTA144WT (-Q)	PDTA144WU (-Q)			PDTA144WM
		Only R1	2.2	-	PDTA123TT	PDTA123TU			PDTA123TM
			4.7	-	PDTA143TT	PDTA143TU (-Q)			PDTA143TM
			10	-	PDTA114TT	PDTA114TU (-Q)			PDTA114TM
			22	-	PDTA124TT	PDTA124TU			PDTA124TM
			47	-	PDTA144TT	PDTA144TU			PDTA144TM
			100	-	PDTA115TT	PDTA115TU			PDTA115TM

50 V/100 mA double RETs

Package					Automotive-qualified								
					DFN1010B-6 (SOT1216)			DFN1412-6 (SOT1268)			SOT363 (SC-88)		
													
Size (mm)					1.1 x 1.0 x 0.37			1.4 X 1.2 X 0.5			2.0 x 1.25 x 0.95		
P_{tot} (mW)					350			480			300		
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP
50	100	R1 = R2	2.2	2.2							PUMH20 (-Q)	PUMD20 (-Q)	PUMB20
			4.7	4.7							PUMH15 (-Q)	PUMD15 (-Q)	PUMB15
			10	10	PQMH11	PQMD3	PQMB11	PRMH11	PRMD3	PRMB11	PUMH11 (-Q)	PUMD3 (-Q)	PUMB11 (-Q)
			22	22		PQMD2			PRMD2		PUMH1 (-Q)	PUMD2 (-Q)	PUMB1 (-Q)
			47	47	PQMH2	PQMD12		PRMH2	PRMD12		PUMH2 (-Q)	PUMD12 (-Q)	PUMB2 (-Q)
			100	100							PUMH24 (-Q)	PUMD24 (-Q)	PUMB24
		R1 ≠ R2	2.2	47	PQMH10	PQMD10		PRMH10	PRMD10		PUMH10 (-Q)	PUMD10 (-Q)	PUMB10
			4.7	10							PUMH18 (-Q)	PUMD18 (-Q)	PUMB18
			4.7	47	PQMH13	PQMD13		PRMH13	PRMD13		PUMH13 (-Q)	PUMD13 (-Q)	PUMB13 (-Q)
			10	47	PQMH9			PRMH9			PUMH9 (-Q)	PUMD9 (-Q)	PUMD9 (-Q)
			22	47		PQMD16			PRMD16		PUMH16 (-Q)	PUMD16 (-Q)	PUMB16
			47	22							PUMH17	PUMD17 (-Q)	PUMB17 (-Q)
			47 / 2.2	47 / 47								PUMD48 (-Q)	
		Only R1	2.2	-							PUMH30 (-Q)	PUMD30	PUMB30
			4.7	-							PUMH7 (-Q)	PUMD6 (-Q)	PUMB3 (-Q)
			10	-							PUMH4 (-Q)	PUMD4 (-Q)	PUMB4 (-Q)
			22	-							PUMH19	PUMD19	PUMB19 (-Q)
			47	-							PUMH14 (-Q)	PUMD14	PUMB14

80 V/100 mA single/double RETs

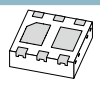
Package					Automotive-qualified						
					SOT23		SOT323 (SC-70)		SOT363 (SC-88)		
											
Size (mm)					2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		2.0 x 1.25 x 0.95		
P_{tot} (mW)					250		200		300		
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP	NPN / NPN	NPN / PNP	PNP / PNP
80	100	R1 = R2	10	10	NHDTC114ET (-Q)	NHDTA114ET (-Q)	NHDTC114EU (-Q)	NHDTA114EU (-Q)	NHUMH11 (-Q)	NHUMD3 (-Q)	NHUMB11 (-Q)
			22	22	NHDTC124ET (-Q)	NHDTA124ET (-Q)	NHDTC124EU (-Q)	NHDTA124EU (-Q)	NHUMH1 (-Q)	NHUMD2 (-Q)	NHUMB1 (-Q)
			47	47	NHDTC144ET (-Q)	NHDTA144ET (-Q)	NHDTC144EU (-Q)	NHDTA144EU (-Q)	NHUMH2 (-Q)	NHUMD12 (-Q)	NHUMB2 (-Q)
		R1 ≠ R2	2.2	47	NHDTC123JT (-Q)	NHDTA123JT (-Q)	NHDTC123JU (-Q)	NHDTA123JU (-Q)	NHUMH10 (-Q)	NHUMD10 (-Q)	NHUMB10 (-Q)
			4.7	47	NHDTC143ZT (-Q)	NHDTA143ZT (-Q)	NHDTC143ZU (-Q)	NHDTA143ZU (-Q)	NHUMH13 (-Q)	NHUMD13 (-Q)	NHUMB13 (-Q)
			10	47	NHDTC114YT (-Q)	NHDTA114YT (-Q)	NHDTC114YU (-Q)	NHDTA114YU (-Q)	NHUMH9 (-Q)	NHUMD9 (-Q)	NHUMB9 (-Q)

50 V/500 mA single RETs

Package					Automotive-qualified					
					SOT23		SOT323 (SC-70)		DFN1010D-3 (SOT1215)	
										
Size (mm)					2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		1.1 x 1.0 x 0.37	
P_{tot} (mW)					250		200		750	
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP	NPN	PNP
50	500	R1 = R2	1	1	PDTD113ET (-Q)	PDTB113ET (-Q)	PDTD113EU (-Q)	PDTB113EU (-Q)	PDTD113EQA	PDTB113EQA
			2.2	2.2	PDTD123ET (-Q)	PDTB123ET (-Q)	PDTD123EU (-Q)	PDTB123EU (-Q)	PDTD123EQA	PDTB123EQA
			4.7	4.7	PDTD143ET (-Q)	PDTB143ET (-Q)	PDTD143EU (-Q)	PDTB143EU (-Q)	PDTD143EQA	PDTB143EQA
			10	10	PDTD114ET (-Q)	PDTB114ET (-Q)	PDTD114EU (-Q)	PDTB114EU (-Q)	PDTD114EQA	PDTB114EQA
		R1 ≠ R2	1	10	PDTD113ZT (-Q)	PDTB113ZT (-Q)	PDTD113ZU (-Q)	PDTB113ZU (-Q)	PDTD113ZQA	PDTB113ZQA
			2.2	10	PDTD123YT (-Q)	PDTB123YT (-Q)	PDTD123YU (-Q)	PDTB123YU (-Q)	PDTD123YQA	PDTB123YQA
			4.7	10	PDTD143XT (-Q)	PDTB143XT (-Q)	PDTD143XU (-Q)	PDTB143XU (-Q)	PDTD143XQA	PDTB143XQA
		Only R1	2.2	-	PDTD123TT (-Q)	PDTB123TT (-Q)				

50 V/500 mA double RETs

Types in **bold** represent new products

Package					Automotive-qualified								
					SOT457 (SC-74)			DFN2020D-6 (SOT1118D)			DFN2020-6 (SOT1118)		
													
Size (mm)					2.9 x 1.5 x 1.0			2.0 x 2.0 x 0.62			2.0 x 2.0 x 0.62		
P_{tot} (mW)					750			500			500		
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN/NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP
50	500	R1 ≠ R2	1	10	PIMN31	PIMC31	PIMP31 (-Q)	**PIMN31PAS-Q**	**PIMC31PAS-Q**	**PIMP31PAS-Q**	**PIMN31PA**	**PIMC31PA**	**PIMP31PA**
			2.2	10	PIMN32 (-Q)	PIMC32 (-Q)	PIMP32 (-Q)	**PIMN32PAS-Q**	**PIMC32PAS-Q**	**PIMP32PAS-Q**	**PIMN32PA**	**PIMC32PA**	**PIMP32PA**

40V/600 mA Performance-based single RETs

Package					Automotive-qualified	
					SOT23	
						
Size (mm)					2.9 x 1.3 x 1.0	
P_{tot} (mW)					250	
V_{CEO} (V)	I_C (mA)		R1 (kΩ)	R2 (kΩ)	NPN	PNP
40	600	R1 = R2	1	1	PBRN113ET (-Q)	PBRP113ET (-Q)
			2.2	2.2	PBRN123ET (-Q)	PBRP123ET (-Q)
		R1 ≠ R2	1	10	PBRN113ZT (-Q)	PBRP113ZT (-Q)
			2.2	10	PBRN123YT (-Q)	PBRP123YT (-Q)

3-terminal adjustable shunt regulators

Automotive-qualified									
Type name	Pinning configuration	T_{amb}(C°)	Vref		Package	Size(mm)	Ptot(mW)	VKA(V)	IK(mA)
TLVH431NCDBZR (-Q)	Normal pinning	0 to 70	1.5%	1.24	SOT23	2.9 x 1.3 x 1.0	480	20	80
TLVH431NIDBZR (-Q)	Normal pinning	-40 to 85							
TLVH431NQDBZR (-Q)	Normal pinning	-40 to 125							
TLVH431NMQDBZR (-Q)	MIRrored pinning								
TLVH431NACDBZR (-Q)	Normal pinning	0 to 70	1%						
TLVH431NAIDBZR (-Q)	Normal pinning	-40 to 85							
TLVH431NAQDBZR (-Q)	Normal pinning	-40 to 125							
TLVH431NAMQDBZR (-Q)	MIRrored pinning								
TL431CDBZR (-Q)	Normal pinning	0 to 70	2%	2.495			580	36	100
TL431IDBZR (-Q)	Normal pinning	-40 to 85							
TL431QDBZR (-Q)	Normal pinning	-40 to 125							
TL431FDT (-Q)	Normal pinning								
TL431MFDT (-Q)	MIRrored pinning								
TL431ACDBZR (-Q)	Normal pinning	0 to 70	1%						
TL431AIDBZR (-Q)	Normal pinning	-40 to 85							
TL431AQDBZR (-Q)	Normal pinning	-40 to 125							
TL431AFDT (-Q)	Normal pinning								
TL431AMFDT (-Q)	MIRrored pinning								
TL431BCDBZR (-Q)	Normal pinning	0 to 70	0.5%						
TL431BIDBZR (-Q)	Normal pinning	-40 to 85							
TL431BQDBZR (-Q)	Normal pinning	-40 to 125							
TL431BFDT (-Q)	Normal pinning								
TL431BMFDT (-Q)	MIRrored pinning								

General purpose bipolar transistors

BC 84 7 X W

Silicon transistor

80 = 500 mA PNP SMD
81 = 500 mA NPN SMD
84 = 100 mA NPN SMD
85 = 100 mA PNP SMD

Max v_{CEO}
6 = 65 V
7 = 45 V
8 = 30 V

Package Indicator
w/o = SOT23
W = SOT323
M = DFN1006 (SOT883)
MB = DFN1006B (SOT883B)
QA = DFN1010D (SOT1215)

hfe selection:
x: A , B , C for BC84 & BC85 types
x: -16 , -25 , -40 for BC80 & BC81 types

General purpose power transistors

BC X 51 - 10 T

Silicon transistor

Package indicator
P = SOT223
X = SOT89

51 = PNP, -45 V, -1A
52 = PNP, -60 V, -1A
53 = PNP, -80 V, -1A
54 = NPN, 45 V, 1A
55 = NPN, 60 V, 1A
56 = NPN, 80 V, 1A

w/o = regular type
T = cost optimized type
H = 175 °C compatible

hfe selection:
w/o = min: 63, max: 250
10 = min: 63, max: 160
16 = min: 100, max: 250

General purpose power transistors

BC 51 - 10 - PAS

Silicon transistor

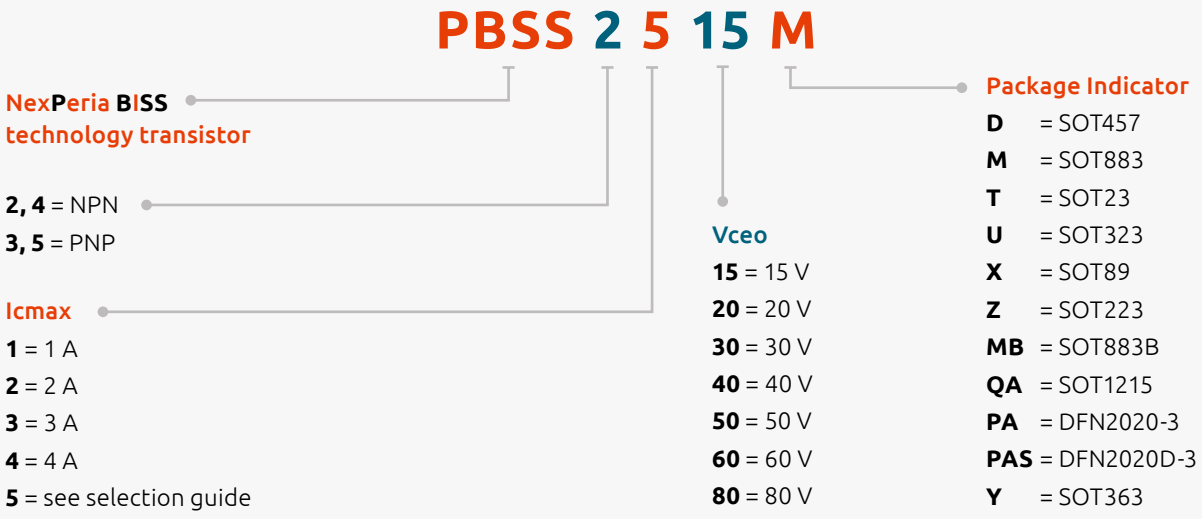
51 = PNP, -45 V, -1A
52 = PNP, -60 V, -1A
53 = PNP, -80 V, -1A
54 = NPN, 45 V, 1A
55 = NPN, 60 V, 1A
56 = NPN, 80 V, 1A

Package indicator
PA = SOT1061
PAS = SOT1061D

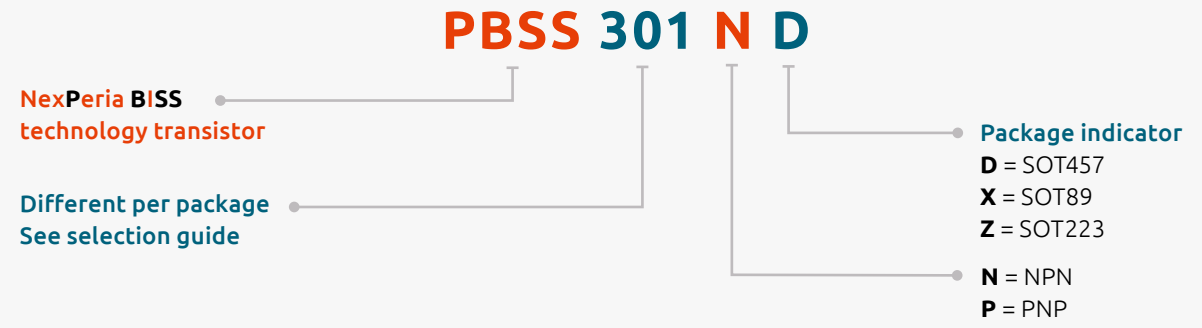
hfe selection:
w/o = min: 63, max: 250
10 = min: 63, max: 160
16 = min: 100, max: 250

Nomenclatures

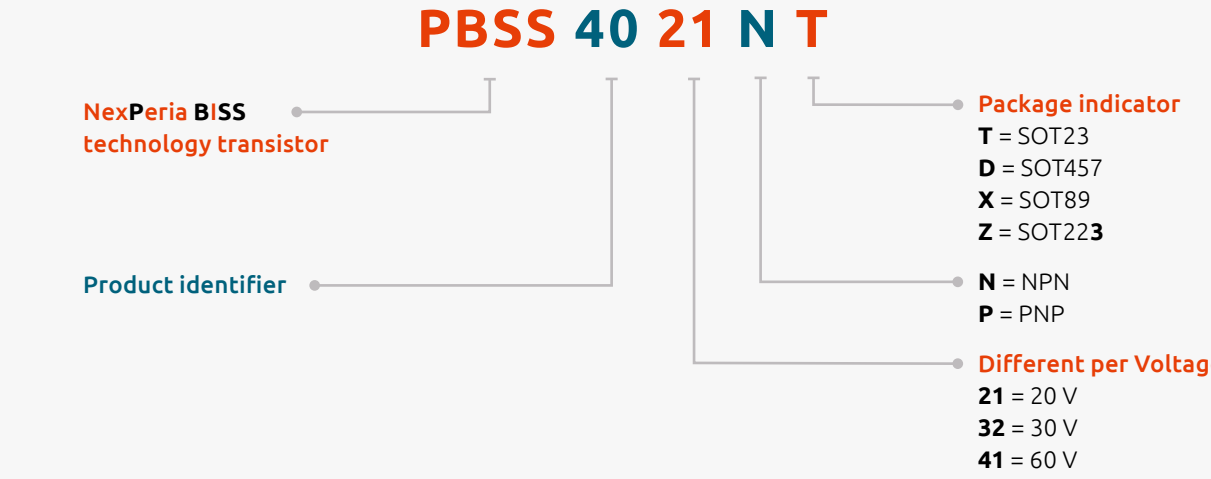
Low V_{CEsat} transistors



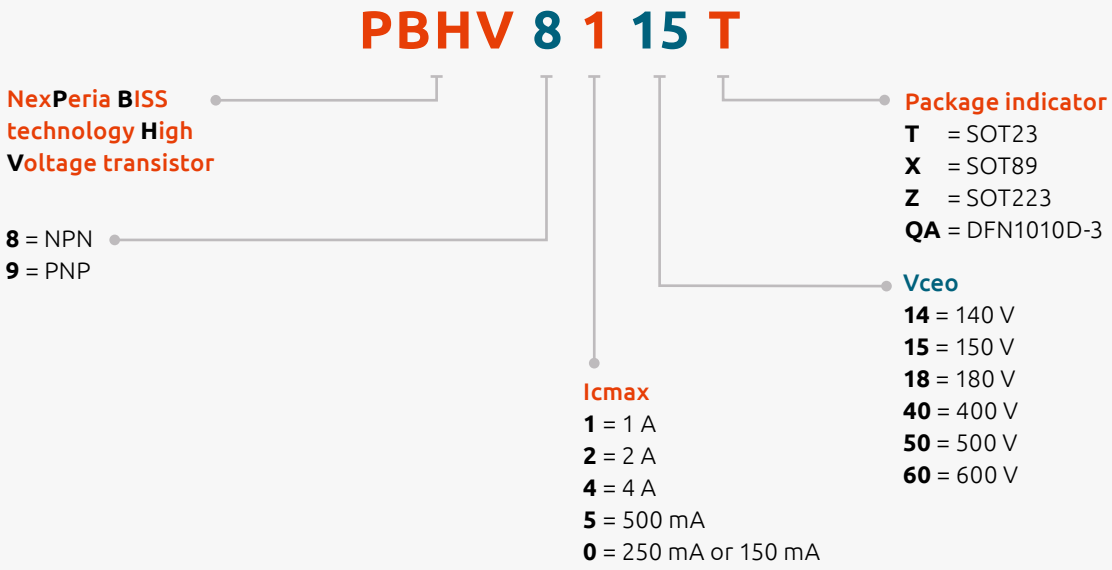
3rd generation Low V_{CEsat} transistors



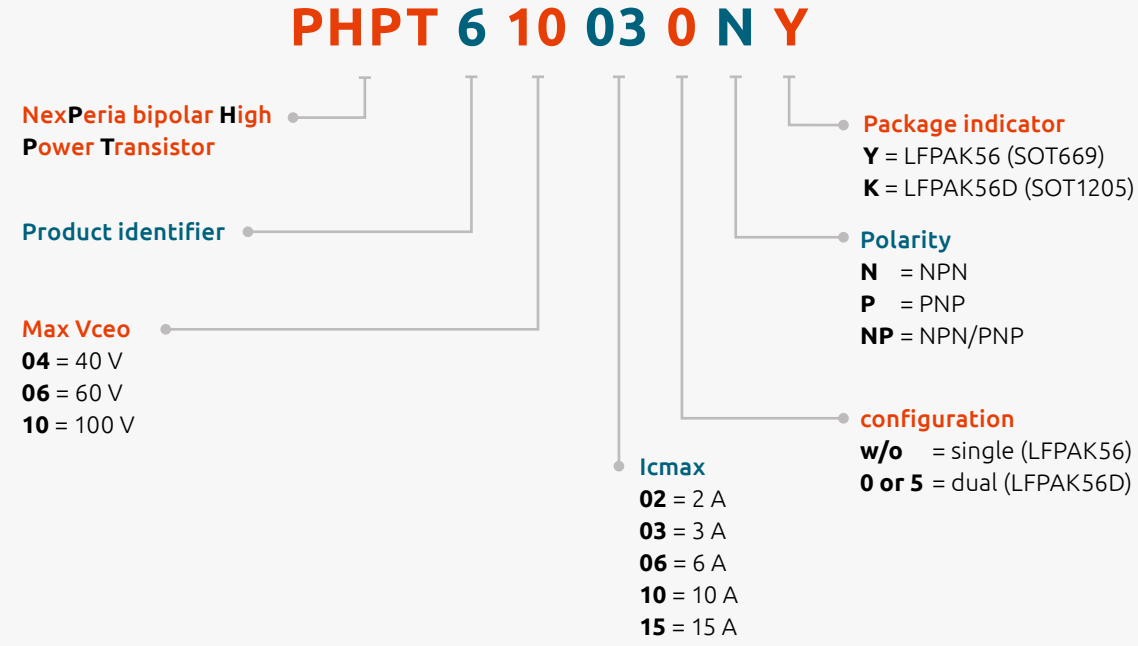
4th generation Low V_{CEsat} transistors



High-voltage Low V_{CEsat} transistors

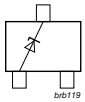


Transistors in a LFPAK SMD package



Diodes 2

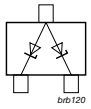
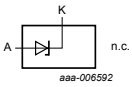
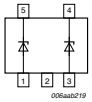
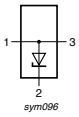
General purpose Zener diodes Part 1

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
200	40	2.4~75	B, C	Europe	Single		BZX884S-Q series	 DFN1006BD-2 (SOD882BD)	Yes	1.0 x 0.6 x 0.47	365
							BZX884S series		No		
		1.8"51	B, C				BZX8850S-Q series		Yes		
		1.8"51	B, C	Japan			PZU884LS-Q series		Yes		
200	40	2.4~75	B, C	Europe	Single		BZX884-Q series	 DFN1006-2 (SOD882)	Yes	1.0 x 0.6 x 0.48	250
		2.4~75	B, C	Europe			BZX884 series		No		250
		2.4~36	B, B2	Japan			PZUxBL series		No		550
		2.4~36	B, B2	Japan			PZUxBL-Q series		Yes		550
		1.8"51	B, C	Europe			BZX8850 series		No		250
200	40	2.4~75	B, C	Europe	Single		BZX585-Q series	 SOD523 (SC-79)	Yes	1.2 x 0.8 x 0.6	300
		2.4~75	B, C				BZX585 series		No		
		2.4~36	B				SZMM5Z series		Yes		
			B				MM5Z series		No		
		1.8"51	B, C				BZX58550-Q series		Yes		
		1.8"51	B, C				BZX58550 series		No		
200	30	100	C	Europe	Back-to-back		BZB100A	 SOD323 (SC-76)	Yes	1.7 x 1.25 x 0.95	830
	40	2.4~51	B, B2	Japan	Single		PZUxBA-Q series		Yes		320
		2.4~51	B, B2				PZUxBA series		No		
		2.4~36	B				PDZ-B series		Yes		400
		2.4~75	B	Europe			SZMM3Z series		Yes		300
							MM3Z series		No		
250			A,B,C				BZX384-Q series		Yes		
							BZX384 series		No		
		1.8"51	B, C				BZX38450-Q series		Yes		
		1.8"51	B, C				BZX38450 series		No		
200	60	100	C	Europe	Single		BZX100A	 SOD323F (SC-90)	Yes	1.7 x 1.25 x 0.7	1000
		2.4~51	B, B2	Japan			PZUxB-Q series		Yes		
		2.4~51	B, B2				PZUxB series		No		550
250	40	2.4~75	B, C	Europe			BZX84J-Q series		Yes		
		2.4~75	B, C	Europe			BZX84J series		No		
		2.4~30	B	Europe			TDZxJ series		Yes		500
250	40	2.4~75	B, C	Europe	Single		BZT52-Q series	 SOD123	Yes	2.7 x 1.6 x 1.2	590
		2.4~75	B, C				BZT52 series		No		
200		2.4~36	B	Japan			PDZ-GW series		Yes		625
250	-	3.0~30	About 2.5%	Special	Single		NZH series	 SOD123F	Yes	2.6 x 1.6 x 1.1	1000
	40	2.4~75	A,B, C	Europe			BZT52H-Q series		Yes		
		2.4~75	A,B, C				BZT52H series		No		830
		1.8"51	B, C				BZT5250H-Q series		Yes		830
		1.8"51	B, C				BZT5250H series		No		830
200	40	2.4~75	B, C	Europe	Dual c.a.		BZB84-Q series	 SOT23	Yes	2.9 x 1.3 x 1.0	300
		2.4~75	B, C				BZB84 series		No		
		2.4~75	A, B, C		Single		BZX84-Q series		Yes		250
		2.4~75	A, B, C				BZX84 series		No		
		1.8"51	B, C				BZX8450-Q series		Yes		
		1.8"51	B, C				BZX8450 series		No		
		2.4~51	B, C	Japan			PZU84-Q series		Yes		
		2.4~51	B, C				PZU84 series		No		
250	30	5~6.8	0.2 V	Ave	Single		PLVA600A series		Yes		

Notes:
Japan: B selection: app. 5% Vz tolerance, B1, B2, B3 selections: app. 2% Vz tolerance in sequential intervals Europe: A selection: app. 1% Vz tolerance, B selection: app. 2% Vz tolerance, C selection: app. 5% Vz tolerance; the selections are in overlapping intervals

Ave: low-voltage avalanche regulator diodes Dual c.a.: dual common anode

General purpose Zener diodes Part 2

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
200	40	2.4~15	C	Europe	Dual c.a.		BZB784 series	SOT323 (SC-70)	Yes	2.0 x 1.25 x 0.95	350
		2.4~75	B, C		Single		BZX84W-Q series		Yes		275
		2.4~75	B, C		Single		BZX84W series		No		
200	40	10	B2	Japan	Dual isolated		PZU10DB2	SOT353 (SC-88A)	Yes	2.0 x 1.25 x 0.95	275
400	40	2.4~75	C	Europe	Single		BZV90 series	SOT223 (SC-73)	Yes	6.5 x 3.5 x 1.65	1500
250	40	2.4~75	C	Europe	Single		BZV49 series	SOT89 (SC-62)	Yes	4.5 x 2.5 x 1.5	1000
400	800	3.0"75	C	Europe	Single		HPZR-Q series	CFP3 (SOD123W)	Yes	2.6 x 1.7 x1.0	4100
		3.0"75	C	Europe	Single		HPZR series		No	2.6 x 1.7 x1.0	5500

A-Selection Zener Diodes (1% V_Z tolerance)

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
250	40	2.4~75	A	Europe	Single		BZX384-A **(-Q)** series	SOD323 (SC-76)	No	1.7 x 1.25 x 0.95	300
250	40	2.4~75	A	Europe	Single		BZT52H-A **(-Q)** series	SOD123F	Yes	2.6 x 1.6 x 1.1	830
200	40	2.4~75	A	Europe	Single		BZX84-A **(-Q)** series	SOT23	Yes	2.9 x 1.3 x 1.0	250

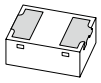
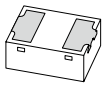
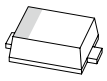
Low leakage (low I_r) Zener diodes

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
200	40	5.1~10	B, B2	Japan	Single		PZUxBL**(-Q)** series	 DFN1006-2 (SOD882)	Yes	1.0 x 0.6 x 0.48	250
200	40	5.1~10	B, C	Japan	Single		PZU884LS **(-Q)**	 DFN1006BD-2 (SOD882BD)	Yes	"1.0 x 0.6 x 0.47"	365
200	40	5.1~10	B, B2	Japan	Single		PZUxBA **(-Q)** series	 SOD323 (SC-76)	Yes	1.7 x 1.25 x 0.95	300
200	40	5.1~10	B, B2	Japan	Single		PZUxB **(-Q)** series	 SOD323F (SC-90)	Yes	1.7 x 1.25 x 0.7	550
200	40	10	B2	Japan	Dual isolated		PZU10DB2 series	 SOT353 (SC-88A)	Yes	2.0 x 1.25 x 0.95	300
200	40	5.1~10	B, C	Japan	Single		PZU84 **(-Q)**	 SOT23	Yes	2.9 x 1.3 x 1.0	250
250	30	5~6.8	0.2 V	Ave	Single		PLVA600A series	 SOT23	Yes	2.9 x 1.3 x 1.0	250

Low differential resistance (low R_z) Zener diodes

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
200	40	2.4~51	B, C	Japan	Single		PZU884LS **(-Q)**	 DFN1006BD-2 (SOD882BD)	Yes	1.0 x 0.6 x 0.47	365
200	40	2.4~51	B, B2	Japan	Single		PZUxBA **(-Q)** series	 SOD323 (SC-76)	Yes	1.7 x 1.25 x 0.95	300
200	40	2.4~51	B, B2	Japan	Single		PZUxB **(-Q)** series	 SOD323F (SC-90)	Yes	1.7 x 1.25 x 0.95	300
200	40	2.4~51	B, B2	Japan	Single		PZUxBL **(-Q)** series	 DFN1006-2 (SOD882)	Yes	1.0 x 0.6 x 0.48	250
200	40	2.4~36	B	Japan	Single		PDZ-GW series	 SOD123	Yes	2.7 x 1.6 x 1.2	625
200	40	2.4~36	B	Japan	Single		PDZ-B series	 SOD323F (SC-90)	Yes	1.7 x 1.25 x 0.95	300
200	40	2.4~51	B, B2	Japan	Single		PZU84 **(-Q)**	 SOT23	Yes	2.9 x 1.3 x 1.0	250
250	30	5~6.8	0.2 V	Ave	Single		PLVA600A series	 SOT23	Yes	2.9 x 1.3 x 1.0	250

50µA Zener diodes (V_z @ 50µA)

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
200	40	1.8"51	B,C	Europe	Single		BZX8850s-Q series	 DFN1006BD-2 (SOD882BD)	Yes No	1.0 x 0.6 x 0.47	365
200	40	1.8"51	B,C	Europe	Single		BZX8850-Q series BZX8850 series	 DFN1006-2 (SOD882)	Yes No	1.0 x 0.6 x 0.47	365
200	40	1.8"51	B,C	Europe	Single		BZX58550-Q series BZX58550 series	 SOD523 (SC-79)	Yes No	1.2 x 0.8 x 0.6	300
250	40	1.8"51	B,C	Europe	Single		BZX38450-Q series BZX38450 series	 SOD323 (SC-76)	Yes No	1.7 x 1.25 x 0.95	300
200	40	1.8"51	B,C	Europe	Single		BZT5250H-Q series BZT5250H series	 SOD123F	Yes No	2.9 x 1.3 x 1.0	250
200	40	1.8"51	B,C	Europe	Single		BZX8450-Q series BZX8450 series	 SOT23	Yes No	2.9 x 1.3 x 1.0	250

High non-repetitive peak reverse power dissipation (P_{ZSM}) Zener

Types in **bold** represent new products

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
250	100-180	2.4~6.8	B	Europe	Single		TDZxJ series	 SOD323F (SC-90)	Yes	1.7 x 1.25 x 0.7	500
	100		B, C				BZX84J series				
400	800	3.0"75	C	Europe	Single		**HPZR-Q series**	 CFP3 (SOD123W)	Yes	2.6 x 1.7 x1.0	5500
		3.0"75	C	Europe	Single		**HPZR series**		No		4100

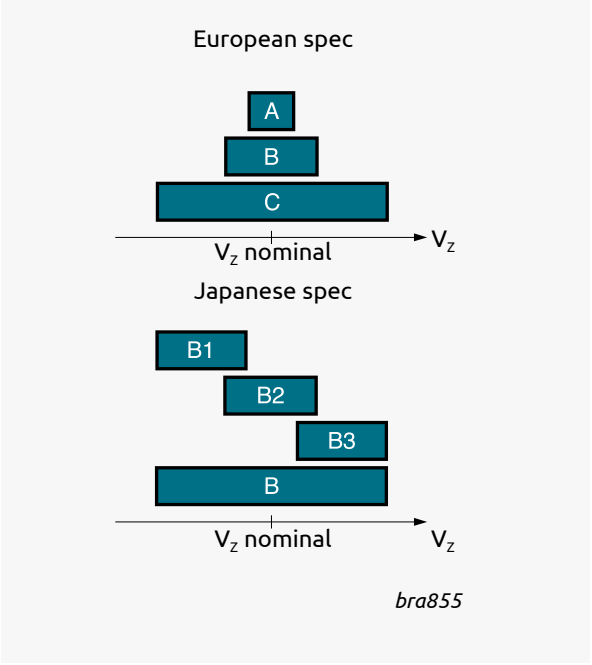
High power voltage regulator Zener diodes (high P_{tot})

Types in **bold** represent new products

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
400	800	3.0"75	C	Europe	Single		**HPZR-Q series**	 CFP3 (SOD123W)	Yes	2.6 x 1.7 x1.0	5500
		3.0"75	C	Europe	Single		**HPZR series**		No		4100

Zener diodes specifications

Differences in Zener specifications



European spec (BZV, BZX, BZB, 1N47)

y =		C-series	B-series	A-series
		±5%	±2%	±1%
	V_z	V_z (V)	V_z (V)	V_z (V)
BZX	2.4V	2.2 - 2.6	2.35 - 2.45	2.37 - 2.43
BZX	2.7V	2.5 - 2.9	2.65 - 2.75	2.67 - 2.73
BZX	3.0V	2.8 - 3.2	2.94 - 3.06	2.97 - 3.03
BZX	3.3V	3.1 - 3.5	3.23 - 3.37	3.26 - 3.34
BZX	3.6V	3.4 - 3.8	3.53 - 3.67	3.56 - 3.64
BZX	3.9V	3.7 - 4.1	3.82 - 3.98	3.86 - 3.94
BZX	4.3V	4 - 4.6	4.21 - 4.39	4.25 - 4.35
BZX	4.7V	4.4 - 5	4.61 - 4.79	4.65 - 4.75
BZX	5.1V	4.8 - 5.4	5 - 5.2	5.04 - 5.16
BZX	5.6V	5.2 - 6	5.49 - 5.71	5.54 - 5.66
BZX	6.2V	5.8 - 6.6	6.08 - 6.32	6.13 - 6.27
BZX	6.8V	6.4 - 7.2	6.66 - 6.94	6.73 - 6.87
BZX	7.5V	7 - 7.9	7.35 - 7.65	7.42 - 7.58
BZX	8.2V	7.7 - 8.7	8.04 - 8.36	8.11 - 8.29
BZX	9.1V	8.5 - 9.6	8.92 - 9.28	9 - 9.2
BZX	10V	9.4 - 10.6	9.8 - 10.2	9.9 - 10.1
BZX	11V	10.4 - 11.6	10.8 - 11.2	10.8 - 11.11
BZX	12V	11.4 - 12.7	11.8 - 12.2	11.88 - 12.12
BZX	13V	12.4 - 14.1	12.7 - 13.3	12.87 - 13.13
BZX	15V	13.8 - 15.6	14.7 - 15.3	14.85 - 15.15
BZX	16V	15.3 - 17.1	15.7 - 16.3	15.84 - 16.16
BZX	18V	16.8 - 19.1	17.6 - 18.4	17.82 - 18.18
BZX	20V	18.8 - 21.2	19.6 - 20.4	19.8 - 20.2
BZX	22V	20.8 - 23.3	21.6 - 22.4	21.78 - 22.22
BZX	24V	22.8 - 25.6	23.5 - 24.5	23.76 - 24.24
BZX	27V	25.1 - 28.9	26.5 - 27.5	26.73 - 27.27
BZX	30V	28 - 32	29.4 - 30.6	29.70 - 30.30
BZX	33V	31 - 35	32.3 - 33.7	32.67 - 33.33
BZX	36V	34 - 38	35.3 - 36.7	35.64 - 36.36
BZX	39V	37 - 41	38.2 - 39.8	38.61 - 39.39
BZX	43V	40 - 46	42.1 - 43.9	42.57 - 43.43
BZX	47V	44 - 50	46.1 - 47.9	-
BZX	51V	48 - 54	50 - 52	50.49 - 51.51
BZX	56V	52 - 60	54.9 - 57.1	-
BZX	62V	58 - 66	60.8 - 63.2	-
BZX	68V	64 - 72	66.6 - 69.4	-
BZX	75V	70 - 79	73.5 - 76.5	74.25 - 75.75

Japanese spec (PZU, PDZ)

y =		C- | B-series	B- | B2-series
		± 5%	± 2%
	V_z	V_z (V)	V_z (V)
PZU	2.4V	2.3 - 2.6	-
PZU	2.7V	2.5 - 2.9	2.65 - 2.9
PZU	3.0V	2.8 - 3.2	2.95 - 3.2
PZU	3.3V	3.1 - 3.5	3.25 - 3.5
PZU	3.6V	3.4 - 3.8	3.55 - 3.8
PZU	3.9V	3.7 - 4.1	3.87 - 4.1
PZU	4.3V	4.01 - 4.48	4.15 - 4.34
PZU	4.7V	4.42 - 4.9	4.55 - 4.75
PZU	5.1V	4.84 - 5.37	4.98 - 5.2
PZU	5.6V	5.31 - 5.92	5.49 - 5.73
PZU	6.2V	5.86 - 6.53	6.06 - 6.33
PZU	6.8V	6.47 - 7.14	6.65 - 6.93
PZU	7.5V	7.06 - 7.84	7.28 - 7.6
PZU	8.2V	7.76 - 8.64	8.02 - 8.36
PZU	9.1V	8.56 - 9.55	8.85 - 9.23
PZU	10V	9.45 - 10.55	9.77 - 10.21
PZU	11V	10.44 - 11.56	10.76 - 11.22
PZU	12V	11.42 - 12.6	11.74 - 12.24
PZU	13V	12.47 - 13.96	12.91 - 13.49
PZU	14V	-	13.7 - 14.3
PZU	15V	13.84 - 15.52	14.34 - 14.98
PZU	16V	15.37 - 17.09	15.85 - 16.51
PZU	18V	16.94 - 19.03	17.56 - 18.35
PZU	20V	18.86 - 21.08	19.52 - 20.39
PZU	22V	20.88 - 23.17	21.54 - 22.47
PZU	24V	22.93 - 25.57	23.72 - 24.78
PZU	27V	25.1 - 28.9	26.50-27.50
PZU	30V	28 - 32	29.4-20.6
PZU	33V	31 - 35	32.34-33.66
PZU	36V	34 - 38	35.3-36.7
PZU	39V	37-41	38.2-39.8
PZU	43V	40-46	42.1-43.9
PZU	47V	44-50	46.1-47.9
PZU	51V	48-54	50-52

y =		C-series	B-series
		±5%	±2%
	V_z	V_z (V)	V_z (V)
BZX*50*	1.8V	1.71-1.89	1.764-1.836
BZX*50*	2.0V	1.88-2.12	1.96-2.04
BZX*50*	2.2V	2.09-2.31	2.156-2.244
BZX*50*	2.4V	2.28-2.52	2.35-2.45
BZX*50*	2.7V	2.565-2.835	2.65-2.75
BZX*50*	3.0V	2.85-3.15	2.94-3.06
BZX*50*	3.3V	3.13-3.47	3.23-3.37
BZX*50*	3.6V	3.42-3.78	3.53-3.67
BZX*50*	3.9V	3.7-4.1	3.82-3.98
BZX*50*	4.3V	4.09-4.52	4.21-4.39
BZX*50*	4.7V	4.47-4.94	4.61-4.79
BZX*50*	5.1V	4.85-5.36	5-5.2
BZX*50*	5.6V	5.32-5.88	5.49-5.71
BZX*50*	6.2V	5.89-6.51	6.08-6.32
BZX*50*	6.8V	6.46-7.14	6.66-6.94
BZX*50*	7.5V	7.13-7.88	7.35-7.65
BZX*50*	8.2V	7.79-8.61	8.04-8.36
BZX*50*	9.1V	8.65-9.56	8.92-9.28
BZX*50*	10V	9.5-10.5	9.8-10.2
BZX*50*	11V	10.45-11.55	10.8-11.2
BZX*50*	12V	11.4-12.6	11.8-12.2
BZX*50*	13V	12.35-13.65	12.7-13.3
BZX*50*	15V	14.25-15.75	14.7-15.3
BZX*50*	16V	15.2-16.8	15.7-16.3
BZX*50*	18V	17.1-18.9	17.6-18.4
BZX*50*	20V	19-21	19.6-20.4
BZX*50*	22V	20.9-23.1	21.6-22.4
BZX*50*	24V	22.8-25.2	23.5-24.5
BZX*50*	27V	25.65-28.35	26.5-27.5
BZX*50*	30V	28.5-31.5	29.4-30.6
BZX*50*	33V	31.35-34.65	32.3-33.7
BZX*50*	36V	34.2-37.8	35.3-36.7
BZX*50*	39V	37.05-40.95	38.2-39.8
BZX*50*	43V	40.85-45.15	42.14-43.86
BZX*50*	47V	44-50	46.1-47.9
BZX*50*	51V	48-54	50-52

General purpose, high speed switching diodes <= 90 V

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOD80C (MiniMelf)	Automotive-qualified SOT23	SOT143B	SOT323 (SC-70)	SOT363 (SC-88)	DFN1110D-3 (SOT8015)	DFN1412-6 (SOT1268)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)
						Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.1x1.0.x0.48	1.4 x 1.2 x 0.5	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48
						P_{tot} (mW)	**400**	**250**	**250**	**200**	**350**		**480**	**325**	**250**
50	1	50	100	50	4			BAL74 **(-Q)**							
								BAV74 **(-Q)**							
70	1	50	1000	70	4			BAL99 (-Q)							
75	1	50	1000	75	4				BAS28						
		100	5000	75	4		BAS32L								
80	1	50	500	80	4					1PS300 (-Q)					
										1PS301 (-Q)					
										1PS302 (-Q)					
90	1	50	500	80	4			BAW56 **(-Q)**		BAW56W**(-Q)**		BAW56QB **(-Q)**		BAW56QA (-Q)	BAW56M (-Q)
											BAW56S **(-Q)**		BAW56SRA		
											BAV756S **(-Q)**				

General purpose, high speed switching diodes 100 V (Leaded SMD)

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	Automotive-qualified										
							SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOD523 (SC-79)	DFN1006BD-2 (SOD882BD)	DFN1110D-3 (SOT8015)	DFN1412D-3 (SOT8009)
																	
						Size (mm)	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.2 x 0.8 x 0.6	1 x 0.6 x 0.47	1.1x1.0.x0.48	1.4 x 1.2 x 0.47
						P_{tot} (mW)	250	380	375	200	300	300	300	250	345		345
100	1	50	500	80	4			BAS16GW **(-Q)**	BAS16H **(-Q)**			BAS316 **(-Q)**	BAS16J **(-Q)**	BAS516 **(-Q)**			
							BAS16 **(-Q)**			BAS16W **(-Q)**							
											BAS16VY **(-Q)**						
							BAV70 **(-Q)**			BAV70W **(-Q)**							
											BAV70S **(-Q)**						
							BAV99 **(-Q)**			BAV99W **(-Q)**							
											BAV99S						
															BAS16LS **(-Q)**		
																BAV99QB **(-Q)**	BAV99QC **(-Q)**

General purpose, high speed switching diodes 100 V (Leadless DFN)

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	Automotive-qualified						
							DFN1412-6 (SOT1268)	DFN1010D-3 (SOT1215)	DFN1006-2 (SOD882)	DFN1006-3 (SOT883)	DFN1006D-2 (SOD882D)	DFN1006BD-2 (SOD882BD)	DFN1110D-3 (SOT8015)
													
						Size (mm)	1.4 x 1.2 x 0.5	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.0 x 0.6 x 0.47	1.1 x 1.0 x 0.48
						P_{tot} (mW)	480	325	250	250	250	250	
100	1	50	500	80	4				BAS16L **(-Q)**		BAS16LD **(-Q)**	BAS16LS	
								BAS16QA **(-Q)**					
													
								BAV70QA **(-Q)**		BAV70M **(-Q)**			BAV70QB **(-Q)**
							BAV70SRA **(-Q)**						
								BAV99QA **(-Q)**					
													

General purpose, switching diodes >= 100 V

							Automotive-qualified																
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOD80C (MiniMelf)	SOT457 (SC-74)	SOT23	SOT143B	SOD123	SOD123F	SOT323 (SC-70)	SOT353 (SC-88A)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOD523 (SC-79)	DFN1006D-2 (SOD882(D))	DFN1010D-3 (SOT1215)	DFN1006BD-2 (SOD882BD)	DFN1110D-3 (SOT8015)	DFN1412D-3 (SOT8009)
																							
						Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48 (1.0 x 0.6 x 0.37)	1.1 x 1.0 x 0.37	1 x 0.6 x 0.47	1.1 x 1 x 0.47	1.4 x 1.2 x 0.47
						P_{tot} (mW)	400	250	250	250	380	375	200	255	300	300	300	250	250	325	610	745	750
100	1	100	100	100	50				BAS19 **(-Q)**														
150	1	100	100	150	50		BAV102																
									BAS20 **(-Q)**														
≥ 200	1	100	100	150	50		BAV103				BAS-21GW **(-Q)**	BAS 21H **(-Q)**				BAS 321 **(-Q)**	BAS 321J **(-Q)**	BAS 521B **(-Q)**	BAS 21LL(LD) **(-Q)**	BAV 21QA **(-Q)**			
				200					BAS21 **(-Q)**				BAS 21W **(-Q)**										
										BAV23 **(-Q)**													
														BAS 21PG **(-Q)**									
									BAV23A **(-Q)**				BA-S21AW **(-Q)**									
									BAV23C **(-Q)**											BAV 23QA **(-Q)**			
									BAV23S **(-Q)**				BAS 21SW **(-Q)**									
								BS21 AVD **(-Q)**															
								BAS-21VD **(-Q)**															
200	1	250	100	200	50																BAS 21LS **(-Q)**	BAS 21QB **(-Q)**	BAS 21QC **(-Q)**
300	1.1	100	150	250	50												BAS21J **(-Q)**	BAS521 **(-Q)**					
									BAS101 **(-Q)**														
									BAS 101S **(-Q)**														
										BAW101 **(-Q)**													
															BAW 101S **(-Q)**						BAS 30LS **(-Q)**		

High performance switching diodes (175 °C capable & superior power dissipation)

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	Automotive-qualified
							SOT23
							
						Size (mm)	2.9 X 1.3 X 1.0
						P_{tot} (mW)	300
100	1	50	500	80	4		BAS16TH (-Q)
200	1	100	100	200	50		BAS21TH (-Q)

Controlled avalanche switching diodes

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_d max (pF)	t_{rr} max (ns)	Package	Automotive-qualified	
									SOT23	SOT143B
										
								Size (mm)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
								P_{tot} (mW)	250	250
60	1	200	100	9	600	2.5	6			BAS56
90	1	200	100	10	600	35	50		BAS29	
									BAS31	
									BAS35	

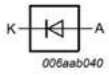
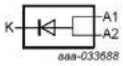
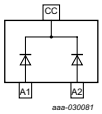
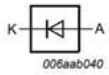
Low leakage current switching diodes

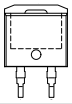
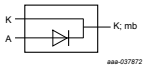
Types in **bold** represent new products

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	t_{rr} max (µs)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	Automotive-qualified: SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006-2 (SOD882)	DFN1006BD-2 (SOD882BD)	DFN1412D-3 (SOT8009)
																		
					Size (mm)	3.5 x 1.5 x 1.5	3.04 x 1.6 x 0.55	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.47	1.4 x 1.2 x 0.47
					P_{tot} (mW)	400	300	250	380	375	250	250	250	305	250	250		345
75	1	10	5	3					BAS-116GW (-Q)	BAS116H (-Q)		BAS416 (-Q)	BAS716 (-Q)			BAS116L (-Q)	**BAS116LS (-Q)**	
								BAS116 (-Q)						BAS116QA (-Q)				
								BAV199 **(-Q)**			BAV199W **(-Q)**							BAV199QC **(-Q)**
								BAW156 (-Q)										
								BAV170 **(-Q)**						BAV170QA (-Q)	BAV170M **(-Q)**			
125	1	100	1	1.5 typ		BAS45AL	BAS45A											

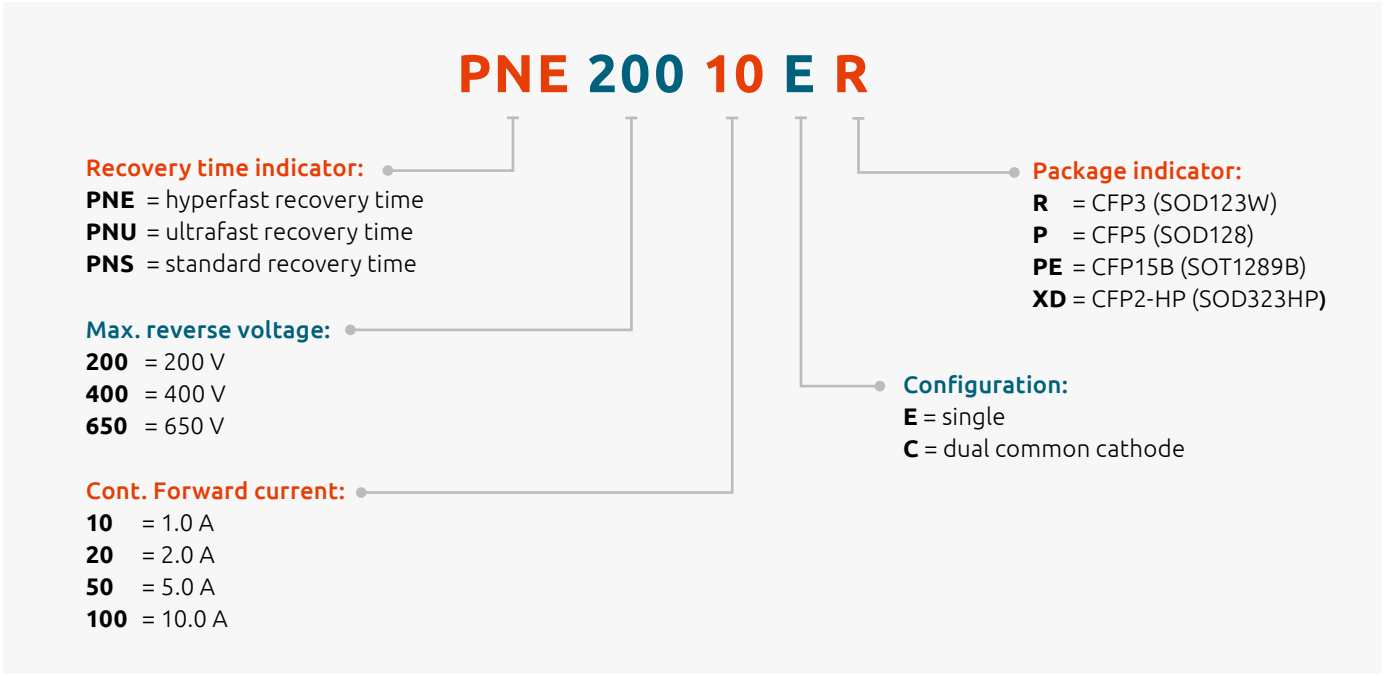
Recovery rectifiers

Types in **bold** represent new products

V_R max (V)	V_F max (V)	(@) I_F (A)	I_R max (µA)	(@) V_R (V)	trr max (ns)	Package	CFP2-HP (SOD323HP)	Automotive-qualified: CFP3 (SOD123W)	CFP5 (SOD128)	CFP15B (SOT1289B)
										
						Size (mm)	2.2 x 1.3 x 0.68	2.6 x 1.7 x 1.0	3.8 x 2.5 x 1.0	5.8 x 4.3 x 0.95
						P_{tot} (mW) @ 1cm²	1200	1150	1200	2150
200	1.02	1	0.075	200	25		PNE20010EXD (-Q)			
	1.09	2	0.075	200	25		PNE20020EXD (-Q)			
	0.93	1	0.2	200	25			PNE20010ER (-Q)		
	0.98	2	0.2	200	25			PNE20020ER (-Q)		
	0.95	2	1	200	25				PNE20020EP (-Q)	
	0.98	3	1	200	30				PNE20030EP (-Q)	
	0.93	4	1	200	30				PNE20040EP (-Q)	
	0.95	5	1	200	30				PNE20050EP (-Q)	
	0.93	4	1	200	30					PNE20040EPE (-Q)
	0.94	6	1	200	30					PNE20060EPE (-Q)
	0.95	8	1	200	30					PNE20080EPE (-Q)
	0.96	10	1	200	30					PNE200100EPE (-Q)
	0.98	2x2	1	200	25					PNE20040CPE (-Q)
	0.94	2x3	1	200	30					PNE20060CPE (-Q)
	0.93	2x4	1	200	30					PNE20080CPE (-Q)
	0.95	2x5	1	200	30					PNE200100CPE (-Q)
400	1.1	1	1	400	1500			**PNS40010AER (-Q)**		
650	1.2	1	1	650	65			PNU65010ER (-Q)		
	1.2	1	1	650	65				PNU65010EP (-Q)	
	1.2	2	1	650	65				PNU65020EP (-Q)	
	1.2	3	1	650	70				PNU65030EP (-Q)	

V_R max (V)	V_F max (V)	(@) I_F (A)	I_R max (µA)	(@) V_R (V)	trr max (ns)	Package	D2PAK (R2P) (SOT8018)
							
						Size (mm)	8.8 x 10.35 x 4.46
						P_{tot} (mW) @ 6cm² cathode pad	2400
650	1.55	10	5	650	60		**PNU650100EJ (-Q)**
	2.40	10	5	650	30		**PNE650100EJ (-Q)**
	1.55	15	5	650	60		**PNU650150EJ (-Q)**
	2.40	15	5	650	30		**PNE650150EJ (-Q)**
	1.55	20	5	650	60		**PNU650200EJ (-Q)**
	2.40	20	5	650	30		**PNE650200EJ (-Q)**
	1.68	15	5	650	60		**PNU650150AEJ (-Q)**
	1.70	20	5	650	60		**PNU650200AEJ (-Q)**
	1.80	30	5	650	60		**PNU650300AEJ (-Q)**

Nomenclature recovery rectifiers automotive grade types



SiC Schottky diodes

Key features

- Zero forward and reverse recovery
- Temperature independent switching performance
- Fast and smooth switching performance
- High I_{FSM} capability
- Low leakage current
- Easy to parallel / positive temperature coefficient
- Outstanding figure-of-merit (Q_C x V_F)
- Thermal stability up to 175 °C junction temperature
- AEC-Q101 qualification

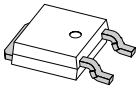
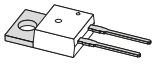
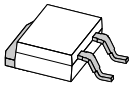
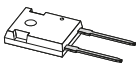
Key applications

- Consumer and industrial power supplies / PFC
- DC-DC-converter
- High frequency AC-DC converter
- Battery charging systems
- Base station power supply (5G)
- Photovoltaic power converter
- Traction inverter
- On board charger

Key benefits

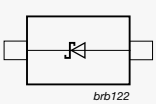
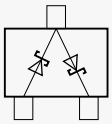
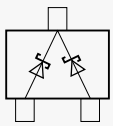
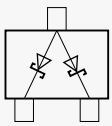
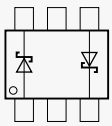
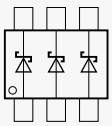
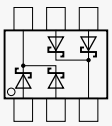
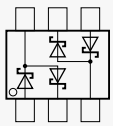
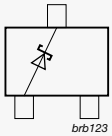
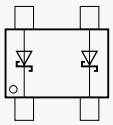
- High power density
- Reduced system cost
- System miniaturization
- High temperature operation
- Reduced EMI
- Increased ruggedness and reliability

types in **bold** represent new products

Type name	Package	V_R max (V)	I_F max	I_{FSM} max	P_{tot} max
PSC1065H	 DPAK (TO-252-2)	650	10	440	58
PSC1065H-Q					
PSC0665K	 TO-220-2	650	6	300	37
PSC1065K		650	10	440	65
PSC1665J	 D2PAK (TO-263-2)	650	16	650	90
PSC2065J		650	20	780	98
PSC1665L	 TO-247-2	650	16	650	95
PSC2065L		650	20	780	115

General purpose Schottky diodes <= 250 mA

I_F max (mA)	V_R max (V)	V_F max (mV)	@ I_F (mA)	I_R max (µA)	@ V_R (V)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOT143B	SOD123
						Size (mm)	3.5 x 1.5 x 1.5	3.04 x 1.6 x 0.55	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2
						P_{tot} (mW)	300	500	250	250	357
70	70	750	10	0.1	50	Single			BAS70 **(-Q)**		
						Dual series			BAS70-04 **(-Q)**		
						Dual c.c.			BAS70-05 **(-Q)**		
						Dual c.a.			BAS70-06 **(-Q)**		
						Dual isolated				BAS70-07 **(-Q)**	
						Triple isolated					
						Quad 2x series					
100	30	350	10	10	10	Single					
		450	10	0.5	10	Single					
120	40	500	10	1	30	Single					
						Single					
						Single			BAS40**(-Q)**		
						Dual series			BAS40-04**(-Q)**		
						Dual c.c.			BAS40-05**(-Q)**		
						Dual c.a.			BAS40-06**(-Q)**		
						Dual isolated				BAS40-07**(-Q)**	
						Triple isolated					
						Quad 2x series					
200	30	300	10	30	10	Single					
		340	10	2	25	Single			BAT754 **(-Q)**		
						Dual series			BAT754S **(-Q)**		
						Dual c.c.			BAT754C **(-Q)**		
						Dual c.a.					
						Triple isolated			BAT754A **(-Q)**		
		400	10	2	25	Single	BAS85	BAT85	BAT54 **(-Q)**		BAT54GW
						Dual series			BAT54S **(-Q)**		
						Dual c.c.			BAT54C **(-Q)**		
						Dual c.a.			BAT54A **(-Q)**		
		480	200	50	30	Single					
		500	200	2.5	30	Single					
		600	200	1	10	Single					
				2	30	Single					
		800	100	1	25	Single+G37:G43					
						Dual series					
						Dual isolated				BAT74	
						Dual c.c.					
						Dual c.a.					
						Triple isolated					
						Quad 2x Isolated					
	40	300	10	15	30	Single			BAT721 **(-Q)**		
						Dual series			BAT721S **(-Q)**		
						Dual c.c.			BAT721C **(-Q)**		
		500	100	0.5	25	Single					
		550	100	0.5	25	Single					
						Dual series					
						Dual c.c.					
						Dual c.a.			BAT721A **(-Q)**		
			200	15	30	Single					
		600	200	10	40	Single					
250	100	350	10	0.5	1.5	Single					
		850	250	0.5	1.5	Single					BAT46GW **(-Q)**
		960	150	9	100	Single					
420	40	500	100	0.5	25	Single					
500	40	550	0.5	100	35	Single			BAT720 **(-Q)**		

Single	Dual series	Dual c.c.	Dual c.a.	Dual isolated	Triple isolated	Quad c.c./c.c.	Quad 2x series
 brb122	 brb124	 brb125	 brb126	 brb127	 brb129	 brb130	 brb131
 brb123				 brb128			

Types in **bold** represent new products

Automotive-qualified									
SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1006-2 (SOD882)/ DFN1006-3 (SOT883)	DFN1006 BD-2 (SOD882BD)	DFN1110 D-3 (SOT8015)	DFN1412 D-3 (SOT8009)
									
2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48	1 x 0.6 x 0.47	1.1 x 1 x 0.47	1.4 x 1.2 x 0.47
375	250	300	385	400	275	250	640	400	415
BAS70H **(-Q)**	BAS70W **(-Q)**			1PS76SB70 **(-Q)**	1PS79SB70 **(-Q)**	BAS70L **(-Q)**	BAS70LS **(-Q)**		
	BAS70-04W **(-Q)**								
	BAS70-05W **(-Q)**								
	BAS70-06W **(-Q)**								
		BAS70-07S **(-Q)**							
		BAS70VY **(-Q)**							
		BAS70XY **(-Q)**							
						RB521CS30L **(-Q)**			
						RB520CS30L **(-Q)**			
				RB751V40 **(-Q)**	RB751S40**(-Q)**	RB751CS40**(-Q)**			
				RB751V45 **(-Q)**			BAS40LS **(-Q)**		
BAS40H**(-Q)**	BAS40W**(-Q)**			1PS76SB40**(-Q)**	1PS79SB40**(-Q)**	BAS40L**(-Q)**			
	BAS40-04W**(-Q)**	BAS40DY**(-Q)**							
	BAS40-05W**(-Q)**	1PS88SB48**(-Q)**							
	BAS40-06W**(-Q)**								
		BAS40VY **(-Q)**							
		BAS40XY**(-Q)**							
					1PS79SB31 **(-Q)**				
		BAT754L							
			BAT54J **(-Q)**	1PS76SB10 **(-Q)** BAT54HGW **(-Q)**	1PS79SB10 **(-Q)**	BAT54L **(-Q)**			
		BAT54CY **(-Q)**				BAT54CM **(-Q)**			
							BAT32ALS (-Q)		
					RB521S30 **(-Q)**				
					RB520S30 **(-Q)**				
							BAT32LS (-Q)		
BAT54H **(-Q)**	BAT54W **(-Q)**						BAT54LS **(-Q)**	BAT54QB **(-Q)**	BAT54QC **(-Q)**
	BAT54SW **(-Q)**								
	BAT54CW **(-Q)**								
	BAT54AW **(-Q)**	BAT74S **(-Q)**							
		BAT54VY **(-Q)**							
		BAT54XY **(-Q)**							
				1PS76SB21 **(-Q)**					
					1PS79SB30 **(-Q)**				
	BAT854W **(-Q)**								
	BAT854SW **(-Q)**								
	BAT854CW **(-Q)**								
	BAT854AW **(-Q)**								
				1PS76SB21 **(-Q)**					
							BAT42LS **(-Q)**		
BAT46WH **(-Q)**			BAT46WJ **(-Q)**						
							BAT46LS **(-Q)**		
					RB530S40 **(-Q)**				

Low capacitance Schottky diodes

I_F max (mA)	V_R max (V)	V_F max (mV) @ I_F (mA)		C_d max (pF) @ V_R = 0 V	Package	Automotive-qualified					
						SOT23	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1006-2 (SOD882)
											
					Size (mm)	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
					P_{tot} (mW)	250	250	300	400	500	250
30	4	450	1	1	Single	BAT17			1PS76SB17	1PS79SB17	
					Triple isolated						
					Dual series	PMBD353 PMBD354 [1]					
	15	340	1	1	Single		1PS70SB82				1PS10SB82
					Triple isolated			1PS88SB82			
					Dual series		1PS70SB84				
					Dual c.c.		1PS70SB85				
					Dual c.a.		1PS70SB86				

Schottky rectifiers - leadless DSN/DFN packages

I_F max (A)	V_R max (V)	V_F max (mV) @ IF max	I_R max (mA) @ V_R max	Package	DSN0603-2 (SOD962)	DSN1006-2 (SOD993)	DSN1006U-2 (SOD995)
							
				Size (mm)	0.6 x 0.3 x 0.3	1.0 x 0.6 x 0.28	1.0 x 0.6 x 0.28
				P_{tot} (mW) @ 1 cm²	525	1.000	1.190
				Optimization			
0.1	30	840	0.0008	Low I_R			
0.2	20	420	0.045	Low V_F	PMEG2002AESF		
		490	0.0035	Low I_R	PMEG2002ESF		
	30	470	0.08	Low V_F	PMEG3002AESF		
		480	0.05	low V_F			
		520	0.015	Low I_R			
		535	0.009	Low I_R	PMEG3002ESF		
	40	525	0.08	Low V_F	PMEG4002AESF		
		600	0.0065	Low I_R	PMEG4002ESF		
		600	0.01	low I_R			
	60	600	0.1	low V_F			
0.5	20	390	0.2	low V_F			
		410	0.3	low V_F			
		440	1.5	low V_F			
		500	0.03	low I_R			
		550	0.045	Low V_F	PMEG2005AESF		
		620	0.0035	Low I_R	PMEG2005ESF		
	30	500	0.5	low V_F			
		630	0.08	Low V_F	PMEG3005AESF		
		670	0.015	Low I_R			
		720	0.009	Low I_R	PMEG3005ESF		
	40	590	0.01	low I_R			
		820	0.08	Low V_F	PMEG4005AESF		
		880	0.0065	Low I_R	PMEG4005ESF		
1	20	375	1.9	low V_F			
		415	0.6	low V_F			
		490	0.2	low V_F			
	30	480	1.25	Low V_F		PMEG3010AESB	PMEG3010AESA
		565	0.045	Low I_R		PMEG3010ESB	
	40	505	0.115	Low V_F		PMEG4010AESB	
		600	0.02	low I_R			
		610	0.04	Low I_R		PMEG4010ESB	
	60	625	0.65	Low V_F		PMEG6010AESB	
		730	0.03	Low I_R		PMEG6010ESB	
1.5	20	420	0.9	low V_F			
	40	610	0.03	low I_R			
2	20	420	1.9	low V_F			
		450	0.9	low V_F			
	30	470	2.5	low V_F			
	40	535	0.1	low V_F			
	60	530	0.2	low V_F			
		575	0.25	low V_F			

Automotive-qualified						
DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	DFN1608D-2 (SOD1608)	DFN1006-2 (SOD882)	DFN1006D-2 (SOD882D)	DFN1006BD-2 (SOD882BD)	DFN0603-2 (SOD972E)
						
2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62	1.6 x 0.8 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.0 x 0.6 x 0.47	0.63 x 0.33 x 0.25
960	960	780	565	660	640	570
						PMEG3001EEF
			PMEG3002AEL (-Q)	PMEG3002AELD (-Q)		
						PMEG3002EEF
			PMEG4002EL (-Q)	PMEG4002ELD (-Q)		
			PMEG6002EL (-Q)	PMEG6002ELD (-Q)		
				PMEG2005BELD (-Q)		
		PMEG2005EPK (-Q)				
			PMEG2005AEL (-Q)	PMEG2005AELD (-Q)		
			PMEG2005EL (-Q)	PMEG2005ELD (-Q)		
			PMEG3005EL (-Q)	PMEG3005ELD (-Q)	PMEG3005ELS (-Q)	
						PMEG3005EEF
		PMEG4005EPK (-Q)				
PMEG2010EPA (-Q)	PMEG2010EPAS (-Q)					
		PMEG2010EPK (-Q)				
				PMEG2010BELD (-Q)		
		PMEG4010EPK (-Q)				
		PMEG2015EPK (-Q)				
		PMEG4015EPK (-Q)				
PMEG2020EPA (-Q)	PMEG2020EPAS (-Q)					
		PMEG2020EPK (-Q)				
PMEG3020EPA (-Q)	PMEG3020EPAS (-Q)					
PMEG4020EPA (-Q)	PMEG4020EPAS (-Q)					
		PMEG4020EPK (-Q)				
PMEG6020EPA (-Q)	PMEG6020EPAS (-Q)					

Power Schottky rectifiers - clip-bond packages

Types in **bold** represent new products

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	Automotive-qualified					
					CFP15 (SOT1289)	CFP15B (SOT1289B)	CFP5 (SOD128)	CFP3-HP (SOD123HP)	CFP3 (SOD123W)	CFP2-HP (SOD323HP)
				Size (mm)	5.8 x 4.3 x 0.78	5.8 x 4.3 x 0.95	3.8 x 2.5 x 1.0	2.8 x 1.8 x 0.9	2.6 x 1.7 x 1.0	2.2 x 1.3 x 0.68
				P_{tot} (mW) @ 1 cm²	2150	2150	1200	1300	1150	1200
				Optimization						
1	20	340	1	Low V_F					PMEG2010ER (-Q)	
		450	0.05	Low I_R					PMEG2010BER (-Q)	
		500	50	Low V_F						**PMEG2010EXD (-Q)**
	30	360	1.5	Low V_F			PMEG3010EP (-Q)		PMEG3010ER (-Q)	
		450	0.05	Low I_R			PMEG3010BEP (-Q)	PMEG3010EXE (-Q)	PMEG3010BER (-Q)	
		500	60	Low V_F						**PMEG3010EXD (-Q)**
	40	490	0.05	Low V_F			PMEG4010EP (-Q)	PMEG4010EXE (-Q)	PMEG4010ER (-Q)	
				Low V_F			PMEG4010ETP (-Q)		PMEG4010ETR (-Q)	
		460	0.022	Low V_F, Low Q_{rr}					PMEG40T10ER (-Q)[1]	
		530	50	Low V_F						**PMEG4010EXD (-Q)**
	45	520	0.02	Low V_F, Low Q_{rr}						PMEG45T10EXD (-Q)[1]
	60	530	0.06	Low V_F			PMEG6010EP (-Q)	PMEG6010EXE (-Q)	PMEG6010ER (-Q)	
				Low V_F					PMEG6010ETR (-Q)	
		580	50	Low V_F						**PMEG6010EXD (-Q)**
		590	0.0008	Low I_R, Low Q_{rr}			PMEG60T10ELP (-Q)[1]			
		600	0.00065	Low I_R, Low Q_{rr}					PMEG60T10ELR (-Q)[1]	
		640	0.0004	Low I_R, Low Q_{rr}						PMEG60T10ELXD (-Q)[1]
		660	0.0003	Low I_R					PMEG6010ELR (-Q)	
	100	750	0.0009	Low I_R, Low Q_{rr}					PMEG100T10ELR (-Q)[1]	
		770	0.00015	Low I_R					PMEG10010ELR (-Q)	
		780	0.00015	Low I_R				PMEG10010ELXE (-Q)		
		795	0.0005	Low I_R, Low Q_{rr}						PMEG100T10ELXD (-Q)[1]
2	20	520	0.05	Low I_R					PMEG2020CER (-Q)	
		580	50	Low V_F						**PMEG2020EXD (-Q)**
	30	360	3	Low V_F			PMEG3020EP (-Q)			
		420	1.5	Low V_F			PMEG3020CEP (-Q)		PMEG3020ER (-Q)	
		450	0.1	Low I_R			PMEG3020BEP (-Q)			
		520	0.05	Low I_R			PMEG3020DEP (-Q)		PMEG3020BER (-Q)	
								PMEG3020EXE (-Q)	PMEG3020CER (-Q)	
		580	60	Low V_F						**PMEG3020EXD (-Q)**
	40	490	0.1	Low V_F			PMEG4020EP (-Q)		PMEG4020ER (-Q)	
				Low V_F			PMEG4020ETP (-Q)		PMEG4020ETR (-Q)	
		570	0.05	Low I_R				PMEG4020EXE (-Q)	PMEG4020CER (-Q)	
		515	0.022	Low V_F, Low Q_{rr}			PMEG40T20EP (-Q)[1]		PMEG40T20ER (-Q)[1]	
		610	50	Low V_F						**PMEG4020EXD (-Q)**
	45	560	0.025	Low V_F, Low Q_{rr}						PMEG45T20EXD (-Q)[1]
	60	530	0.2	Low V_F			PMEG6020EP (-Q)		PMEG6020ER (-Q)	
				Low V_F			PMEG6020ETP (-Q)		PMEG6020ETR (-Q)	
		620	0.0012	Low I_R, Low Q_{rr}			PMEG60T20ELP (-Q)[1]		PMEG60T20ELR (-Q)[1]	
		650	0.06	Low I_R				PMEG6020EXE (-Q)	PMEG6020CER (-Q)	
		670	0.0007	Low I_R			PMEG6020AELP (-Q)		PMEG6020AELR (-Q)	
		700	0.00047	Low I_R, Low Q_{rr}						PMEG60T20ELXD (-Q)[1]
		720	50	Low V_F						**PMEG6020EXD (-Q)**
		760	0.0003	Low I_R					PMEG6020ELR (-Q)	
	100	800	0.00125	Low I_R, Low Q_{rr}			PMEG100T20ELP (-Q)[1]		PMEG100T20ELR (-Q)[1]	
		770	0.0003	Low I_R			PMEG10020AELP (-Q)		PMEG10020AELR (-Q)	
		830	0.00015	Low I_R					PMEG10020ELR (-Q)	
		840	0.00015	Low I_R				PMEG10020ELXE (-Q)		
		880	0.0006	Low I_R, Low Q_{rr}						PMEG100T20ELXD (-Q)[1]
3	20	580	0.05	Low I_R					PMEG2030CER (-Q)	
	30	500	0.1	Low V_F			**PMEG3030CEP (-Q)**			
		580	0.05	Low I_R				PMEG3030EXE (-Q)	PMEG3030CER (-Q)	
		360	5	Low V_F			PMEG3030EP (-Q)			
		450	0.15	Low I_R		PMEG030V030EPE (-Q)	PMEG3030BEP (-Q)			
	40	490	0.12	Low V_F		PMEG040V030EPE (-Q)				
			0.2	Low V_F			PMEG4030EP (-Q)			
				Low V_F			PMEG4030ETP (-Q)			
		525	0.028	Low V_F, Low Q_{rr}			PMEG40T30EP (-Q)[1]		PMEG40T30ER (-Q)[1]	
		540	0.1	Low V_F			**PMEG4030CEP (-Q)**		PMEG4030ER (-Q)	
				Low V_F					PMEG4030ETR (-Q)	
		630	0.05	Low I_R				PMEG4030EXE (-Q)	PMEG4030CER (-Q)	
		520	0.12	Low V_F				PMEG4030AEXE (-Q)		

[1] Trench Schottky technology

Power Schottky rectifiers - clip-bond packages

Types in **bold** represent new products

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	Automotive-qualified					
					CFP15 (SOT1289)	CFP15B (SOT1289B)	CFP5 (SOD128)	CFP3-HP (SOD123HP)	CFP3 (SOD123W)	CFP2-HP (SOD323HP)
				Size (mm)	5.8 x 4.3 x 0.78	5.8 x 4.3 x 0.95	3.8 x 2.5 x 1.0	2.8 x 1.8 x 0.9	2.6 x 1.7 x 1.0	2.2 x 1.3 x 0.68
				P_{tot} (mW) @ 1 cm²	2150	2150	1200	1300	1150	1200
				Optimization						
3	45	480	0.044	Low V_F, Low Q_{rr}	PMEG045T030EPD[1]					
	50	530	0.1	Low V_F		PMEG050V030EPE (-Q)				
	60	475	0.4	Low V_F			PMEG6030EVP (-Q)			
		530	0.2	Low V_F		PMEG060V030EPE (-Q)	PMEG6030EP (-Q)			
				Low V_F			PMEG6030ETP (-Q)			
		560	0.18	Low V_F				PMEG6030AEXE (-Q)		
		600	0.15	Low V_F			**PMEG6030CEP (-Q)**			
		620	0.0018			PMEG060T030ELPE (-Q)[1]	PMEG60T30ELP (-Q)[1]		PMEG60T30ELR (-Q)[1]	
		670	0.001	Low I_R			PMEG6030ELP (-Q)			
		750	0.0007	Low I_R			**PMEG6030CELP (-Q)**			
		760	0.06	Low I_R				PMEG6030EXE (-Q)	PMEG6030CER (-Q)	
	100	800	0.00175	Low I_R, Low Q_{rr}			PMEG100T30ELP (-Q)[1]		PMEG100T30ELR (-Q)[1]	
		770	0.00045	Low I_R			PMEG10030ELP (-Q)			
		710	0.0025	Low I_R, Low Q_{rr}		PMEG100T030ELPE (-Q)[1]				
		850	0.0003	Low I_R			**PMEG10030CELP (-Q)**			
2x2	60	620	0.0012	Low I_R, Low Q_{rr}		PMEG060T040CLPE (-Q)[1]				
4.5	60	530	0.4	Low V_F			PMEG6045ETP (-Q)			
5	30	360	8	Low V_F			PMEG3050EP (-Q)			
		450	0.25	Low I_R			PMEG3050BEP (-Q)			
		500	0.15	Low V_F		PMEG030V050EPE (-Q)				
		560	0.1	Low V_F			**PMEG3050CEP (-Q)**			
	40	490	0.3	Low V_F			PMEG4050EP (-Q)			
			0.3	Low V_F			PMEG4050ETP (-Q)			
		520	0.12	Low V_F		PMEG040V050EPE (-Q)				
		525	0.041	Low V_F, Low Q_{rr}			PMEG40T50EP (-Q)1)			
		620	0.1	Low V_F			**PMEG4050CEP (-Q)**			
	45	490	0.3	Low V_F		PMEG045V050EPE (-Q)				
		525	0.044	Low V_F, Low Q_{rr}	PMEG045T050EPD[1]					
	60	560	0.4	Low V_F		PMEG060V050EPE (-Q)				
		690	0.0018	Low I_R, Low Q_{rr}		PMEG060T050ELPE (-Q)[1]	PMEG60T50ELP (-Q)[1]			
		720	0.15	Low V_F			**PMEG6050CEP (-Q)**			
		780	0.001	Low I_R			**PMEG6050ELP (-Q)**			
		895	0.00175	Low I_R, Low Q_{rr}			PMEG100T50ELP (-Q)[1]			
	100	810	0.0025	Low I_R, Low Q_{rr}		PMEG100T050ELPE (-Q)[1]				
		880	0.00045	Low I_R			**PMEG10050ELP (-Q)**			
2x3	60	620	0.0018	Low I_R, Low Q_{rr}		PMEG060T060CLPE (-Q)[1]				
6	100	840	0.00045	Low I_R		PMEG100V060EPE (-Q)				
2x4	60	660	0.0018	Low I_R, Low Q_{rr}		PMEG060T080CLPE (-Q)[1]				
8	100	850	0.0005	Low I_R		PMEG100V080EPE (-Q)				
		810	0.004	Low I_R, Low Q_{rr}		PMEG100T080ELPE (-Q)[1]				
2x5	60	690	0.0018	Low I_R, Low Q_{rr}		PMEG060T100CLPE (-Q)[1]				
10	45	490	0.6	Low V_F		PMEG045V100EPE (-Q)				
		540	0.5	Low V_F		PMEG045V100EIPE (-Q)				
		545	0.08	Low V_F, Low Q_{rr}		PMEG045T100EPE (-Q)[1]				
	60	560	0.7	Low V_F		PMEG060V100EPE (-Q)				
	100	850	0.0008	Low I_R		PMEG100V100EPE (-Q)				
		810	0.005	Low I_R, Low Q_{rr}		PMEG100T100ELPE (-Q)[1]				
12	100	810	0.006	Low I_R, Low Q_{rr}		PMEG100T120ELPE[1]				
15	45	570	1	Low V_F		PMEG045V150EPE (-Q)				
		550	0.1	Low V_F, Low Q_{rr}	PMEG045T150EPD[1]					
		580		Low V_F, Low Q_{rr}	PMEG45T15EPD[1]					
		570	0.098	Low V_F, Low Q_{rr}	PMEG045T150EIPD[1]					
	50	570	1	Low V_F		PMEG050V150EPE (-Q)				
		550	0.1	Low V_F, Low Q_{rr}	PMEG050T150EPD[1]					
		570	0.2	Low V_F, Low Q_{rr}	PMEG050T150EIPD[1]					
	100	820	0.008	Low I_R, Low Q_{rr}		PMEG100T150ELPE[1]				
20	100	830	0.01	Low I_R, Low Q_{rr}		PMEG100T200ELPE[1]				

Schottky rectifiers - leaded packages

					Automotive-qualified							
I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	SOT457 (SC-74)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)
				Size (mm)	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6
				P_{tot} (mW) @ 1 cm²	540	420	660	830	400	830	570	500
				Optimization								
0.2	30	480	0.05	Low V_F						PMEG3002EJ (-Q)		
	40	600	0.01	Low I_R						PMEG4002EJ		
	60	600	0.1	Low V_F						PMEG6002EJ (-Q)	PMEG3010BEA (-Q)	
0.5	20	390	0.2	Low V_F		PMEG2005ET (-Q)	PMEG2005EGW (-Q)	PMEG2005EH (-Q)		PMEG2005EJ (-Q)		
		480	0.03	Low I_R								
	30	430	0.15	Low V_F		PMEG3005ET (-Q)	PMEG3005EGW (-Q)	PMEG3005EH (-Q)		PMEG3005EJ (-Q)	PMEG4010BEA (-Q)	
		500	0.5	Low V_F							PMEG4010CEA	
	40	470	0.1	Low V_F		PMEG4005ET (-Q)	PMEG4005EGW (-Q)	PMEG4005EH (-Q)		PMEG4005EJ (-Q)		
		550	1.1	Low V_F		BAT720 (-Q)			1PS70SB20		PMEG2015EA (-Q)	
		640	0.008	Low I_R						PMEG4005CEJ		
0.75	40	740	0.008	Low I_R							PMEG1020EA (-Q)	
1	20	430	0.2	Low V_F		PMEG2010AET (-Q)		PMEG2010AEH (-Q)			PMEG2020AEA (-Q)	
		500	0.2	Low V_F		PMEG2010ET (-Q)		PMEG2010EH (-Q)		PMEG2010EJ (-Q)		
		550	0.07	Low I_R						PMEG2010AEJ (-Q)		
		620	1.5	Low V_F								PMEG2010AEB (-Q)
1	30	450	1	Low V_F	1PS74SB23							
		520	0.1	Low I_R				PMEG3010CEH (-Q)		PMEG3010CEJ (-Q)		
		560	0.15	Low V_F		PMEG3010ET (-Q)	PMEG3010EGW (-Q)	PMEG3010EH (-Q)			PMEG3010BEA(-Q)	
		680	0.5	Low V_F								PMEG3010EB (-Q)
	40	570	0.05	Low I_R			PMEG4010CEGW (-Q)	PMEG4010CEH (-Q)		PMEG4010CEJ (-Q)		
		640	0.05	Low V_F		PMEG4010ET (-Q)	PMEG4010EGW (-Q)	PMEG4010EH (-Q)		PMEG4010EJ (-Q)	PMEG4010BEA (-Q)	
		840	0.008	Low I_R							PMEG4010CEA (-Q)	
	60	660	0.05	Low I_R			PMEG6010CEGW (-Q)	PMEG6010CEH (-Q)		PMEG6010CEJ (-Q)		
1.5	20	660	0.2	Low I_R				PMEG2015EH (-Q)		PMEG2015EJ (-Q)	PMEG2015EA (-Q)	
	30	500	1	Low V_F				PMEG3015EH (-Q)		PMEG3015EJ (-Q)		
2	10	460	3	Low V_F				PMEG1020EH (-Q)		PMEG1020EJ (-Q)	PMEG1020EA (-Q)	
	20	525	0.2	Low V_F				PMEG2020EH (-Q)		PMEG2020EJ (-Q)	PMEG2020AEA (-Q)	
	30	620	1	Low V_F			PMEG3020EGW (-Q)	PMEG3020EH (-Q)		PMEG3020EJ (-Q)		
3	10	530	3	Low V_F				PMEG1030EH (-Q)		PMEG1030EJ (-Q)		

[1] Trench Schottky technology

Dual Schottky rectifiers - leaded/leadless DFN packages

						Automotive-qualified			
I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Optimization	Package	SOT223 (SC-73)	SOT23	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
									
					Size (mm)	6.5 x 3.5 x 1.65	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.63
					P_{tot} (mW) @ 1 cm²	1500	400	1000	1000
0.5	20	390	0.2	Low V_F			PMEG2005CT (-Q)		
	30	430	0.15	Low V_F			PMEG3005CT (-Q)		
	40	470	0.1	Low V_F			PMEG4005CT (-Q)		
1.0	25	450	1.0	Low V_F		BAT120S (-Q)			
				Low V_F		BAT120C (-Q)			
				Low V_F		BAT120A (-Q)			
	40	500	0.05	Low V_F				PMEG4010CPA (-Q)	PMEG4010CPAS (-Q)
	60	540	0.06	Low V_F				PMEG6010CPA (-Q)	PMEG6010CPAS (-Q)
		650	0.35	Low V_F		BAT160S (-Q)			
				Low V_F		BAT160C (-Q)			
				Low V_F		BAT160A (-Q)			
2.0	20	420	1.0	Low V_F				PMEG2020CPA (-Q)	PMEG2020CPAS (-Q)
	30	440	2.0	Low V_F				PMEG3020CPA (-Q)	PMEG3020CPAS (-Q)

Nomenclature of Schottky rectifiers

PMEG 40 T 10 A E T P

NEXPERIA MEGA
Schottky rectifier

Max. reverse voltage in V
e.g. **40** = 40 V

Variant letter
(design, optional)
T = trench design

Cont. forward current in A
e.g. **10** = 1.0 A

Variant letter (optional)

Internal configuration:
- **A** = CA
- **B** = CC
- **E** = single
- **P** = double, parallel
- **R** = triple, antiparallel
- **S** = series
- **V** = triple
- **W** = CA and CC
- **X** = 2 x series
- **Y** = 2 x CC
- **Z** = 2 x CA

Package indicator:

A	SOD323
B	SOD523
D	SOT457
EF	SOD972
GW	SOD123
H	SOD123F
J	SOD323F
L	SOD882
LD	SOD882D
P	SOD128
PA	SOT1061
PAS	SOT1061D
PK	SOD1608
R	SOD123W
SA	SOD995
SB	SOD993
SF	SOD962
SFB	SOD962B
T	SOT23
XD	SOD323HP

Variant letter (optional):
T = high temperature
L = ultra-low leakage

Nomenclature of Schottky rectifiers in CFP15 and CFP15B power packages

PMEG 100 V 080 E L PD

NEXPERIA MEGA
Schottky rectifier

Max. reverse voltage in V
e.g. **100** = 100 V

Variant letter (design)
V = planar design
T = trench design

Cont. forward current in A
e.g. **080** = 8.0 A

Internal configuration:
E = single
C = dual common cathode

Variant letter (optional):
I = low leakage
L = ultra-low leakage

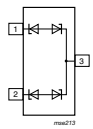
Package indicator:
PD = SOT1289
PE = SOT1289B

ESD protection, TVS, filtering and signal conditioning

3

Classic In-Vehicle Networks

Types in **bold** represent new products

Main Application	number of protected lines, bidirectional	V_{RWM} (V)	ESD rating max (kV) [1]	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20µs (A)	V_{CL} 8/20µs @ I_{ppm} (V)	Configuration	Type	Package	Size(mm)
LIN	1	24	30	14	17	3.5	42		PESD1IVN24A-Q	 SOD323 (SC-76)	1.7 x 1.25 x 0.95
		27	30	14	17	3	45		PESD1IVN27A-Q		
		24	30	14	17	3.5	42		PESD1IVN24L-Q	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.47
		27	30	14	17	3	45		PESD1IVN27L-Q		
		24	30	14	17	3.5	42		PESD1IVN24LS-Q	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.47
		27	30	14	17	3	45		PESD1IVN27LS-Q		
Classic IVNs single line protection devices	2	24	30	10	12	3.8	31		**PESD1CANFD24LS-Q**	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.47
		30	30	9.8	11.3	3.8	34		**PESD1CANFD30LS-Q**		
		33	27	9.5	11.0	3.5	36		**PESD1CANFD33LS-Q**		
		36	20	8.7	10	2.9	42		**PESD1CANFD36LS-Q**		
		24	30	10.0	11.5	3.8	31		**PESD1CANFD24L-Q**	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.47
		30	30	9.8	11.3	3.9	34		**PESD1CANFD30L-Q**		
		33	27	9.5	11.0	3.8	36		**PESD1CANFD33L-Q**		
		36	20	8.7	10.0	2.9	42		**PESD1CANFD36L-Q**		
CAN FlexRay	2	24	30	14	17	3.5	42		PESD2IVN24T-Q	 SOT23	2.9 x 1.3 x 1.0
		27	30	14	17	3	45		PESD2IVN27-T		
		24	30	14	17	3.5	42		PESD2IVN24-U	 SOT323	2.0 x 1.25 x 0.95
		27	30	14	17	3	45		PESD2IVN27-U		
		24	30	13.6	16	5.3	35		**PESD2CAN24T-Q**	 SOT23	2.9 x 1.3 x 1.0
		24	30	25	30	9	33.5		**PESD2CAN24LT-Q**		
		24	30	31	37	12	33.0		**PESD2CAN24XLT-Q**		
CAN-FD CAN FlexRay		24	15	3.2	3.5	1.9	43		PESD2CANFD24U-T		
			23	5.2	6	2.6	42		PESD2CANFD24VT-Q		
			30	9	10	4.0	41		PESD2CANFD24LT-Q		
		27	15	3.6	4	1.8	45		PESD2CANFD27U-T		
			20	5.2	6	2.5	44		PESD2CANFD27V-T		
			30	9	10	3.9	42		PESD2CANFD27L-T		
		36	15	3.6	4	2	45		PESD2CANFD36UT-Q		
			23	5.2	6	2	45		PESD2CANFD36VT-Q		
			30	9	10	2	45		PESD2CANFD36LT-Q		
		24	15	3.2	3.5	1.9	43		PESD2CANFD24U-U	 SOT323	2.0 x 1.25 x 0.95
			23	5.2	6	2.6	42		PESD2CANFD24V-U		
			30	9	10	4.0	41		PESD2CANFD24LU-Q		
		27	15	3.6	4	1.8	45		PESD2CANFD27U-U		
			20	5.2	6	2.5	44		PESD2CANFD27V-U		
			30	9	10	4.0	41		PESD2CANFD27L-U		
		36	15	3.6	4	2	45		PESD2CANFD36UU-Q		
			23	5.2	6	2	45		PESD2CANFD36VU-Q		
			30	9	10	2	45		PESD2CANFD36LU-Q		
		48	30	7.1	8.6	3.5	67		PESD2IVN48T-Q	 SOT23	2.9 x 1.3 x 1.0
		54	17	3,1	3,6	2,8	74		**PESD2CANFD54VT-Q**		
			30	5,1	6	4,0	73		**PESD2CANFD54LT-Q**		
		60	17	3,1	3,6	2,6	78		**PESD2CANFD60VT-Q**		
			24	5,2	6	4	77		**PESD2CANFD60LT-Q**		
		72	15	2,8	3,4	1,9	93		**PESD2CANFD72VT-Q**		
			20	4,5	5,4	3	94		**PESD2CANFD72LT-Q**		

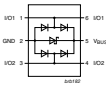
Classic In-Vehicle Networks

Types in **bold** represent new products

Main Application	number of protected lines, bidirectional	V_{RWM} (V)	ESD rating max (kV) [1]	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20µs (A)	V_{CL} 8/20µs @ I_{ppm} (V)	Configuration	Type	Package	Size(mm)
CAN-FD CAN FlexRay	2	24	15	3.2	3.5	1.9	43		PESD2CANFD24UQB-Q	 DFN1110D-3 (SOT8015)	1.1 x 1.0 x 0.48
			23	5.2	6	2.6	42		PESD2CANFD24VQB-Q		
		27	15	3.6	4	1.8	45		PESD2CANFD27UQB-Q		
			20	5.2	6	2.5	44		PESD2CANFD27VQB-Q		
		33	17	4.1	4.5	2	38		**PESD2CANFD33UQB-Q**		
		36	12	3.9	4.3	1.6	44		**PESD2CANFD36UQB-Q**		
		36	20	5.4	6	2.3	43		**PESD2CANFD36VQB-Q**		
			20	8.7	10	2.9	42		**PESD2CANFD36LQB-Q**		
		24	15	3.2	3.5	1.9	43		PESD2CANFD24U-QC	 DFN1412D-3 (SOT8009)	1.4 x 1.2 x 0.48
			23	5.2	6	2.6	42		PESD2CANFD24VQC-Q		
		27	15	3.6	4	1.8	45		PESD2CANFD27U-QC		
			20	5.2	6	2.5	44		PESD2CANFD27V-QC		
		36	12	3.9	4.3	1.6	44		**PESD2CANFD36UQC-Q**		
			20	5.4	6.0	2.3	42		**PESD2CANFD36VQC-Q**		
			20	8.7	10.0	2.9	42		**PESD2CANFD36LQC-Q**		

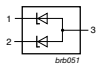
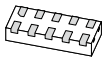
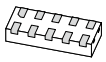
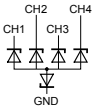
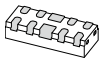
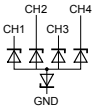
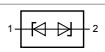
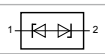
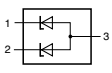
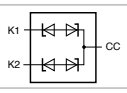
Automotive Ethernet

Types in **bold** represent new products

Main Application	Number of protected lines	V_{RWM} (V)	$V_{trigger}$ min(V)	ESD rating max (kV) [1]	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} max (µA)	Configuration	Type	Package	Size (mm)
100BASE-T1 1000BASE-T1	1	24	100	30	1.5	1.8	2.3		PESD1ETH1GLS-Q	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.48
					0.9	1.2	2.3		PESD1ETH1GXLS-Q		
	2				-	-	-		PESD2ETH1GT-Q	 SOT23	2.9 x 1.3 x 1.0
					1.1	1.3	2.3		PESD2ETH1GXT-Q		
100BASE-T1					-	-	-		PESD2ETH100T-Q		
10BASE-T1s	1	24	100	18	0.35	0.4	2.3		**PESD1ETH10LS-Q**	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.47
					0.35	0.4			**PESD1ETH10L-Q**	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
10/100/1000 Mbit/s Ethernet at the PHY	2	5	-	8	-	-	-		PESD2ETHX-Q	 SOT143B	2.9 x 1.3 x 1.0
			-	12	1.8	-	-		PESD2ETHAX-Q		
			-	8	1.3	1.5	-		PESD2ETHD-Q	 SOT457	2.9 x 1.5 x 1.0
			-	12	2	2.3	-		PESD2ETHAD-Q		
	1	5.5	-	10	0.4	0.55	2.5		PESD5V0F1BL-Q	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
			-	10	0.4	0.55	2.5		PESD5V0F1BLD-Q	 DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.37

Infotainment/SerDes

Types in **bold** represent new products

Main Application	Number of protected lines	V_{RWM} (V)	ESD rating max (kV) [1]	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20µs (A)	V_{CL} 8/20µs typ (V)	Configuration	Type	Package	Size (mm)
USBx HDMI LVDS SerDes GSML FPD Link Mgbit Ethernet	2	3.3	18	0.83	1	8	2.6 V @ 8 A		PESD2USB3UVT-Q	 SOT23	2.9 x 1.3 x 1.0
		3.3	8	0.56	0.7	4	3.3 V @ 8 A		PESD2USB3UXT-Q		
		5	22	0.76	0.9	10	2.4 V @ 8 A		PESD2USB5UVT-Q		
		5	8	0.47	0.6	4	3.3 V @ 8 A		PESD2USB5UXT-Q		
	4	3.3	15	0.29	0.34	7	3 V @ 5 A		PESD4USB3UTBR-Q	 DFN2510A-10 (SOT1176-1)	2.5 x 1.0 x 0.5
		5	15	0.29	0.34	7	3 V @ 5 A		PESD4USB5UTBR-Q		
		3.3	15	0.17	0.23	7	5 V @ 5 A		PESD4USB3BTBR-Q		
		5	15	0.17	0.23	7	5 V @ 5 A		PESD4USB5BTBR-Q		
		3.3	15	0.17	0.2	6.5	5.4		**PESD4USB3BBTBR-Q**		
		3.3	15	0.19	0.23	6.5	5.4		**PESD4USB3BCTBR-Q**		
		5	15	0.19	0.23	6.5	5.4		**PESD4USB5BBTBR-Q**		
		3.3	15	0.29	0.34	6.5	2.9		**PESD4USB3UCTBR-Q**		
		5	15	0.29	0.34	6.5	2.9		**PESD4USB5UBTBR-Q**		
		3.3	15	0.29	0.34	7	3 V @ 5 A		PESD4USB3UTBS-Q	 DFN2510D-10 (SOT1176D)	
		5	15	0.29	0.34	7	3 V @ 5 A		PESD4USB5UTBS-Q		
		3.3	15	0.17	0.23	7	5 V @ 5 A		PESD4USB3BTBS-Q		
		5	15	0.17	0.23	7	5 V @ 5 A		PESD4USB5BTBS-Q		
		3.3	15	0.23	0.3	6.5	5		**PESD4USB3BBTBS-Q**		
		5	15	0.23	0.3	6.5	5		**PESD4USB5BBTBS-Q**		
		3.3	15	0.4	0.5	6.5	3		**PESD4USB3UBTBS-Q**		
		5	15	0.4	0.5	6.5	3		**PESD4USB5UBTBS-Q**		
		3.3	15	0.29	0.34	7	3 V @ 5 A		PESD4USB3UTTS-Q	 DFN2510D-10 (SOT1165D)	
		5	15	0.29	0.34	7	3 V @ 5 A		PESD4USB5UTTS-Q		
		3.3	15	0.17	0.23	7	5 V @ 5 A		PESD4USB3BTTS-Q		
		5	15	0.17	0.23	7	5 V @ 5 A		PESD4USB5BTTS-Q		
		3.3	15	0.23	0.3	6.5	5.2		**PESD4USB3BBTTS-Q**		
		5	15	0.23	0.3	6.5	5.2		**PESD4USB5BBTTS-Q**		
		3.3	15	0.4	0.5	6.5	2.9		**PESD4USB3UBTTS-Q**		
		5	15	0.4	0.5	6.5	2.9		**PESD4USB5UBTTS-Q**		
		5	15		0.6	6.5	3.5V@8A TLP		**PESD5V0C1ULS-Q**	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.47
		5	15		0.3	6.5	5.4V@8A TLP		**PESD5V0C1BLS-Q**		
		5.5	15		0.6	6.5	3.5V@8A TLP		**PESD5V5C1UL-Q**	 DFN1006-2 (SOD882)	
		5.5	15		0.3	6.5	5.4V@8A TLP		**PESD5V5C1BL-Q**		
		5	15	0.5	0.6	5	3.4@6.5A		**PESD5V0C2UM-Q**	 DFN1006-3 (SOT883)	
		5	15		0.25	6.5	6		**PESD5V0H1BLL-Q**	DFN1006L-2 (SOD882L-1)	1.0 x 0.6 x 0.45
		5	15		0,25	6,25	5		**PESD5V0H1BLG-Q**	DFN1006LD-2 (SOD882LD-1)	1.0 x 0.6 x 0.45
		5	15		0,25	6,25	5		**PESD5V0H2BFG-Q**	DFN1006LD-3 (SOT8079LD-1)	1.0 x 0.6 x 0.45

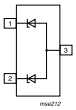
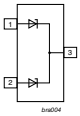
Infotainment/SerDes

Types in **bold** represent new products

Main Application	Number of protected lines	V_{RWM} (V)	ESD rating max (kV) [1]	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20µs (A)	V_{CL} 8/20µs typ (V)	Configuration	Type	Package	Size (mm)
Audio Interface Charger Port Antenna (NFC, WiFi) LVDS	1	4.5	30	65	78	34	13.2		PTVS4V5D1BL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
		5.5	30	70	84	35	12.2		PTVS5V5D1BL		
		18	10	0.35	0.5		17		PESD18VF1BBL-Q		
		24	10	0.3	0.45		17		PESD24VF1BBL-Q		
		30	10	0.27	0.4		17		PESD30VF1BBL-Q		
		18	10	0.31	0.45	1	17		**PESD18VF1BLS-Q**	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.47
		24	10	0.28	0.4	1	17		**PESD24VF1BLS-Q**		
		30	10	0.28	0.4	1	17		**PESD30VF1BLS-Q**		
		32	10	0.28	0.4	1	17		**PESD32VF1BLS-Q**		
		5	30	35	45	12	14		PESD5V0S1BLD-Q	 DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.37
		5	30	11	13	4.8	12.5		PESD5V0V1BLD-Q		
		5.5	10	0.4	0.55	2.5	15		PESD5V0F1BLD-Q		
			10	0.4	0.55	2.5	15		PESD5V0F1BRLD-Q		

[1] According to IEC 61000-4-2

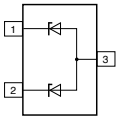
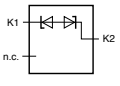
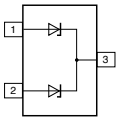
TVS diodes, 24 W/40 W

Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V min (V) @ I	V typ (V) @ I	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV)	C typ (pF)	V_{CL} max (V) @ IPP [1]	I_{PP} (A) [1]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	3	5.32	5.6	5.88	20	30	210	8	3	5		MMBZ5V6AL-Q	 SOT23	2.9 x 1.3 x 1.0
		5.89	6.2	6.51	1	30	175	8.7	2.76	0.2		MMBZ6V2AL-Q		
	4.5	6.48	6.8	7.14	1	30	150	9.6	2.5	0.3		MMBZ6V8AL-Q		
	6	8.65	9.1	9.56	1	30	155	14	1.7	0.1		MMBZ9V1AL-Q		
	6.5	9.5	10	10.5	1	30	130	14.2	1.7	0.02		MMBZ10VAL-Q		
40	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		MMBZ12VAL-Q		
	12	14.25	15	15.75	1	30	85	21	1.9	0.005		MMBZ15VAL-Q		
	13	15.2	16	16.8	1	30	76	23	1.9	0.005		MMBZ16VAL-Q		
	13	15.68	16	16.32	1	30	76	23	1.9	0.005		MMBZ16VTAL-Q		
	14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VAL-Q		
	17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VAL-Q		
	22	25.65	27	28.35	1	30	48	40	1	0.005		MMBZ27VAL-Q		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VAL-Q		
	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		MMBZ12VDL-Q		
	12.8	14.3	15	15.8	1	30	85	21.2	1.9	0.005		MMBZ15VDL-Q		
	14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VCL-Q		
	17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VCL-Q		
	22	25.65	27	28.35	1	30	48	38	1	0.005		MMBZ27VCL-Q		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VCL-Q		

[1] 10/1000µs according to IEC 61643-321

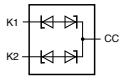
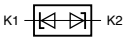
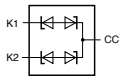
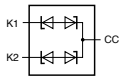
New MMBZ TVS diodes, lightning pulse

Types in **bold** represent new products

V_{RWM} (V)	V_{BR} min (V) @ I	V_{BR} typ (V) @ I	V_{BR} max (V) @ I_R	ESD rating max (kV)	C typ (pF)	V_{CL} typ (V) @ I_{PPM}	I_{PPM} 8/20µs (A)[w]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
3	5.1	5.6	6.1	30	200	13	18	0.5		**MMBZ5V6A-T**		
	5.7	6.2	6.7	30	88	12	8.8	0.2		**MMBZ6V2A-T**		
4.5	6.3	6.8	7.3	30	150	13.6	15	0.3		**MMBZ6V8A-T**		
6	8.65	9.1	9.56	30	60	20	10.5	0.05		**MMBZ9V1A-T**		
6.5	9.5	10	10.5	30	55	18	8	0.05		**MMBZ10VA-T**		
8.5	11.4	12	12.6	30	45	21	7	0.05		**MMBZ12VA-T**		
12	14.25	15	15.75	30	36	24	6	0.05		**MMBZ15VA-T**		
13	15.2	16	16.8	30	30	27	4.8	0.05		**MMBZ16VA-T**		
15	17.1	18	18.9	30	30	28	4.8	0.05		**MMBZ18VA-T**		
17	19	20	21	30	26	32	3.8	0.05		**MMBZ20VA-T**		
22	25.65	27	28.35	30	22	46	4.2	0.05		**MMBZ27VA-T**		
26	31.3	33	34.7	30	20	49	2.8	0.05		**MMBZ33VA-T**		
3	5.1	5.6	6.1	30	200	13	18	0.5		**MMBZ5V6AT-Q**	 SOT23	2.9 x 1.3 x 1.0
3	5.7	6.2	6.7	30	88	12	8.8	0.2		**MMBZ6V2AT-Q**		
4.5	6.3	6.8	7.3	30	150	13.6	15	0.3		**MMBZ6V8AT-Q**		
6	8.65	9.1	9.56	30	60	20	10.5	0.05		**MMBZ9V1AT-Q**		
6.5	9.5	10	10.5	30	55	18	8	0.05		**MMBZ10VAT-Q**		
8.5	11.4	12	12.6	30	45	21	7	0.05		**MMBZ12VAT-Q**		
12	14.25	15	15.75	30	36	24	6	0.05		**MMBZ15VAT-Q**		
13	15.2	16	16.8	30	30	27	4.8	0.05		**MMBZ16VAT-Q**		
15	17.1	18	18.9	30	30	28	4.8	0.05		**MMBZ18VAT-Q**		
17	19	20	21	30	26	32	3.8	0.05		**MMBZ20VAT-Q**		
22	25.65	27	28.35	30	22	46	4.2	0.05		**MMBZ27VAT-Q**		
26	31.3	33	34.7	30	20	49	2.8	0.05		**MMBZ33VAT-Q**		
24	25	-	35	30	14	33	3.5	0.05		**MMBZ27VS-T**		
27	38	33	38	30	13	36	3.5	0.05		**MMBZ33VS-T**		
24	25	-	35	30	14	33	3.5	0.05		**MMBZ27VST-Q**		
27	38	33	38	30	13	36	3.5	0.05		**MMBZ33VST-Q**		
22	25.65	27	28.35	30	22	40	3.2	0.05		**MMBZ27VC-T**		
26	31.4	33	34.7	20	20	49	2.8	0.05		**MMBZ33VC-T**		
22	25.65	27	28.35	30	22	40	3.2	0.05		**MMBZ27VCT-Q**		
26	31.4	33	34.7	20	20	49	2.8	0.05		**MMBZ33VCT-Q**		

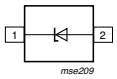
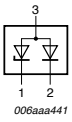
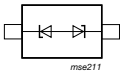
New MMBZ TVS diodes, lightning pulse

Types in **bold** represent new products

V_{RWM} (V)	V_{BR} min (V) @ I	V_{BR} typ (V) @ I	V_{BR} max (V) @ I_R	ESD rating max (kV)	C typ (pF)	V_{CL} typ (V) @ I_{PPM}	I_{PPM} 8/20µs (A)[w]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	25.5	-	35.5	30	9	31	4	0.05		**MMBZ27VB-U**	 SOT323	2.0 x 1.25 x 0.95
27	28	33	38	30	9	31	3.9	0.05		**MMBZ33VB-U**		
24	25.5	-	35.5	30	9	31	4	0.05		**MMBZ27VBU-Q**		
27	28	33	38	30	9	31	3.9	0.05		**MMBZ33VBU-Q**		
24	25.5	-	35.5	30	14	33	3.5	0.05		**MMBZ27VZ-LS**	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.47
27	38	33	38	30	14	36	3	0.05		**MMBZ33VZ-LS**		
24	25.5	-	35.5	30	14	33	3.5	0.05		**MMBZ27VZLS-Q**		
27	38	33	38	30	14	36	3	0.05		**MMBZ33VZLS-Q**		
24	25.5	-	35.5	20	6	33	2.6	0.05		**MMBZ27VB-QC**	 DFN1412D-3 (SOT8009)	1.1 x 1.0 x 0.48
27	28	-	38	17	6	33	2.5	305		**MMBZ33VB-QC**		
24	25.5	-	35.5	20	6	33	2.6	0.05		**MMBZ27VBQC-Q**		
27	28	-	38	17	6	33	2.5	0.05		**MMBZ33VBQC-Q**		
24	25.5	-	30.5	20	6	33	2.6	0.05		**MMBZ27VB-QB**	 DFN1110D-3 (SOT8015)	1.4 x 1.2 x 0.48
27	28	-	38	17	6	33	2.5	0.05		**MMBZ33VB-QB**		
24	25.5	-	30.5	20	6	33	2.6	0.05		**MMBZ27VBQB-Q**		
27	28	-	38	17	6	33	2.5	0.05		**MMBZ33VBQB-Q**		

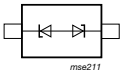
Low capacitance ESD protection for high-speed interfaces

Types in **bold red** are in development,
types in **bold** represent new products

UnidIRectional	BidIRectional	V_{RWM} (V)	C_{line} typ (pF)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
1	0	5	0.45	20		PESD5V0C1USF	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
		6.5	0.45	20		PESD6V5C1USF		
		5	0.6	10		PESD5V0F1USF		
		5.5	0.5	18		**PESD5V5C1UBSF**		
		15	1	30		**PESD15VW1UCSF**		
		15	0.5	15		**PESD5V5C1UL**	 DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.37
		5	0.95	8		PESD5V0X1ULD		
			1.55	15		PESD5V0X1UALD		
		5	0.95	8		PESD5V0X1UB	 SOD523 (SC-79)	1.2 x 0.8 x 0.6
			1.55	15		PESD5V0X1UAB		
		3.3	0.6	30		PESD3V3U1UT	 SOT23	2.9 x 1.3 x 1.0
		3.3	1	18		**PESD3V3X2UT**		
		3.3	0.8	8		**PESD3V3F2UT**		
		5	0.9	22		**PESD5V0X2UT**		
		5	0.6	8		**PESD5V0F2UT**		
		5	0.6	30		PESD5V0U1UT		
		12	0.6	30		PESD12VU1UT		
		15	0.6	30		PESD15VU1UT		
		24	0.6	23		PESD24VU1UT		
0	1	2	0.7	20		**PESD2V0Y1BXM**	 SOD962C	0.6 x 0.3 x 0.18
		1	0.1	8		**PESD1V0R1BCSF**	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
			0.13	10		**PESD1V0R1BDSF**		
			0.15	13		**PESD1V0H1BSF**		
			0.16	14		**PESD1V0Y1BBSF**		
			0.18	15		**PESD1V0C1BSF**		
			0.2	15		**PESD1V0R1BESF**		
			0.24	19		**PESD1V0R1BFSF**		
		1.2	0.26	15		**PESD1V2Y1BSF**		
		2.0	0.69	20		PESD2V0Y1BSF		
		2.5	0.25	15		PESD2V5Y1BSF		
		2.5	2	25		PESD2V5X1BSF		
		2.8	0.1	10		PESD2V8R1BSF		
		1	0.16	14		**PESD2V8Y1BSF**		
		3.3	0.24	15		PESD3V3Y1BSF		
			0.2	20		PESD3V3C1BSF		
			0.28	20		PESD3V3Z1BSF		
			0.45	30		PESD3V3Z1BCSF		
			0.55	30		PESD3V3W1BCSF		
		3.3	0.78	20		PESD3V3F1BSF		
		4.0	0.24	15		PESD4V0Y1BSF		
			0.7	30		**PESD4V0Y1BBSF**		
			0.16	14		**PESD4V0Y1BCSF**		
			0.28	20		PESD4V0Z1BSF		
			0.37	13		**PESD4V0Y1BHSF**		
			0.45	30		PESD4V0Z1BCSF		
			0.55	30		PESD4V0W1BCSF		
		5	0,16	15		**PESD5V0Y1BCSF**		
		5	0.09	8		**PESD5V0R1BCSF**		
		5	0.1	12		**PESD5V0R1BDSF**		
		5	0.1	10		PESD5V0R1BSF		
			0.15	15		PESD5V0H1BSF		
			0.2	20		PESD5V0C1BSF		
			0.32	30		PESD5V0Z1BDSF		
			0.49	30		PESD5V0W1BDSF		

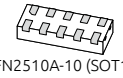
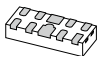
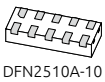
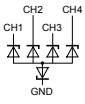
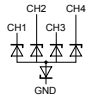
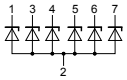
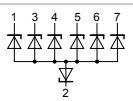
Low capacitance ESD protection for high-speed interfaces

Types in **bold red** are in development,
types in **bold** represent new products

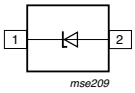
UnidIRectional	BidIRectional	V_{RWM} (V)	C_{line} typ (pF)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
0	1	5.5	0.27	18		**PESD5V5C1BBSF**	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
		7	0.1	10		PESD7V0R1BSF		
			0.15	15		PESD7V0H1BSF		
			0.2	20		PESD7V0C1BSF		
		7.1	0.11	8		**PESD7V1R1BCSF**		
			0.13	12		**PESD7V1R1BDSF**		
		5.5	0.25	10		PESD5V0F1BSF		
						PESD5V0F1BRSF		
		3.3	-	20		PESD3V3X1BCSF		
		5.0	-			PESD5V0X1BCSF		
		9	0.2	18		**PESD9V0C1BSF**		
		9	0.32	30		**PESD9V0Z1BDSF**		
		9	0.49	30		**PESD9V0W1BDSF**		
		12	0.37	13		**PESD12VY1BSF**		
		12	0.45	30		**PESD12VW1BCSF**		
		15	0.18	10		**PESD15VY1BSF**		
		15	0.45	30		**PESD15VW1BCSF**		
		15	0.5	30		**PESD15VW1ACSF**		
		18	0.23	10		**PESD18VF1BBSF**		
		24	0.18	10		**PESD24VY1BSF**		
		24	0.7	30		**PESD24VY1BBSF**		
		24	0.23	10		**PESD24VF1BBSF**		
		30	0.24	10		**PESD30VF1BSF**		
		30	0.15	10		**PESD30VY1BSF**		
		1	0.18	15		**PESD1V0Y1BIF**	 DSN0603D-2 (SOD962D)	
		18	0.15	10		**PESD18VY1BBIF**		
		5	0.4	10		PESD5V0F1BLD	 DFN1006D-2 (SOD882D)	
						PESD5V0F1BRLD		
		3.3	1.3	9		PESD3V3X1BL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
		5.5	0.4	10		PESD5V0F1BL		
		5	0.49	8		PESD5V0X1BCL		
			0.85	15		PESD5V0X1BCAL		
			0.9	9		PESD5V0X1BL		
		5.5	0.24	15		**PESD5V5C1BL**		
		18	0.31	10		**PESD18VF1BBL**		
		24	0.28	10		**PESD24VF1BBL**		
		30	0.27	10		**PESD30VF1BBL**		
2	1	3.3	0.5	15		**PESD3V3C2UM**	 DFN1006-3 (SOT883-3)	1.0 x 0.6 x 0.46
		4	0.8	20		**PESD4V0X2UM**		
		5	0.5	15		**PESD5V0C2UM**		
			0.5	10		PESD5V0X2UMB	 DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37
						PESD5V0X2UM	 DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48
			0.8	15		PESD5V0X2UAMB	 DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37
						PESD5V0X2UAM	 DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48
			0.9	9		PESD5V0X1BT	 SOT23	2.9 x 1.3 x 1.0

Low capacitance ESD protection for high-speed interfaces

Types in **bold** represent new products

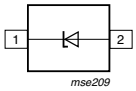
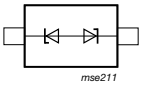
UnidIRectional	BidIRectional	V_{RWM} (V)	C_{line} typ (pF)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
2	0	80	0.6	30		NUP1301U	 SOT323	2.0 x 1.25 x 0.95
						NUP1301	 SOT23	2.9 x 1.3 x 1.0
						NUP1301QA	 SOT1215	1.0 x 1.0 x 0.4
0	2	5	0.21	20		**PESD5V0C2BDF**	 DFN0603-3 (SOT8013)	0.62 x 0.32 x 0.25
0	2	4	0.26	20		PUSB3BB2DF		
0	2	4	0.31	25		**PESD4V0Z2BCDF**		
3	0	5.5	1	8		PRTR5V0U2X	 SOT143B	2.9 x 1.3 x 1.0
			1.8	12		PRTR5V0U2AX		
			1	8		PRTR5V0U2F	 DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48
4	0	3.3	0.75	25		PESD3V3X4UHC	 DFN1308-6 (SOT8006)	1.3 x 0.8 x 0.4
		5.5	1	8		IP4220CZ6	 SOT457 (SC-74)	2.9 x 1.5 x 1.0
						PRTR5V0U4D		2.9 x 1.5 x 1.0
			0.6	8		IP4283CZ10-TBR	 DFN2510A-10 (SOT1176)	2.5 x 1.0 x 0.48
4	0	3.3	0.29	15		PUSB3FC4	 SOT1165-3 (DFN2510-10)	2.5 x 1 x 0.5
						PHDMI2FC4		
4	0		0.29			PUSB3FR4	 DFN2510A-10 (SOT1176-1)	2.5 x 1 x 0.5
4	0		0.3			**PUSB3FS4**		
0	4		0.17			PUSB3AB4		
0	4		0.17			**PUSB3BB4**		
0	4		0.22			**PUSB3CB4**		
4	0	5	0.29			PHDMI2FR4		
4	0		0.3			**PHDMI2FS4**		
0	4		0.17			PHDMI2AB4		
0	4		0.17			**PHDMI2BB4**		
0	4		0.22			**PHDMI2CB4**		
6	0	3.3	0.35			PUSB3FR6	 XSON7 (SOT1358-1)	2.1 x 1.1 x 0.5
0	6		0.15			PUSB3AB6		

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} (A) 8/20µs	ESD rating max (kV) [1]	I_R max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
UnidRectional	BidRectional										
1	0	5	35	42	3.5	30	0.1		PESD5V0S1USF	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
		5.5	12	15.4	1.2	30	0.1		PESD5V0L1USF		
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5
			34	40	4.5	30	0.3		PESD3V3L1UL		
			207	300	15	30	2		PESD3V3S1UL		
		5	2	2.6	-	9	0.1		PESD5V0U1UL		
			25	30	3.5	26	0.1		PESD5V0L1UL		
		5	152	200	15	30	1		PESD5V0S1UL		
		6	82	105	10	30	0.3		PESD6V3S1UL		
		8	70	90	9	30	0.5		PESD8V0S1UL		
		12	38	75	5	30	0.05		PESD12VS1UL		
		15	32	70	5	30	0.05		PESD15VS1UL		
		24	23	50	3	23	0.05		PESD24VS1UL		
		36	18	2.5	2.5	30	0.01		PESD36VS1UL		
		5	25	30	3.5	26	0.1		PESD5V0L1ULD	 DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.4
			152	200	15	30	1		PESD5V0S1ULD		
		8	70	90	13	30	0.5		PESD8V0S1ULD		
		12	38	75	5	30	0.05		PESD12VS1ULD		
		15	32	70	5	30	0.05		PESD15VS1ULD		
		24	23	50	3	23	0.05		PESD24VS1ULD		
		3.3	207	300	15	30	2		PESD3V3S1ULS	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.48
		5	152	200	15	30	1		PESD5V0S1ULS		
		8	70	90	13	30	0.5		PESD8V0S1ULS		
		12	38	75	5	30	0.05		PESD12VS1ULS		
		15	32	70	5	30	0.05		PESD15VS1ULS		
		24	23	50	3	23	0.05		PESD24VS1ULS		
		36	18	2.5	2.5	30	0.01		PESD36VS1ULS		
		2.5	229	300	20	30	6		PESD5Z2.5	 SOD523 (SC-79)	1.2 x 0.8 x 0.6
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UB		
			34	40	4.5	30	0.3		PESD3V3L1UB		
			172	200	20	30	0.05		PESD5Z3.3		
			207	300	18	30	2		PESD3V3S1UB		
		5	2	2.6	-	9	0.1		PESD5V0U1UB		
			25	30	3.5	26	0.1		PESD5V0L1UB		
			89	150	10	30	0.05		PESD5Z5.0		
			152	200	15	30	1		PESD5V0S1UB		
		6	78	150	10	30	0.01		PESD5Z6.0		
		7	69	150	10	30	0.01		PESD5Z7.0		
		12	35	75	6	30	0.01		PESD5Z12		
			38	75	5	30	0.05		PESD12VS1UB		
		15	32	70	5	30	0.05		PESD15VS1UB		
		24	23	50	3	23	0.05		PESD24VS1UB		

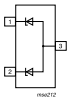
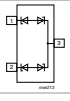
General purpose ESD protection devices

types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} (A) 8/20µs	ESD rating max (kV) [1]	I_R max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
UnidRectional	BidRectional										
1	0	3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UA	 SOD323 (SC-76)	1.7 x 1.25 x 0.95
		5	2	2.6	-	9	0.1		PESD5V0U1UA		
			25	30	3.5	26	0.1		PESD5V0L1UA		
			480	530	47	30	4		PESD5V0S1UA		
		12	160	180	22.5	30	0.1		PESD12VS1UA		
		24	23	50	3	23	0.05		PESD24VS1UA		
		5	480	530	47	30	4		PESD5V0S1UJ	 SOD323F (SC-90)	1.7 x 1.25 x 0.7
		12	160	180	22.5	30	0.1		PESD12VS1UJ		
		36	18	30	2.5	30	0.01		PESD36VS1UJ		
		3.3	5.5	6	5.4	20	0.1		PESD3V3U1BCSF	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
			8.5	10	7.1	30	0.1		PESD3V3V1BCSF		
			11	14	12	30	0.05		PESD3V3S1BSF		
			24	-	20	30	0.05		PESD3V3L1BBSF		
			33	-	20	30	0.05		PESD3V3L1BSF		
		5	5.3	6	1	20	0.1		PESD5V0V1BCSF		
					2	20	0.1		PESD5V0V1BDSF		
				4.5	1	15	0.1		PESD5V0V1BSF		
			12	15.4	3	30	0.1		PESD5V0L1BSF		
			35	45	8	30	0.1		PESD5V0S1BSF		
		5.5	5.3	6	5.4	20	0.1		PESD5V5U1BCSF		
			6.2	7.5	11	22	0.05		PESD5V5S1BSF		
		12	17	19	6.1	30	0.05		PESD12VA-SF		
		16	5.7	6.5	1.3	12	0.05		PESD16VV1BSF		
		18	4	6	3	25	0.1		PESD18VV1BBSF		
		12	17	19	10	30	0.05		**PESD12VV1BSF**		
		15	15	17	9	30	0.05		**PESD15VV1BSF**		
		18	12.7	15	7.1	30	0.05		**PESD18VV1BASF**		
		20	11.2	13.5	6.5	30	0.05		**PESD20VV1BSF**		
		22	10.2	12.2	5.1	30	0.05		**PESD22VV1BSF**		
		24	9.3	11.2	4.7	30	0.05		**PESD24VV1BSF**		
		24	5	6	2.6	20	0.05		**PESD24VV1BBSF**		
		27	5	6	2.4	18	0.05		**PESD27VV1BSF**		
		30	4.8	5.8	2.1	15	0.05		**PESD30VV1BSF**		
		-30 / +33	4.8	5.8	1.9	13	0.05		**PESD33VV1ASF**		
		-30 / +36	4.5	5.4	1.8	12	0.05		**PESD36VV1ASF**		
		5	75	-	15	30	1		PESD5V0L1BA	 SOD323 (SC-76)	1.7 x 1.25 x 0.95
		12	19	-	5	30	0.05		PESD12VL1BA		
		15	16	-	5	30	0.05		PESD15VL1BA		
		24	11	-	3	23	0.05		PESD24VL1BA		
		32	9	12	2.5	23	0.05		PESD32VL1BA		
		36	9	12	2	18	0.05		PESD36VL1BA		
		24	14	17	3.5	30	0.05		PESD24VV1BA		
		27	13	17	3	30	0.05		PESD27VV1BA		
		3.3	11	13	5	30	0.01		PESD3V3V1BL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5
			22	30	10	30	0.05		PESD3V3T1BL		
			35	40	15	30	0.1		PESD3V3S1BL		
			65	78	34	30	0.05		PTVS3V3D1BAL		
		4.5	65	78	34	30	0.05		PTVS4V5D1BL		
		5	11	13	4.8	30	0.01		PESD5V0V1BL		

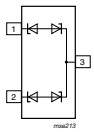
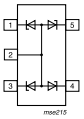
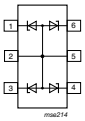
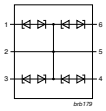
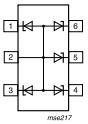
General purpose ESD protection devices

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} (A) 8/20µs	ESD rating max (kV) [1]	I_R max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
UnidRectional	BidRectional										
0	1	5	35	45	12	30	0.1		PESD5V0S1BL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5
		5.5	70	84	35	30	0.1		PTVS5V5D1BL		
		12	17	25	7.8	30	0.01		PESD12VV1BL		
		24	14	17	3.5	30	0.05		**PESD24VV1BL**		
		27	14	17	3	30	0.05		**PESD27VV1BL**		
		3	20	25	10	30	0.1		PESD3V3T1BLD	 DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.37
		5	11	13	4.8	30	0.01		PESD5V0V1BLD		
			35	45	12	30	0.1		PESD5V0S1BLD		
		3.3	20	25	10	30	0.1		PESD3V3T1BLS	 DFN1006BD-2 (SOD882BD)	1.0 x 0.6 x 0.48
		5	11	13	4.8	30	0.01		PESD5V0V1BLS		
		12	17	25	7.8	30	0.01		PESD12VV1BLS		
		3.3	15.5	18	7.5	25	0.1		PESD3V3L1BSL	 SOD882-S1	1 x 0.6 x 0.4
		5	15.5	18	7.5	25	0.1		PESD5V0L1BSL		
		7	15	20	7	30	0.1		PESD7V0L1BSL		
		12	7.7	9	7.3	30	0.1		PESD12VL1BSL		
		5	11	13	4.8	30	0.01		PESD5V0V1BB	 SOD523 (SC-79)	1.2 x 0.8 x 0.6
			35	45	12	30	0.1		PESD5V0S1BB		
			11	13	4.8	30	0.01		PESD5V0V1BA	 SOD323 (SC-76)	1.7 x 1.25 x 0.95
			35	45	12	12	0.1		PESD5V0S1BA		
			2.9	3.5	-	10	0.1		PESD5V0U1BL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5
									PESD5V0U1BLD	 DFN1006D-2 (SOD882D)	1 x 0.6 x 0.4
									PESD5V0U1BB	 SOD523 (SC-79)	1.2 x 0.8 x 0.6
									PESD5V0U1BA	 SOD323 (SC-76)	1.7 x 1.25 x 0.95
2	1	3.3	22	28	3	15	0.03		PESD3V3L2UM	 DFN1006-3 (SOT883)	1.0 x 0.6 x 0.5
		5	16	19	2.5	15	0.025		PESD5V0L2UM		
					2.5	15	0.025		PESD5V0L2UMB	 DFN1006B-3 (SOT883B)	1 x 0.6 x 0.37
		3.3	207	300	18	30	2		PESD3V3S2UT	 SOT23	2.9 x 1.3 x 1
		5.2	152	200	15	30	1		PESD5V2S2UT		
		12	38	75	5	30	1		PESD12VS2UT		
		15	32	70	5	30	1		PESD15VS2UT		
		24	23	50	3	23	1		PESD24VS2UT		
		36	17	35	2.5	30	1 (@ 30 V)		PESD36VS2UT		
		42	17	20	1.8	23	0.05		PESD42VS2UT		
		3.3	207	300	18	30	2		PESD3V3S2UAT		
		5	152	200	15	30	1		PESD5V0S2UAT		
		15	32	70	5	30	0.05		PESD15VS2UAT		
		24	23	50	3	23	0.05		PESD24VS2UAT		
		5	38	46	6.5	30	0.09 (@ 4 V)		PESD5V0L2UU	 SOT323 (SC-70)	2 x 1.25 x 0.95
		6	34	40	5.5	30	0.018 (@ 4.3 V)		PESD6V0L2UU		
0	2	3.3	101	-	15	30	0.05		PESD3V3L2BT	 SOT23	2.9 x 1.3 x 1
		5	75	-	13	30	0.05		PESD5V0L2BT		
		12	19	-	5	30	0.1		PESD12VL2BT		

General purpose ESD protection devices

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} (A) 8/20µs	ESD rating max (kV) [1]	I_R max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
UnidRectional	BidRectional										
0	2	15	16	-	5	30	0.05		PESD15VL2BT	 SOT23	2.9 x 1.3 x 1
		24	11	-	3	23	0.05		PESD24VL2BT		
		24	14	17	3.5	30	0.05		PESD24VV2BT		
		27	13	17	3	30	0.05		PESD27VV2BT		
		48	7	9	4	30	0.05		**PESD48VV2BT**		
		5	35	45	12	30	0.1		PESD5V0S2BT		
			2.9	3.5	-	10	0.1		PESD5V0U2BT		
									PESD5V0U2BM	 DFN1006-3 (SOT883)	1.0 x 0.6 x 0.5
			18	20	9	30	0.01		PESD5V0V2BM		
			2.9	3.5	-	10	0.1		PESD5V0U2BMB	 DFN1006B-3 (SOT883B)	1 x 0.6 x 0.37
			18	20	9	30	0.01		PESD5V0V2BMB		
			35	45	35	30	0.1		PESD5V0S2BQA	 DFN1010D-3 (SOT1215)	1.1 x 1.0 x 0.37
4	3	3.3	22	28	3	20	0.3		PESD3V3L4UF	 DFN1410-6 (SOT886)	1.45 x 1 x 0.5
			110	300	10	30	1 (@ 3 V)		PESD3V3S4UF		
		5	16	19	2.5	20	0.025		PESD5V0L4UF		
			85	220	10	30	0.1 (@ 4.3 V)		PESD5V0S4UF		
		3	200	240	-	8	2		BZA856A	 SOT353 (SC-88A)	2 x 1.25 x 0.95
		3.3	22	28	3	20	0.3		PESD3V3L4UG		
		5	16	19	2.5	20	0.025		PESD5V0L4UG		
		3	200	240		8	2		BZA456A	 SOT457 (SC-74)	2.9 x 1.5 x 1
		3.3	215	300	20	30	0.8		PESD3V3S4UD		
		5	165	220	20	30	0.2		PESD5V0S4UD		
		15	37	48	-	8	0.1		BZA420A		
		24	40	70	4	23	0.01		PESD24VS4UD		
0	4	3.3		9.9	6	20	0.1		**PESD3V3L4BHC**	 DFN1308-6 (SOT8006)	1.3 x 0.8 x 0.4
		5	2.9	3.5	-	10	0.1		PESD5V0U4BF	 DFN1410-6 (SOT886)	1.45 x 1 x 0.5
			45	75	-	15	0.1		BZA408B	 SOT457 (SC-74)	2.9 x 1.5 x 1.0
0	5	3.3	22	28	2.5	20	0.3		PESD3V3L5UF	 DFN1410-6 (SOT886)	1.45 x 1 x 0.5
		5	16	19	2.5	20	0.025		PESD5V0L5UF		
		3.3	22	28	2.5	20	0.3		PESD3V3L5UY	 SOT363 (SC-88)	2 x 1.25 x 0.95
		5	16	19	2.5	20	0.025		PESD5V0L5UY		
		3.3	215	300	20	30	0.8		PESD3V3S5UD	 SOT457 (SC-74)	2.9 x 1.5 x 1.0
		5	165	220	20	30	0.2		PESD5V0S5UD		
		12	73	100	10	30	0.015		PESD12VS5UD		
		15	60	90	6	30	0.015		PESD15VS5UD		
		24	45	70	4	23	0.015		PESD24VS5UD		
		5	2.9	3.5	-	10	0.1		PESD5V0U5BF	 DFN1410-6 (SOT886)	1.45 x 1 x 0.5

Common mode filters with integrated protection

Types in **bold** represent new products

Interface	Number of protected line pairs	Type	Differential Mode 3 dB frequency (typ.)	range of CM rejection > -10 dB	V_{RWM} (V)	IEC61000-4-2 ESD rating (kV)	IPP (A) 8/20 µs	Channel series resistance (Ω)	Package	Size (mm)
USB2.0	1	IP3319CX6	1.5	0.14 - 5.8	5.5	15	6	6	WLCSP6	0.95 x 1.34 x 0.6
USB3.2	1	PCMF1USB3BA/C	10 GHz	1.85 - 8.9	4	15	7.5	2.2	WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2USB3BA/C							WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3USB3BA/C							WLCSP15	2.4 x 1.2 x 0.5
	1	PCMF1USB3B/C	8.1 GHz	1.24 - 10	4	20	9.5	2.6	WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2USB3B/C							WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3USB3B/C							WLCSP15	2.4 x 1.2 x 0.5
	1	PCMF1USB3S	6 GHz	0 63 - 8.3	5	15	7	3	WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2USB3S							WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3USB3S							WLCSP15	2.4 x 1.2 x 0.5
	1	PESD1USB3B	16.1 GHz	-	4	20	9.5	-	WLCSP5	0.8 x 1.2 x 0.5
	2	PESD2USB3B							WLCSP10	1.6 x 1.2 x 0.5
	3	PESD3USB3B							WLCSP15	2.4 x 1.2 x 0.5
	1	PESD1USB3S	17 GHz	-	5	15	8	-	WLCSP5	0.8 x 1.2 x 0.5
	2	PESD2USB3S							WLCSP10	1.6 x 1.2 x 0.5
	3	PESD3USB3S							WLCSP15	2.4 x 1.2 x 0.5
HDMI2.0	1	PCMF1HDMI2S	>6 GHz	0.63-8.3	5	15	7	3	WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2HDMI2S							WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3HDMI2S							WLCSP15	2.4 x 1.2 x 0.5
HDMI2.1	1	**PCMF1HDMI2BA-C**	10 GHz	1.85 - 8.9	4	15	7.5	2.2	WLCSP5	0.8 x 1.2 x 0.5
	2	**PCMF2HDMI2BA-C**							WLCSP10	1.6 x 1.2 x 0.5
	3	**PCMF3HDMI2BA-C**							WLCSP15	2.4 x 1.2 x 0.5

TVS diodes for mobile applications

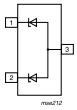
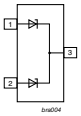
Types in **bold** represent new products

V_{RWM}	V_{BR} min	V_{BR} max	I_{PPM} 8/20µs	V_{CL} 8/20µs	Type	Package	Size
3.3	4.7	-	34	13.2	PTVS3V3D1BAL	 DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
4.5	4.7	-	34	13.2	PTVS4V5D1BL		
5.5	5.6	7.6	35	12.2	PTVS5V5D1BL		
3.3	3.8	6.8	70	11	PTVS3V3Z1BSC	 DSN1006-2 (SOD993B)	1.0 x 0.6 x 0.27
5	5.5	8.3	60	12	PTVS5V0Z1BSC		
5	5.1	7	44	7.3	**PTVS5V0Z1UCL**	 DFN1006-2 (SOD882P-1)	1.02 x 0.62 x 0.45
5	5.1	7	65	7.5	**PTVS5V0D1UCL**		
6.3	6.4	9	40	9.3	**PTVS6V3Z1UCL**		
6.3	6.4	9	56	9.3	**PTVS6V3D1UCL**		
20	22	26	30	28.5	**PTVS20VD1UL**		
4.8	5.1	7	150	8.5	PTVS4V8Z1UPC	 DFN1610-2 (SOD1610)	1.6 x 1.0 x 0.55
5	5.1	7	150	8.5	PTVS5V0Z1UPC		
5.5	6.4	9	140	9.9	**PTVS5V5Z1UPC**		
6.3	6.4	9	140	9.9	**PTVS6V3Z1UPC**		
24	25	29	150	28	PTVS24VZ1UPA	 DFN2020-3 (SOT1061-3)	2.0 x 2.0 x 0.55
30	31	34.5	150	33.5	**PTVS30VZ1UPA**		

P_{PPM} 10/1000µs	V_{RWM}	V_{BR} min	V_{BR} max	I_{PPM} 8/20µs	V_{CL} 8/20µs	I_{PPM} 10/1000µs	V_{CL} 10/1000µs	Type	Package	Size
300	7.5	8.33	9.21	178	19.7	23.3	12.9	PTVS7V5U1UPA	 DFN2020-3 (SOT1061)	2.0 x 2.0 x 0.62
	10	11.1	12.3	148	23	17.6	17	PTVS10VU1UPA		
	12	13.3	14.7	131	25.2	15.1	19.9	PTVS12VU1UPA		
	15	16.7	18.5	111	28.8	12.3	24.4	PTVS15VU1UPA		
	18	20	22.1	97	32	10.3	29.2	PTVS18VU1UPA		
	20	22.2	24.5	98.5	38.7	9.2	32.5	PTVS20VU1UPA		
	22	24.4	26.9	88.5	41	8.4	35.5	PTVS22VU1UPA		
	24	26.7	29.5	79	44.2	7.7	38.8	PTVS24VU1UPA		
	26	28.9	31.9	69	43.5	7	43	PTVS26VU1UPA		

V_{RWM} (V)	V_{br} min (V)	V_{br} max (V)	8/20µs pulse		10/1000µs pulse		I_{Rm} typ @ V_{RWM} (nA)	I_{Rm} max @ V_{RWM} (nA)	R_{dyn} (TLP)	Type	Package	Size
			V_{cl} @ I_{ppm} (V)max	V_{CL} @ I_{ppm} (A)	V_{cl} @ I_{ppm} (V)max	I_{ppm} (A)						
5	6.4	7.8	19.4	100	12	20	25	1000	0.1	PTVS5V0Z1USKP	DSN1608-2 (SOD964)	1.6 x 0.8 x 0.27
			18	80	12	20	25	1000	0.06	PTVS5V0Z1USK		
7.5	8.33	9.65	22	100	13.5	17	1	200	0.08	PTVS7V5Z1USK		
10	11.1	12.9	27	75	18.2	12.5	0.1	200	0.11	PTVS10VZ1USK		
12	13.1	15.4	29	65	21.8	10.5	0.1	200	0.11	PTVS12VZ1USK		
15	16.7	19.4	26	52	27.4	7.5	0.1	200	0.13	PTVS15VZ1USK		
18	20	23.2	44	41	32.8	6.4	0.1	200	0.17	PTVS18VZ1USK		
20	22.2	25.4	48.3	41	36.9	6	1	200	0.2	PTVS20VZ1USK		
22	24.4	26.9	51	39	40	5	0.1	200	0.2	PTVS22VZ1USK		
26	28.9	33.4	57.5	32	46	4.5	0.1	200	0.15	PTVS26VZ1USK		

TVS diodes, 24 W/40 W

Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V min (V) @ I	V typ (V) @ I	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV)	C typ (pF)	V_{CL} max (V) @ IPP [1]	I_{PP} (A) [1]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	3	5.32	5.6	5.88	20	30	210	8	3	5		MMBZ5V6AL(-Q)	 SOT23	2.9 x 1.3 x 1.0
		5.89	6.2	6.51	1	30	175	8.7	2.76	0.2		MMBZ6V2AL(-Q)		
	4.5	6.48	6.8	7.14	1	30	150	9.6	2.5	0.3		MMBZ6V8AL(-Q)		
	6	8.65	9.1	9.56	1	30	155	14	1.7	0.1		MMBZ9V1AL(-Q)		
	6.5	9.5	10	10.5	1	30	130	14.2	1.7	0.02		MMBZ10VAL(-Q)		
40	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		MMBZ12VAL(-Q)		
	12	14.25	15	15.75	1	30	85	21	1.9	0.005		MMBZ15VAL(-Q)		
	13	15.2	16	16.8	1	30	76	23	1.9	0.005		MMBZ16VAL(-Q)		
	13	15.68	16	16.32	1	30	76	23	1.9	0.005		MMBZ16VTAL(-Q)		
	14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VAL(-Q)		
	17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VAL(-Q)		
	22	25.65	27	28.35	1	30	48	40	1	0.005		MMBZ27VAL(-Q)		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VAL(-Q)		
	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		MMBZ12VDL(-Q)		
	12.8	14.3	15	15.8	1	30	85	21.2	1.9	0.005		MMBZ15VDL(-Q)		
	14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VCL(-Q)		
	17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VCL(-Q)		
	22	25.65	27	28.35	1	30	48	38	1	0.005		MMBZ27VCL(-Q)		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VCL(-Q)		

[1] 10/1000µs according to IEC 61643-321

TVS 400 W

Power (W) (10/1000 µs waveform) [1]	Uni/Bi directional	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	V_{CL} max (V) @ I_{PP} [1]	V_{CL} max (V) @ I_{PPM} [1]	I_{PP} (A) [1]	I_{RM} typ (µA) @ V_{RWM}	I_{RM} max (µA) @ V_{RWM}	Type (Tj max = 150 °C)	Type (Tj max = 185 °C)	Package	Size (mm)
350	Uni-directional	3.5	5.20	5.60	6.00	10	8.0	43.8	5	600	PTVS3V3S1UR(-Q)	PTVS3V3S1UTR(-Q)	SOD123W	2.6 x 1.7 x 1.0
400		5.0	6.40	6.70	7.00	10	9.2	43.5	5	400	PTVS5V0S1UR(-Q)	PTVS5V0S1UTR(-Q)		
		6.0	6.67	7.02	7.37	10	10.3	38.8	5	400	PTVS6V0S1UR(-Q)	PTVS6V0S1UTR(-Q)		
		6.5	7.22	7.60	7.98	10	11.2	35.7	5	250	PTVS6V5S1UR(-Q)	PTVS6V5S1UTR(-Q)		
		7.0	7.78	8.20	8.60	10	12.0	33.3	3	100	PTVS7V0S1UR(-Q)	PTVS7V0S1UTR(-Q)		
		7.5	8.33	8.77	9.21	1	12.9	31.0	0.2	50	PTVS7V5S1UR(-Q)	PTVS7V5S1UTR(-Q)		
		8.0	8.89	9.36	9.83	1	13.6	29.4	0.03	25	PTVS8V0S1UR(-Q)	PTVS8V0S1UTR(-Q)		
		8.5	9.44	9.92	10.40	1	14.4	27.8	0.01	10	PTVS8V5S1UR(-Q)	PTVS8V5S1UTR(-Q)		
		9.0	10.00	10.55	11.10	1	15.4	26.0	0.005	5	PTVS9V0S1UR(-Q)	PTVS9V0S1UTR(-Q)		
		10	11.10	11.70	12.30	1	17.0	23.5	0.005	2.5	PTVS10VS1UR(-Q)	PTVS10VS1UTR(-Q)		
		11	12.20	12.85	13.50	1	18.2	22.0	0.005	2.5	PTVS11VS1UR(-Q)	PTVS11VS1UTR(-Q)		
		12	13.30	14.00	14.70	1	19.9	20.1	0.005	2.5	PTVS12VS1UR(-Q)	PTVS12VS1UTR(-Q)		
		13	14.40	15.15	15.90	1	21.5	18.6	0.001	0.1	PTVS13VS1UR(-Q)	PTVS13VS1UTR(-Q)		
		14	15.60	16.40	17.20	1	23.2	17.2	0.001	0.1	PTVS14VS1UR(-Q)	PTVS14VS1UTR(-Q)		
		15	16.70	17.60	18.50	1	24.4	16.4	0.001	0.1	PTVS15VS1UR(-Q)	PTVS15VS1UTR(-Q)		
		16	17.80	18.75	19.70	1	26.0	15.4	0.001	0.1	PTVS16VS1UR(-Q)	PTVS16VS1UTR(-Q)		
		17	18.90	19.90	20.90	1	27.6	14.5	0.001	0.1	PTVS17VS1UR(-Q)	PTVS17VS1UTR(-Q)		
		18	20.00	21.00	22.10	1	29.2	13.7	0.001	0.1	PTVS18VS1UR(-Q)	PTVS18VS1UTR(-Q)		
		20	22.20	23.35	24.50	1	32.4	12.3	0.001	0.1	PTVS20VS1UR(-Q)	PTVS20VS1UTR(-Q)		
		22	24.40	25.60	26.90	1	35.5	11.3	0.001	0.1	PTVS22VS1UR(-Q)	PTVS22VS1UTR(-Q)		
		24	26.70	28.10	29.50	1	38.9	10.3	0.001	0.1	PTVS24VS1UR(-Q)	PTVS24VS1UTR(-Q)		
		26	28.90	30.40	31.90	1	42.1	9.5	0.001	0.1	PTVS26VS1UR(-Q)	PTVS26VS1UTR(-Q)		
		28	31.10	32.80	34.40	1	45.4	8.8	0.001	0.1	PTVS28VS1UR(-Q)	PTVS28VS1UTR(-Q)		
		30	33.30	35.10	36.80	1	48.4	8.3	0.001	0.1	PTVS30VS1UR(-Q)	PTVS30VS1UTR(-Q)		
		33	36.70	38.70	40.60	1	53.3	7.5	0.001	0.1	PTVS33VS1UR(-Q)	PTVS33VS1UTR(-Q)		
		36	40.00	42.10	44.20	1	58.1	6.9	0.001	0.1	PTVS36VS1UR(-Q)	PTVS36VS1UTR(-Q)		
		40	44.40	46.80	49.10	1	64.5	6.2	0.001	0.1	PTVS40VS1UR(-Q)	PTVS40VS1UTR(-Q)		
		43	47.80	50.30	52.80	1	69.4	5.8	0.001	0.1	PTVS43VS1UR(-Q)	PTVS43VS1UTR(-Q)		
		45	50.00	52.65	55.30	1	72.7	5.5	0.001	0.1	PTVS45VS1UR(-Q)	PTVS45VS1UTR(-Q)		
		48	53.30	56.10	58.90	1	77.4	5.2	0.001	0.1	PTVS48VS1UR(-Q)	PTVS48VS1UTR(-Q)		
		51	56.70	59.70	62.70	1	82.4	4.9	0.001	0.1	PTVS51VS1UR(-Q)	PTVS51VS1UTR(-Q)		
		54	60.00	63.15	66.30	1	87.1	4.6	0.001	0.1	PTVS54VS1UR(-Q)	PTVS54VS1UTR(-Q)		
		58	64.40	67.80	71.20	1	93.6	4.3	0.001	0.1	PTVS58VS1UR(-Q)	PTVS58VS1UTR(-Q)		
		60	66.70	70.20	73.70	1	96.8	4.1	0.001	0.1	PTVS60VS1UR(-Q)	PTVS60VS1UTR(-Q)		
		64	71.10	74.85	78.60	1	103.0	3.9	0.001	0.1	PTVS64VS1UR(-Q)	PTVS64VS1UTR(-Q)		

[1] 10/1000µs according to IEC 61643-321

TVS 600 W

Power (W) (10/1000 µs waveform) [1]	Uni/Bi directional	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RM} typ (µA) @ V_{RWM}	I_{RM} max (µA) @ V_{RWM}	Type (Tj max = 150 °C)	Type (Tj max = 185 °C)	Package	Size (mm)
600	Uni-directional	3.5	5.20	5.60	6.00	10	8	75	5	600	PTVS3V3P1UP(-Q)	PTVS3V3P1UTP(-Q)	 SOD128	3.8 x 2.6 x 1.0
		5	6.40	6.70	7.00	10	9.2	65.2	5	400	PTVS5V0P1UP(-Q)	PTVS5V0P1UTP(-Q)		
		6	6.67	7.02	7.37	10	10.3	58.3	5	400	PTVS6V0P1UP(-Q)	PTVS6V0P1UTP(-Q)		
		6.5	7.22	7.60	7.98	10	11.2	53.6	5	250	PTVS6V5P1UP(-Q)	PTVS6V5P1UTP(-Q)		
		7	7.78	8.20	8.60	10	12	50	3	100	PTVS7V0P1UP(-Q)	PTVS7V0P1UTP(-Q)		
		7.5	8.33	8.77	9.21	1	12.9	46.5	0.2	50	PTVS7V5P1UP(-Q)	PTVS7V5P1UTP(-Q)		
		8	8.89	9.36	9.83	1	13.6	44.1	0.03	25	PTVS8V0P1UP(-Q)	PTVS8V0P1UTP(-Q)		
		8.5	9.44	9.92	10.40	1	14.4	41.7	0.01	10	PTVS8V5P1UP(-Q)	PTVS8V5P1UTP(-Q)		
		9	10.00	10.55	11.10	1	15.4	39	0.005	5	PTVS9V0P1UP(-Q)	PTVS9V0P1UTP(-Q)		
		10	11.10	11.70	12.30	1	17	35.3	0.005	2.5	PTVS10VP1UP(-Q)	PTVS10VP1UTP(-Q)		
		11	12.20	12.85	13.50	1	18.2	33	0.005	2.5	PTVS11VP1UP(-Q)	PTVS11VP1UTP(-Q)		
		12	13.30	14.00	14.70	1	19.9	30.2	0.005	2.5	PTVS12VP1UP(-Q)	PTVS12VP1UTP(-Q)		
		13	14.40	15.15	15.90	1	21.5	27.9	0.001	0.1	PTVS13VP1UP(-Q)	PTVS13VP1UTP(-Q)		
		14	15.60	16.40	17.20	1	23.2	25.9	0.001	0.1	PTVS14VP1UP(-Q)	PTVS14VP1UTP(-Q)		
		15	16.70	17.60	18.50	1	24.4	24.6	0.001	0.1	PTVS15VP1UP(-Q)	PTVS15VP1UTP(-Q)		
		16	17.80	18.75	19.70	1	26	23.1	0.001	0.1	PTVS16VP1UP(-Q)	PTVS16VP1UTP(-Q)		
		17	18.90	19.90	20.90	1	27.6	21.7	0.001	0.1	PTVS17VP1UP(-Q)	PTVS17VP1UTP(-Q)		
		18	20.00	21.00	22.10	1	29.2	20.5	0.001	0.1	PTVS18VP1UP(-Q)	PTVS18VP1UTP(-Q)		
		20	22.20	23.35	24.50	1	32.4	18.5	0.001	0.1	PTVS20VP1UP(-Q)	PTVS20VP1UTP(-Q)		
		22	24.40	25.60	26.90	1	35.5	16.9	0.001	0.1	PTVS22VP1UP(-Q)	PTVS22VP1UTP(-Q)		
		24	26.70	28.10	29.50	1	38.9	15.4	0.001	0.1	PTVS24VP1UP(-Q)	PTVS24VP1UTP(-Q)		
		26	28.90	30.40	31.90	1	42.1	14.2	0.001	0.1	PTVS26VP1UP(-Q)	PTVS26VP1UTP(-Q)		
		28	31.10	32.80	34.40	1	45.4	13.2	0.001	0.1	PTVS28VP1UP(-Q)	PTVS28VP1UTP(-Q)		
		30	33.30	35.10	36.80	1	48.4	12.4	0.001	0.1	PTVS30VP1UP(-Q)	PTVS30VP1UTP(-Q)		
		33	36.70	38.70	40.60	1	53.3	11.3	0.001	0.1	PTVS33VP1UP(-Q)	PTVS33VP1UTP(-Q)		
		36	40.00	42.10	44.20	1	58.1	10.3	0.001	0.1	PTVS36VP1UP(-Q)	PTVS36VP1UTP(-Q)		
		40	44.40	46.80	49.10	1	64.5	9.3	0.001	0.1	PTVS40VP1UP(-Q)	PTVS40VP1UTP(-Q)		
		43	47.80	50.30	52.80	1	69.4	8.6	0.001	0.1	PTVS43VP1UP(-Q)	PTVS43VP1UTP(-Q)		
		45	50.00	52.65	55.30	1	72.7	8.3	0.001	0.1	PTVS45VP1UP(-Q)	PTVS45VP1UTP(-Q)		
		48	53.30	56.10	58.90	1	77.4	7.8	0.001	0.1	PTVS48VP1UP(-Q)	PTVS48VP1UTP(-Q)		
		51	56.70	59.70	62.70	1	82.4	7.3	0.001	0.1	PTVS51VP1UP(-Q)	PTVS51VP1UTP(-Q)		
		54	60.00	63.15	66.30	1	87.1	6.9	0.001	0.1	PTVS54VP1UP(-Q)	PTVS54VP1UTP(-Q)		
		58	64.40	67.80	71.20	1	93.6	6.4	0.001	0.1	PTVS58VP1UP(-Q)	PTVS58VP1UTP(-Q)		
		60	66.70	70.20	73.70	1	96.8	6.2	0.001	0.1	PTVS60VP1UP(-Q)	PTVS60VP1UTP(-Q)		
		64	71.10	74.85	78.60	1	103	5.8	0.001	0.1	PTVS64VP1UP(-Q)	PTVS64VP1UTP(-Q)		

[1] 10/1000µs according to IEC 61643-321

TVS 600 W

Types in **bold** represent new products

Power (W) (10/1000 µs waveform) [1]	Uni/Bi directional	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RM} typ (µA) @ V_{RWM}	I_{RM} max (µA) @ V_{RWM}	Type (Tj max = 150 °C)	Type (Tj max = 185 °C)	Package	Size (mm)
600	Bi-directional	9	10	10.55	11.1	10	15.4	39		10	**PTVS9V0P1BPL**		SOD128FL-1	4.275 x 2.6 x 1.0
		10	11.1	11.7	12.3	5	17	35.3		5	**PTVS10VP1BPL**			
		11	12.2	12.85	13.5	1	18.2	33		1	**PTVS11VP1BPL**			
		12	13.3	14	14.7	1	19.9	30.2		1	**PTVS12VP1BPL**			
		13	14.4	15.15	15.9	1	21.5	28		1	**PTVS13VP1BPL**			
		14	15.6	16.4	17.2	1	23.2	25.9		1	**PTVS14VP1BPL**			
		15	16.7	17.6	18.5	1	24.4	24.6		1	**PTVS15VP1BPL**			
		16	17.8	18.75	19.7	1	26	23.1		1	**PTVS16VP1BPL**			
		17	18.9	19.9	20.9	1	27.6	21.8		1	**PTVS17VP1BPL**			
		18	20	21.05	22.1	1	29.2	20.6		1	**PTVS18VP1BPL**			
		20	22.2	23.35	24.5	1	32.4	18.6		1	**PTVS20VP1BPL**			
		22	24.4	25.65	26.9	1	35.5	16.9		1	**PTVS22VP1BPL**			
		24	26.7	28.1	29.5	1	38.9	15.5		1	**PTVS24VP1BPL**			
		26	28.9	30.4	31.9	1	42.1	14.3		1	**PTVS26VP1BPL**			
		28	31.1	32.75	34.4	1	45.4	13.3		1	**PTVS28VP1BPL**			
		30	33.3	35.05	36.8	1	48.4	12.4		1	**PTVS30VP1BPL**			
		33	36.7	38.65	40.6	1	53.3	11.3		1	**PTVS33VP1BPL**			
		36	40	42.1	44.2	1	58.1	10.4		1	**PTVS36VP1BPL**			
		40	44.4	46.75	49.1	1	64.5	9.3		1	**PTVS40VP1BPL**			
		43	47.8	50.3	52.8	1	69.4	8.7		1	**PTVS43VP1BPL**			
		45	50	52.65	55.3	1	72.7	8.3		1	**PTVS45VP1BPL**			
		48	53.3	56.1	58.9	1	77.4	7.8		1	**PTVS48VP1BPL**			
		51	56.7	59.7	62.7	1	82.4	7.3		1	**PTVS51VP1BPL**			
		54	60	63.15	66.3	1	87.1	6.9		1	**PTVS54VP1BPL**			
		58	64.4	67.8	71.2	1	93.6	6.5		1	**PTVS58VP1BPL**			
		60	66.7	70.2	73.7	1	96.8	6.2		1	**PTVS60VP1BPL**			
		64	71.1	74.85	78.6	1	103	5.9		1	**PTVS64VP1BPL**			
		70	77.8	81.9	86	1	113	5.3		1	**PTVS70VP1BPL**			
		75	83.2	87.65	92.1	1	121	5		1	**PTVS75VP1BPL**			
		78	86.7	91.25	95.8	1	126	4.8		1	**PTVS78VP1BPL**			
		85	94.4	99.2	104	1	137	4.4		1	**PTVS85VP1BPL**			
		90	100	105.5	111	1	146	4.1		1	**PTVS90VP1BPL**			
		100	111	117	123	1	162	3.7		1	**PTVS100VP1BPL**			
		110	122	128.5	135	1	177	3.4		1	**PTVS110VP1BPL**			
		120	133	140	147	1	193	3.1		1	**PTVS120VP1BPL**			
		130	144	151.5	159	1	209	2.9		1	**PTVS130VP1BPL**			
		150	167	176	185	1	243	2.5		1	**PTVS150VP1BPL**			
		160	178	187.5	197	1	259	2.3		1	**PTVS160VP1BPL**			

Automotive ESD protection nomenclature

PESD 2 CANFD 24 L U -Q

Automotive qualified
*optional

Protection
PESD (Protection ESD)

Number
of differential line pairs

Application
CANFD = CAN-FD interface
CAN = CAN interface
IVN = In-Vehicle Network
ETH = Ethernet
ETH10 = Ethernet up to 10 Mbps
ETH100 = Ethernet up to 100 Mbps
ETH1G = Ethernet up to 1 Gbps
USB = USB protection

Reverse stand-off voltage

L = **capacitance class**
Ultra low **C**lamp
High **T**emperature
High **S**urge

Packages
A = SOD323 (SC-76)
D = SOT457
L = DFN1006-2 (SOD882)
LD = DFN1006D-2 (SOD882D)
LS = DFN1006BD-2 (SOD882BD)
LL = DFN1006L-2 (SOD882L)
LG = DFN1006LD-2 (SOD882LD)
FG = DFN1006LD-3 (SOT8079LD)
QB = DFN1110D-3 (SOT8051)
QC = DFN1412D-3 (SOT8009)
T = SOT23
TBR = DFN2510A-10 (SOT1176)
TBS = DFN2510D-10 (SOT1176D)
TTS = DFN2510D-10 (SOT1165D)
U = SOT323 (SC-70)
UM = DFN1006-3 (SOT883)
X = SOT143B

ESD protection devices nomenclature

PESD 5V0 S 1 U C L -Q

Protection
PESD (Protection ESD)
PRTR (rail-to-rail ESD protection)

Reverse stand-off voltage

ESD – Capacitance class, series
Standard capacitance
Low capacitance
Very low capacitance
Ultra low capacitance
X-extremely low capacitance
R, H, Z, C, F, W Femto farad capacitance
Y TrEOS2, TrEOS3

Number of protected lines

Directional
Uni-directional
Bi-directional

A, B, C, D, E, ...
Variation of a similar technology

Automotive qualified
*optional

Packages
A = SOD323 (SC-76)
B = SOD523 (SC-79)
D = SOT457 (SC-74)
DF = DFN0603-3 (SOT8013)
F = DFN1410-6 (SOT886)
G = SOT353 (SC-88A)
HC = DFN1308-6 (SOT8006)
IF = DSN0603D-2 (SOD962D)
J = SOD323F (SC-90)
L = DFN1006-2 (SOD882)
LD = DFN1006D-2 (SOD882D)
LS = DFN1006BD-2 (SOD882BD)
M = DFN1006-3 (SOT883)
MB = DFN1006B-3 (SOT883B)
QA = DFN1010D-3 (SOT1215)
SF = DSN0603-2 (SOD962)
SL = SOD882-S1
T = SOT23
U = SOT323 (SC-70)
X = SOT143B
XM = SOD962C
Y = SOT363 (SC-88)

Multi-line ESD protection nomenclature

P USB3 A B 4

- **Protection**
- **Application**
  USB3 – target application USB3.1
  HDMI2 – target application HDMI2
- **Number of protected lines**
- **B**: Bi-directional
  Other letter: series identifier
- **F**: femto farad
  Other letter: series identifier

Common mode filters nomenclature

PCMF 1 USB3 B A

- **Protection**
  PCMF (Protection and Common Mode Filter)
  PESD (Protection ESD)
- **Number of differential line pairs**
- **Application**
  USB3 – target application USB3.1
  HDMI2 – target application HDMI2
- **Directional**
  Uni-directional
  Bi-directional
- **Series identifier**

TVS protection nomenclature

PTVS 4V5 D 1 B x L -Q

- **Protection**
  PTVS (high surge power protection)
- **Reverse stand-off voltage**
- **TVS-Power Class**
  D, Z mobile series
  U 300 Watt series
  S 400 Watt series
  P 600 Watt series
- **Number of protected lines**
- **Directional**
  Uni-directional
  Bi-directional
- Ultra low **C**lamp
  High **T**emperature
- **Packages**
  L = DFN1006-2 (SOD882)
  P = CFP5 (SOD128)
  PA = DFN2020-3 (SOT1061)
  PC = DFN1610-2 (SOD1610-1)
  PL = CFP5-FL (SOD128FL-1)
  R = CFP3 (SOD123W)
  SC = DSN1006-2 (SOD993B)
  SK = DSN1608-2 (SOD964)
- **Automotive qualified**
  *optional

MMBZ series nomenclature

MM BZ 16V T A L

- **MM**
  Dual Monolithic
- **BZ**
  Silicon based
  Zener Diode
- **Voltage**
  Breakdown Voltage (VBR)
- **T** = tighter spec
  (optional)
- **Configuration**
  A = Common Anode
  C, D = Common Cathode
  Z = DFN1006BD-2 (SOD882BD)
  QB = DFN1110D-3 (SOT8015)
  QC = DFN1412D-3 (SOT8009)
- **Series identifier**

MOSFETs 4

Automotive grade leaded & application specific MOSFETs (ASFETs) nomenclature

BUK 7 S 1R0 - 40 H

Segment
Leaded automotive MOSFETs

Gate level
7 = Standard level
9 = Logic level

Package
5 = TO-220B (SOT78)
6 = D²PAK (SOT404)
A = CCPAK1212 (SOT8000A)
D = DFN2020MD-6 (SOT1220)
J = LFPAK56E (SOT1023)
K = LFPAK56D (SOT1205)
M= LFPAK33 (SOT1210)
S = LFPAK88 (SOT1235)
T = CCPAK1212i (SOT8005A)
V = LFPAK56D half-bridge (SOT1205)
Y = LFPAK56 (SOT669)

N-channel technology
E = Trench 6
H = Trench 9
L = Trench 12
M = Trench 14
N = Trench 15
R = Trench 24
S = Trench 25
RA = ASFETs for Repetitive Avalanche
EL = ASFETs for Airbag

P-channel technology
P = P-channel

Voltage rating
V_{DS} rating

$R_{DS(on)}$ max rating
e.g. **1R0** = 1.0 mΩ
e.g. **10** = 10 mΩ

Automotive grade micro-lead MOSFETs nomenclature

BXK 9 Q 29 - 60 A

Segment
BXK = Micro-lead automotive MOSFETs

Gate level
7 = Standard level
9 = Logic level

Package
Q = MLPAK33-WF (SOT8002-3D)
R = MLPAK56-WF (SOT8038-2)

N-channel technology
E = Trench 6
H = Trench 9
L = Trench 12
R = Trench 24
S = Trench 25

Voltage rating
V_{DS} rating

$R_{DS(on)}$ max rating
e.g. **1R0** = 1.0 mΩ
e.g. **10** = 10 mΩ

N-channel 30 V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56D (SOT1205)	BUK9K5R1-30E	30	4.4	5.3	40	2.21
	BUK9K5R6-30E	30	4.7	5.8	40	2.36
	BUK7K5R1-30E	30	5.1		40	2.21
	BUK7K5R6-30E	30	5.6		40	2.36
 LFPAK33 (SOT1210)	BUK9M5R2-30E	30	4.1	5.2	70	1.89
	BUK9M6R6-30E	30	5.3	6.6	70	2
	BUK9M10-30E	30	7.8	10	54	2.75
	BUK9M17-30E	30	14	17	37	3.4

N-channel 40 V automotive power MOSFETs

types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK88 (SOT1235)	BUK7S0R5-40H	40	0.55		500	0.4
	BUK7S0R7-40H	40	0.7		425	0.4
	BUK7S1R0-40H	40	1		325	0.4
	BUK7S1R2-40H	40	1.2		300	0.51
	BUK7S1R5-40H	40	1.5		260	0.62
	BUK7S2R0-40H	40	2.0		190	0.82
	BUK7S2R5-40H	40	2.5		140	1.11
 D^2PAK (SOT404)	BUK961R6-40E	40	1.4	1.6	120	0.43
	BUK761R6-40E	40	1.6		120	0.43
	BUK764R0-40E	40	4		75	0.82
	BUK768R1-40E	40	7.2		75	1.56
 LFPAK56E (SOT1023)	BUK9J0R9-40H	40	0.94	1.2	220	0.3
	BUK7J1R0-40H	40	1		220	0.3
	BUK7J1R4-40H	40	1.4		120	0.38
 LFPAK56; Power-SO8 (SOT669)	**BUK7Y1R0-40N**	40	0.9		320	0.56
	BUK9Y1R3-40H	40	1.3	1.8	190	0.38
	BUK7Y1R4-40H	40	1.4		190	0.38
	BUK9Y1R6-40H	40	1.6	2.2	120	0.51
	BUK7Y1R7-40H	40	1.7		120	0.51
	BUK9Y1R9-40H	40	1.9	2.6	120	0.69
	BUK7Y2R0-40H	40	2		120	0.69
	BUK9Y2R4-40H	40	2.4	3.2	120	0.79
	BUK9Y3R0-40E	40	2.5	3	100	0.77
	BUK7Y2R5-40H	40	2.5		120	0.79
	BUK9Y2R8-40H	40	2.8	3.9	120	0.87
	BUK7Y3R0-40H	40	3		120	0.87
	BUK7Y3R5-40H	40	3.5		120	1.3
	BUK7Y3R5-40E	40	3.5		100	0.9
	BUK9Y3R5-40E	40	3.6	3.8	100	0.9
	BUK9Y4R4-40E	40	3.7	4.4	100	1.02
	BUK7Y4R4-40E	40	4.4		100	1.02
	BUK9Y7R6-40E	40	6	7.6	79	1.58
	BUK9Y6R5-40H	40	6.5	7.9	70	2.35
	BUK7Y7R0-40H	40	7		68	2.35
	BUK9Y12-40E	40	10	12	52	2.31
	BUK7Y12-40E	40	12		52	2.31
	BUK9Y21-40E	40	17	21	33	3.33
	BUK7Y21-40E	40	21		33	3.33
	BUK9Y29-40E	40	25	29	25	4.03
	BUK7Y29-40E	40	29		26	4.03

N-channel 40 V automotive power MOSFETs

Types in **bold red** are in development.

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 4.5 V or 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56D (SOT1205)	**BUK7K3R5-40N**	40	3.5		TBA	TBA
	BUK7V4R2-40H	40	4.2		98	1.76
	BUK7K6R2-40E	40	5.8		40	2.21
	BUK9K6R2-40E	40	6	6.2	40	2.21
	BUK9K6R8-40E	40	6.1	7.2	40	2.36
	BUK7K6R8-40E	40	6.8			2.36
	BUK9K8R7-40E	40	8	9.4	30	2.84
	BUK7K8R7-40E	40	8.5			2.84
	BUK9V13-40H	40	13	17	42	3
	BUK9K13-40H	40	14	17	42	3
	BUK9K18-40E	40	16	20	30	3.96
	BUK7K18-40E	40	19		24	3.96
	BUK9K25-40E	40	24	29	18	4.68
	BUK9K25-40RA	40	24	29	18.2	4.68
	BUK7K25-40E	40	25		27	4.68
 LFPAK33 (SOT1210)	BUK7M3R3-40H	40	3.3		80	1.48
	BUK9M3R3-40H	40	3.3	4.2	80	1.48
	BUK7M4R3-40H	40	4.3		95	1.67
	BUK9M4R3-40H	40	4.3	5.5	95	1.67
	BUK7M5R0-40H	40	5		85	1.81
	BUK9M5R0-40H	40	5	6.4	85	1.81
	BUK9M7R2-40E	40	5.8	7.2	70	1.89
	BUK7M6R0-40H	40	6		50	2.14
	BUK9M6R0-40H	40	6	7.7	50	2.14
	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M6R7-40H	40	6.7		50	2.32
	BUK9M6R7-40H	40	6.7	8.6	50	2.32
	BUK9M9R1-40E	40	7.3	9.1	64	2
	BUK7M8R0-40E	40	8		69	2
	BUK7M8R5-40H	40	8.5		40	2.56
	BUK9M8R5-40H	40	8.5	11	40	2.56
	BUK9M11-40E	40	9	11	53	2.43
	BUK7M9R5-40H	40	9.5		40	2.74
	BUK9M9R5-40H	40	9.5	12	40	2.74
	BUK7M10-40E	40	10		56	2.43
	BUK7M11-40H	40	11		35	3
	BUK9M11-40H	40	11	14	35	3
	BUK9M14-40E	40	11	14	44	2.75
	BUK7M12-40E	40	12		48	2.75
	BUK7M15-40H	40	15		30	3.44
	BUK9M15-40H	40	15	19	30	3.44
	BUK9M24-40E	40	20	24	30	3.4
	BUK7M20-40H	40	20		25	3.96
	BUK9M20-40H	40	20	25	25	3.96
	BUK7M21-40E	40	21		33	3.4
	BUK9M52-40E	40	40	52	18	4.8
	BUK7M45-40E	40	45		19	4.8
 MLPAK33-WF (SOT8002-3D)	**BXK7Q4R9-40H**	40	4.9			
	BXK7Q6R0-40H	40	6			
	BXK7Q7R5-40H	40	7.5			
	BXK7Q8R4-40H	40	8.4			
	BXK7Q9R5-40H	40	9.5			
	BXK9Q7R0-40H	40	7			
	BXK9Q4R6-40H	40	4.6			
	BXK9Q12-40H	40	12			
	BXK9Q20-40H-40H	40	20			
 MLPAK56-WF (SOT8038-2)	**BXK9R4R5-40H**	40	4.5			

N-channel 55 V - 60 V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56; Power-SO8 (SOT669)	BUK9Y4R8-60E	60	4.1	4.8	100	0.63
	BUK7Y4R8-60E	60	4.8		100	0.63
	BUK9Y6R0-60E	60	5.2	6	100	0.77
	BUK9Y7R2-60E	60	5.6	7.2	100	0.9
	BUK7Y6R0-60E	60	6		100	0.77
	BUK9Y7R0-60EL	60	6.2	7	100	0.63
	BUK7Y7R2-60E	60	7.2		100	0.9
	BUK9Y8R7-60E	60	7.5	8.7	86	1.02
	BUK9Y8R8-60EL	60	8	9	100	0.77
	BUK7Y8R7-60E	60	8.7		87	1.02
	BUK9Y13-60EL	60	11	13	73	1.02
	BUK7Y15-60E	60	15		53	1.59
	BUK9Y15-60E	60	13	15	53	1.58
	BUK9Y22-60EL	60	20	22	45	1.58
	BUK9Y25-60E	60	22	25	34	2.31
	BUK7Y25-60E	60	25		34	2.31
	BUK9Y43-60E	60	38	43	22	3.33
	BUK7Y43-60E	60	43		22	3.33
	BUK9Y59-60E	60	52	59	17	4.03
	BUK7Y59-60E	60	59		17	4.03
 LFPAK56D (SOT1205)	BUK7K12-60E	60	9.3		40	2.21
	BUK7K13-60E	60	10		40	2.36
	BUK9K12-60E	60	11	12	35	2.21
	BUK9K13-60RA	60	11.2	12.5	40	2.36
	BUK9K13-60E	60	12	13	40	2.36
	BUK7K17-60E	60	14		30	2.84
	BUK7K35-60E	60	30		21	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK9K35-60RA	60	32	35	22	3.96
	BUK7K52-60E	60	45		15	4.68
	BUK9K52-60E	60	49	55	16	4.68
	BUK9K52-60RA	60	49	55	16	4.68

N-channel 55 V - 60 V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK33 (SOT1210)	BUK7M9R9-60E	60	9.9		60	1.89
	BUK9M12-60E	60	11	12	54	1.89
	BUK7M12-60E	60	12		53	2
	BUK9M15-60E	60	13	15	47	2
	BUK7M15-60E	60	15		43	2.43
	BUK9M20-60EL	60	17	20	46	1.89
	BUK9M19-60E	60	17	19	38	2.43
	BUK7M19-60E	60	19		36	2.75
	BUK9M24-60E	60	21	24	32	2.75
	BUK9M31-60EL	60	27	31	32	2.43
	BUK7M33-60E	60	33		24	3.4
	BUK9M42-60E	60	37	42	22	3.4
	BUK7M42-60E	60	42		20	4.17
	BUK9M53-60E	60	46	53	17	4.17
	BUK9M67-60EL	60	59	67	19	3.4
	BUK7M67-60E	60	67		14	4.8
	BUK9M85-60E	60	73	85	13	4.8
 MLPAK33 (SOT8002-3)	BXK9Q29-60E	60	29		21	5.5
 SC-73 (SOT223)	BUK9832-55A/CU	55	29	32	12	15
	BUK9880-55A/CU	55	73	80	7	15
	BUK7880-55A/CU	55	80		7	15
	BUK98150-55A/CU	55	137	150	5.5	
	BUK78150-55A/CU	55	150		5.5	

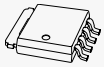
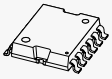
N-channel 75 V - 80 V automotive power MOSFETs

Types in **bold red** are in development,
types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56; Power-SO8 (SOT669)	**BUK7Y3R1-80M**	80	3.1		254	0.59
	BUK7Y7R8-80E	80	7.8		100	0.63
	BUK9Y8R5-80E	80	8	8.5	100	0.63
	BUK7Y9R9-80E	80	9.9		89	0.77
	BUK9Y11-80E	80	10	11	84	0.77
	BUK9Y14-80E	80	14	15	62	1.02
	BUK7Y14-80E	80	14		65	1.02
	BUK9Y25-80E	80	25	27	37	1.58
	BUK7Y25-80E	80	25		39	1.58
	BUK9Y41-80E	80	41	45	24	2.33
	BUK7Y41-80E	80	41		25	2.31
	BUK9Y72-80E	80	72	78	15	3.33
	BUK7Y72-80E	80	72		16	3.33
	BUK9Y107-80E	80	98	107	12	4.03
	BUK7Y98-80E	80	98		12	4.03
 LFPAK56D (SOT1205)	**BUK9K12-80L**	80	12		51	2.21
	BUK7K15-80E	80	15		23	2.21
	BUK7K17-80E	80	17		21	2.36
	BUK9K20-80E	80	17	19	23	2.84
	BUK7K23-80E	80	23		17	2.21
	BUK9K22-80E	80	19	22	21	2.36
	BUK9K30-80E	80	26	30	17	2.84
	BUK9K49-80L	80	49		17	4.68
 LFPAK56E (SOT1023)	**BUK7J2R4-80M**	80	2		231	0.51
 LFPAK33 (SOT1210)	**BUK9M13-80L**	80	13		55	1.65
	BUK7M17-80E	80	17		43	1.89
	BUK9M23-80E	80	20	23	37	1.89
	BUK7M22-80E	80	22		37	2
	BUK9M24-80L	80	24		35	2.23
	BUK7M27-80E	80	27		30	2.43
	BUK9M28-80E	80	28	28	33	2
	BUK9M35-80E	80	35	35	26	2.43
	BUK9M48-80L	80	48		15	2.98
 MLPAK33-WF (SOT8002-3D)	**BXK9Q14-80L**	80	14			
	BXK9Q17-80L	80	17			
	BXK9Q22-80L	80	22			
	BXK9Q28-80L	80	28			
	BXK9Q34-80L	80	34			
	BXK9Q45-80L	80	45			

N-channel 100 V automotive power MOSFETs

Types in **bold red** are in development,
types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56; Power-SO8 (SOT669)	BUK9Y12-100E	100	12	12	85	0.63
	BUK7Y12-100E	100	12		85	0.63
	BUK9Y15-100E	100	15	15	69	0.77
	BUK9Y19-100E	100	18	19	56	0.9
	BUK7Y19-100E	100	19		56	0.9
	BUK9Y22-100E	100	22	22	49	1.02
	BUK7Y22-100E	100	22		49	1.02
	BUK9Y38-100E	100	38	38	30	1.58
	BUK7Y38-100E	100	38		30	1.58
	BUK9Y65-100E	100	64	65	19	2.31
	BUK7Y65-100E	100	65		19	2.31
	BUK9Y113-100E	100	110	113	12	3.33
	BUK7Y113-100E	100	113		12	3.33
	BUK9Y153-100E	100	146	153	9.4	4.03
	BUK7Y153-100E	100	153		9.4	4.03
 CCPAK1212 (SOT8000A)	**BUK7A1R0-100L**	100	0.99			
	BUK7A1R3-100L	100	1.3			
 CCPAK1212i (SOT8005A)	**BUK7T1R0-100L**	100	1.04			
	BUK7T1R4-100L	100	1.35			
 LFPAK56D (SOT1205)	BUK7K29-100E	100	25		29.5	2.21
	BUK9K29-100E	100	27	29	30	2.21
	BUK9K31-100L	100	31			
	BUK7K32-100E	100	28		29	2.36
	BUK9K32-100E	100	31	33	26	2.36
	BUK9K35-100L	100	35		23	3.57
	BUK7K45-100E	100	38		21	2.84
	BUK9K45-100E	100	42	45	21	2.84
	BUK9K61-100L	100	61			
	BUK7K89-100E	100	83		13	3.96
	BUK9K89-100E	100	85	89	13	3.96
	BUK7K134-100E	100	121		9.8	4.68
	BUK9K134-100E	100	154	159	8.5	4.68

N-channel 100 V automotive power MOSFETs

Types in **bold red** are in development,
types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK33 (SOT1210)	BUK9M34-100E	100	34	34	29	1.89
	BUK9M16-100L	100	16		45	1.65
	BUK9M43-100E	100	43	44	26	1.88
	BUK9M60-100L	100	60		19	2.98
	BUK9M120-100E	100	119	120	12	3.4
	BUK9M156-100E	100	150	156	9.3	4.17
 MLPAK33-WF (SOT8002-3D)	**BXK9Q16-100L**	100	16			
	BXK9Q19-100L	100	22			
	BXK9Q25-100L	100	29			
	BXK9Q32-100L	100	33			
	BXK9Q39-100L	100	46			
	BXK9Q50-100L	100	55			
 SC-73 (SOT223)	BUK98180-100A/CU	100	173	180	4.6	
	BUK9875-100A/CU	101	72	75	7	

P-channel 30 V - 60 V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56; Power-SO8 (SOT669)	BUK6Y10-30P	30	10	80	1.4
	BUK6Y19-30P	30	19	45	2.3
	BUK6Y24-40P	40	14	39	2.3
	BUK6Y14-40P	40	15	64	1.4
	BUK6Y33-60P	60	33	38	1.4
	BUK6Y61-60P	60	61	22	2.3

Small-signal automotive MOSFETs – Low $R_{DS(on)}$

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N-channel	20	8	7	0.4	1	1	-	15	18	-	
			4.7	0.45	1	2	-	24	29	40	
			2.8	0.4	1	2	-	64	78	110	
		12	12.9	0.4	0.9	2	-	10	12	16	
			11.4	0.4	0.9	2	-	12	15	20	
			7.3	0.6	1.3	2	-	13	17		
			26	0.6	1.3	2	-	16	21	-	
			6.3	0.75	1.25	2	-	16	24	-	
	30	8	6	0.4	0.9	1	-	13	23	39	
		12	11.3	0.4	0.9	2	-	13	14	17	
			5	0.4	0.9	2	-	28	32	37	
			4	0.75	1.25	2	-	55	72	-	
			8.3	0.6	1.25	1	-	60	98	-	
		20	5.5 / 22	1	2.5	2	17	22	-	-	
			3.9 / 17	1	2.5	2	30	39	-	-	
			3.7 / 11	1	2.5	2	54	70	-	-	
	40	15	19	1.4	2.1	-	18	22	-	-	
		20	6.2 / 19	1.3	2.7	-	17	22	-	-	
			19	2.4	4	-	18	-	-	-	
			5 / 18	1.5	2.5	2	25	30	-	-	
			2.7	1	2.5	1	64	79	-	-	
			9	1	2.5	1	85	112	-		
			2.5 / 5.7	1	2.5	1	95	120	-	-	
	60	20	4.2 / 13	1.3	2.7	-	32	38	-	-	
			4.7 / 14	2.4	4	-	36	-	-	-	
			3.5 / 11	1.3	2.7	2	37	45	-	-	
			11	1.3	2.7	2	59	70	-	-	
			2.2 / 7.4	1.3	2.7	2	88	104	-	-	
			1.5 / 5.7	1.3	2.7	2	176	196	-	-	
			0.8	1.3	2.7	2	300	332	-	-	
	80	20	10	1.3	2.7	2	72	84	-	-	
			7	1.3	2.7	2	175	195	-	-	
	100	20	1.5	1.3	2.7	2	285	301	-	-	
P-channel	12	12	11.8	0.47	0.9	-	-	15	17	21	
	20	8	5.6	0.45	0.95	2	-	27	38	50	
			2	0.4	0.9	-	-	97	118	145	
			2	0.5	1.1	-	-	100	155	210	
			2.3	0.45	0.95	-	-	120	150	200	
		12	10.3	0.47	0.9	2	-	19	22	28	
			5	0.47	0.9	2.3	-	28	31	36	
			5.3	0.75	1.25	2	-	28	42	-	
			5	0.6	1.3	1	-	38	-	-	
			5.2 / 18	0.6	1.3	1	-	38	64	-	
			5	0.47	0.9	2	-	39	45	56	
			5.7	0.75	1.25	2	-	41	56	-	
			3.5	0.75	1.25	-	-	48	71	-	
			4.7	0.6	1.3	1	-	50	78	-	
			4.4	0.6	1.3	-	-	55	-	-	
			3.3	0.75	1.25	2	-	67	99	-	
			2.4	1	2.5	2	-	97	147	-	
			6.7	1	1.3	1	-	110	189	-	
	30	20	8.8	1	2.5	-	24	32	-	-	
			4.2	1	3	2	35	47	-	-	
	40	20	1.5	1	2.5	1	180	220	-	-	
			14	1.4	2.7	-	30	45	-	-	
	60	20	8	1.9	3.2	-	95	125	-	-	
			3	1.9	3.2	-	130	180	-	-	

	SOT457 (SC-74)	SOT23	DFN2020MD-6 (SOT1220)	DFN2020D-6 (SOT1118D)
				
	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65
	600	250	1250	1250
		PMV15UNEA		
		PMV28UNEA		
		PMV65UNEA		
			PMPB10XNEA	
			PMPB12UNEA	
		PMV13XNEA		
			BUK4D16-20	
		PMV20XNEA	PMPB20XNEA	
		PMV19XNEA		
			PMPB13XNEA	
			PMPB29XNEA	
		PMV50XNEA		PMDPB56XNEA
			BUK4D60-30	
	PMN25ENEA	PMV15ENEA	BUK6D22-30E	
		PMV28ENEA	BUK6D38-30E	
		PMV52ENEA	BUK6D72-30E	
			BUK9D23-40E	
	PMN20ENA		BUK6D23-40E	
			BUK7D25-40E	
	PMN30ENEA	PMV30ENEA	BUK6D30-40E	
		PMV60ENEA		
			BUK6D120-40E	
		PMV130ENEA		
	PMN40ENA		BUK6D43-60E	
	PMN40SNA		BUK7D36-60E	
	PMN55ENEA	PMV37ENEA	BUK6D56-60E	
			BUK6D77-60E	
	PMN120ENEA	PMV88ENEA	BUK6D125-60E	
	PMN230ENEA	PMV164ENEA	BUK6D210-60E	
		PMV450ENEA		
			BUK6D81-80E	
			BUK6D230-80E	
	PMN280ENEA	PMV280ENEA	BUK6D335-100E	
			PMPB15XPA	
		PMV27UPEA		
		BSH205G2A		
		NX2301P		
		BSH205G2		
			PMPB20XPEA	
			PMPB29XPEA	
		PMV30XPEA		
	PMN30XPEA	PMV28XPEA		
	PMN30XPA	PMV30XPA	BUK4D38-20P	
			PMPB43XPEA	
	PMN42XPEA			
	PMN48XPA	PMV48XPA		
	PMN40XPEA			
	PMN48XPA2	PMV48XPA2		
		PMV65XPEA		
		PMV100XPEA		
			BUK4D110-20P	
			PMPB27EPA	
		PMV50EPEA		
		PMV250EPEA		
			BUK6D43-40P	
			BUK6D120-60P	
	PMN100EPA	PMV100EPA		

Small-signal automotive MOSFETs – High $R_{DS(on)}$

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =			
							10 V	4.5 V	2.5 V	1.8 V	
N	30	8	0.4	0.6	1.1	2	-	1000	1400	2000	
	60	16	0.72	1.3	2.6	1	850	1100	-	-	
		20	0.36	0.9	1.5	-	900	1000	-	-	
			0.25	0.8	1.5	yes	2200	2700	3400	-	
			0.36	0.48	1.6	1.5	1000	1100	1400	-	
			0.24	1.3	2.6	yes	2200	2500	-	-	
			0.3	1	2.5	2	1000	1300	-	-	
P	30	8	0.23	0.6	1.1	2	-	2800	5300	-	
	50	12	0.27	1.1	2.1	1	7500	8500	-	-	
		20	0.2	1.1	2.1	1	5300	6000	-	-	

Small-signal automotive MOSFETs – Dual

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =			
							10 V	4.5 V	2.5 V	1.8 V	
N	20	10	4.5	0.4	0.9	-	-	26	33	50	
	30	12	4	0.75	1.25	2	-	55	72	-	
P	20	10	3.6	0.47	1	-	-	50	62	83	

Small-signal MOSFETs - Complementary

Package	Type	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	V_{GSth} min (V)	V_{GSth} max (V)
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	NX3008CBKS	N	30	8	0.35	0.6	1.1
		P	30	8	0.2	0.6	1.1
 DFN2020-6 (SOT1118) (2 x 2 x 0.65 mm)	**PMCPB5530XA**	N	20	10	4.5	0.4	0.9
		P	20	10	3.6	0.47	1
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	PMGD290UCEA	N	20	8	725	1	1
		P	20	8	500	1	1

	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1110D-3 (SOT8015)
				
	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.47
	250	300	200	420
	NX3008NBK	NX3008NBKS	NX3008NBKW	
				2N7002KQB
	BSS138P	BSS138PS	BSS138PW	
	BSS138AK-Q	BSS138AKS-Q	BSS138AKW-Q	BSS138AKQB-Q
	BSS138BK	BSS138BKS	BSS138BKW	
	2N7002AK-Q	2N7002AKS-Q	2N7002AKW-Q	2N7002AKQB-Q
	2N7002BK	2N7002BKS	2N7002BKW	
	NX3008PBK	NX3008PBKS	NX3008PBKW	
				BSS84AKQB
	BSS84AK	BSS84AKS	BSS84AKW	

MOSFETs

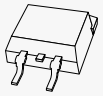
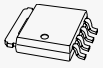
Types in **bold** represent new products

	DFN2020D-6 (SOT1118D)
	
	2.0 x 2.0 x 0.65
	1250
	PMDPB30XNA
	PMDPB56XNEA
	PMDPB55XPA

Types in **bold** represent new products

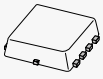
	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =					
					10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	7	10	6.6	-		26	33	50	-	-
	18	80	0.18	-		50	62	83	-	-
	6	86	0.15	2	-	290	420	1	-	-
	18	80	0.18	2	-	670	1	2	-	-

N-channel 25 V - 30 V power MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 D²PAK (SOT404)	PSMNR90-30BL	30	1	1.4	120	118
	PSMN1R5-30BLE	30	1.5	1.85	120	108
	PSMN2R7-30BL	30	3	3.7	100	32
	PSMN3R4-30BL	30	3.3	3.8	100	31
	PSMN3R4-30BLE	30	3.4	5	120	37
	PSMN4R3-30BL	30	4.1	5.2	100	19
 LFPAK56E (SOT1023)	PSMNR51-25YLH	25	0.57	0.82	380	53
	PSMN0R7-25YLD	25	0.74	0.92	300	50.9
	PSMN1R2-25YL	25	1.2	1.9	100	50.6
	PSMNR58-30YLH	30	0.67	0.9	380	55
	PSMN0R9-30YLD	30	0.87	1.1	300	51
	PSMN1R3-30YL	30	1.3	2	100	46.6
 LFPAK56; Power-SO8 (SOT669)	PSMNR56-25YLE	25	0.56		320	54
	PSMNR60-25YLH	25	0.7	1.02	300	43
	PSMN0R9-25YLD	25	0.86	1.2	300	41.5
	PSMNR89-25YLE	25	0.89		270	54
	PSMNR98-25YLE	25	0.98		255	27
	PSMN1R0-25YLD	25	1.02	1.4	100	33.2
	PSMN1R1-25YLC	25	1.15	1.5	100	39
	PSMN1R2-25YLD	25	1.15	1.7	100	28
	PSMN1R2-25YLC	25	1.3	1.7	100	31
	PSMN1R6-25YLE	25	1.6		185	16
	PSMN1R7-25YLD	25	1.68	2.4	100	21.5
	PSMN2R0-25YLD	25	2	2.9	100	15.7
	PSMN2R9-25YLC	25	3.15	4.1	100	16
	PSMN4R0-25YLC	25	4.5	5.8	84	10.9
	PSMN5R4-25YLD	25	5.4	8.4	70	5.7
	PSMN6R0-25YLD	25	6.03	10	61	4.9
	PSMN6R0-25YLB	25	6.1	7.9	73	9
	PSMNR67-30YLE	30	0.67		365	52
	PSMNR70-30YLH	30	0.82	1.1	300	46
	PSMNR82-30YLE	30	0.82		330	41
	PSMN1R0-30YLE	30	1		275	33
	PSMN1R0-30YLD	30	1.02	1.3	300	38.2
	PSMN1R1-30YLE	30	1.1		265	28
	PSMN1R0-30YLC	30	1.15	1.4	100	50
	PSMN1R2-30YLD	30	1.24	1.6	100	32
	PSMN1R2-30YLC	30	1.25	1.7	100	38
	PSMN1R4-30YLD	30	1.42	1.9	100	27.6
	PSMN1R5-30YL	30	1.5	1.9	100	36.2
	PSMN1R5-30YLC	30	1.55	2.1	100	30
	PSMN1R7-30YL	30	1.7	2.1	100	36.2
	PSMN2R0-30YLD	30	2	2.5	100	21.8
	PSMN2R0-30YL	30	2	2.6	100	30
	PSMN2R0-30YLE	30	2	3.5	100	41
	PSMN2R1-30YLE	30	2		160	17
	PSMN2R2-30YLC	30	2.15	2.8	100	26
	PSMN2R4-30YLD	30	2.4	3.1	100	18
	PSMN2R5-30YL	30	2.4	3.2	100	27
	PSMN2R6-30YLC	30	2.8	3.7	100	18
	PSMN3R0-30YL	30	3	4	100	21
	PSMN3R0-30YLD	30	3	4	100	14.5
	PSMN3R5-30YL	30	3.5	4.6	100	19
	PSMN4R0-30YL	30	4	5.3	100	17.6
	PSMN4R0-30YLD	30	4	5.5	95	9.6
	PSMN4R1-30YLC	30	4.35	5.7	92	11
	PSMN4R5-30YLC	30	4.8	6.1	84	9.6
	PSMN5R0-30YL	30	5	6.7	91	14.1
	PSMN6R0-30YL	30	6	7.9	79	11
	PSMN6R0-30YLD	30	6	8.4	66	6.7
	PSMN6R1-30YLD	30	6.1	8.4	66	6.4
	PSMN6R0-30YLB	30	6.5	8.1	71	9

N-channel 25 V - 30 V power MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 LFPAK56; Power-SO8 (SOT669)	PSMN7R0-30YL	30	7	9.1	76	10
	PSMN7R0-30YLC	30	7.1	8.9	61	7.9
	PSMN7R5-30YLD	30	7.5	10	51	5.8
	PSMN9R1-30YL	30	9.1	14	57	8.4
	PSMN9R5-30YLC	30	9.8	12	44	5
	PSMN011-30YLC	30	11.6	15	37	4.9
	PSMN013-30YLC	30	13	17	32	4
 LFPAK56-UL2595 (SOT1023A)	PSMN0R9-30ULD	30	0.87	1.09	300	109
 LFPAK33 (SOT1210)	PSMN1R5-25MLH	25	1.81	2.7	150	17
	PSMN2R0-25MLD	25	2	3.1	70	15.9
	PSMN2R8-25MLC	25	2.8	3.8	70	16.3
	PSMN3R5-25MLD	25	3.51	5.4	70	8.7
	PSMN3R9-25MLC	25	4.15	5.6	70	9.7
	PSMN5R3-25MLD	25	5.3	8.4	70	5.9
	PSMN6R1-25MLD	25	6.13	10	60	4.9
	PSMN9R0-25MLC	25	8.65	11	55	5.4
	PSMN1R6-30MLH	30	1.9	2.6	160	41
	PSMN1R8-30MLH	30	2.1	2.9	150	17
	PSMN2R4-30MLD	30	2.4	3.2	70	16
	PSMN3R0-30MLC	30	3.15	4.1	70	16.1
	PSMN4R2-30MLD	30	4.3	5.7	70	9.2
	PSMN4R4-30MLC	30	4.65	6	70	10.6
	PSMN6R4-30MLD	30	6.4	8.3	66	6.5
	PSMN7R0-30MLC	30	7	9	67	8.2
	PSMN7R5-30MLD	30	7.6	10	57	5.8
	PSMN9R8-30MLC	30	9.8	12	50	5
	PSMN013-30MLC	30	13	17	39	3.7
	PSMN020-30MLC	30	18	27	31.8	4.6
 MLPAK33 (SOT8002)	PXN6R2-25QL	25	6.2	8.5	22.3	8.1
	PXN7R7-25QL	25	7.7	10.3	19	5.3
	PXN1R7-30QLA	30	1.7			
	PXN2R3-30QLA	30	2.3			
	PXN3R0-30QLA	30	3			
	PXN4R0-30RLA	30	4	5.6	77	
	PXN4R7-30QL	30	4.7	6	25	14.7
	PXN5R0-30QLA	30	5			
	PXN5R4-30QL	30	5.4	7.2	22	17.4
	PXN6R7-30QL	30	6.7	8.6	21.5	7.9
	PXN7R0-30QLA	30	7			
	PXN8R3-30QL	30	8.3	11.1	18.3	5.1
	PXN9R0-30QLA	30				
	PXN9R0-30QL	30	9.1	11	17.3	13.8
	PXN010-30QL	30	10.4	13.6	16.5	4
	PXN011-30QLA	30	11			
	PXN017-30QL	30	17.4	23.1	12	2.5
	PXN018-30QL	30	18	23	11.3	7.2
 MLPAK56 (SOT8038)	**PXN0R6-30RLA**	30	0.6			
	PXN0R7-30RLA	30	0.7			
	PXN0R8-30RLA	30	0.8			
	PXN1R0-30RLA	30	1.0			
	PXN1R5-30RLA	30	1.5			
	PXN2R0-30RLA	30	2.0			
	PXN3R0-30RLA	30	3.0			
	PXN4R0-30RLA	30	4.0			
	PXN5R0-30RLA	30	5.0			
	PXN7R0-30RLA	30	7.0			

N-channel 40 V - 60 V power MOSFETs

Types in **bold** represent new products
Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 LFPAK88 (SOT1235)	PSMNR55-40SSH	40	0.55		500	267
	PSMNR70-40SSH	40	0.7		425	144
	PSMN1R0-40SSH	40	1		325	98
	PSMNR90-50SLH	50	0.92		410	228
	PSMN1R2-55SLH	55	0.97		330	226
 D²PAK (SOT404)	PSMN1R1-40BS	40	1.3		120	136
	PSMN2R2-40BS	40	2.2		100	130
	PSMN2R8-40BS	40	2.9		100	71
	PSMN4R5-40BS	40	4.5		100	35
	PSMN8R0-40BS	40	7.6		77	21
	PSMN1R7-60BS	60	2		120	137
	PSMN3R0-60BS	60	3.2		100	130
	PSMN4R6-60BS	60	4.4		100	70.8
	PSMN7R6-60BS	60	7.8		92	38.7
	PSMN015-60BS	60	15		50	20.9
 LFPAK56E (SOT1023)	**PSMNR70-40YSN**	40	0.7		360	168
	PSMNR90-40YLH	40	0.94	1.2	300	54
	PSMN1R0-40YSH	40	1		290	87
	PSMN1R0-40YLD	40	1.1	1.4	280	127
	PSMN1R5-50YLH	50	1.6		220	51
	PSMN2R0-55YLH	55	2.24		200	50
	PSMN1R1-60YSF	60	1			
 LFPAK56; Power-SO8 (SOT669)	**PSMNR90-40YSN**	40	0.97		320	135
	PSMN1R4-40YLD	40	1.4	1.85	240	96
	PSMN1R5-40YSD	40	1.5		240	71
	PSMN1R7-40YLB	40	1.8	2.3	200	79
	PSMN1R7-40YLD	40	1.8	2.3	200	78
	PSMN1R8-40YLC	40	1.8	2.1	100	96
	PSMN1R9-40YSD	40	1.9		200	57
	PSMN1R9-40YSB	40	1.9		200	56
	PSMN2R0-40YLB	40	2.1	2.7	180	28
	PSMN2R0-40YLD	40	2.1	2.7	180	66
	PSMN2R2-40YSB	40	2.2		180	49
	PSMN2R2-40YSD	40	2.2		180	45
	PSMN2R5-40YLB	40	2.6	3.3	160	25
	PSMN2R5-40YLD	40	2.6	3.3	160	56
	PSMN2R8-40YSB	40	2.8		160	37
	PSMN2R8-40YSD	40	2.8		160	44
	PSMN3R2-40YLB	40	3.3	4.2	120	19
	PSMN3R2-40YLD	40	3.3	4.2		120
	PSMN3R5-40YSB	40	3.5		120	30
	PSMN3R5-40YSD	40	3.5		120	31
	PSMN4R0-40YS	40	4.2			
	PSMN5R8-40YS	40	5.7		90	23.8
	PSMN8R3-40YS	40	8.6		70	20
	PSMN014-40YS	40	14		46	10
	PSMN4R0-60YS	60	4		100	56
	PSMN4R1-60YL	60	4.1	4.8	100	103
	PSMN5R2-60YL	60	5.2	6	100	78.4
	PSMN5R5-60YS	60	5.2		100	56
	PSMN5R6-60YL	60	5.6	7.2	100	66.8
	PSMN7R0-60YS	60	6.4		89	45
	PSMN7R5-60YL	60	7.5	8.7	86	60.6
	PSMN8R5-60YS	60	8		76	39
	PSMN012-60YS	60	11		59	28.4
	PSMN013-60YL	60	13	15	53	33.2
	PSMN030-60YS	60	15		29	13
	PSMN017-60YS	60	16		44	20

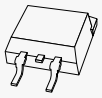
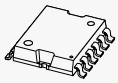
N-channel 40 V - 60 V power MOSFETs

Types in **bold** represent new products
Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 LFPAK56D (SOT1205)	PSMN4R2-40VSH	40	4		53	33.2
	PSMN6R8-40HS	40	6.8		29	13
	PSMN8R0-40HL	40	8	9.4	44	20
	PSMN8R5-40HS	40	8.5		30	21.8
	PSMN014-40HLD	40	13.6	16.9	42	13
	PSMN013-40VLD	40	14	17	42	14
	PSMN9R3-60HS	60	9.3		40	34.2
	PSMN013-60HS	60	10		40	30.1
	PSMN011-60HL	60	10.7	11.5	35	24.5
	PSMN012-60HL	60	11.2	12.5	40	22.4
	PSMN013-60HL	60	11.2	12.5	40	22.4
	PSMN014-60HS	60	14		30	23.6
 LFPAK56-UL2595 (SOT1023A)	PSMN1R0-40ULD	40	1.1	1.4	280	59
 LFPAK33 (SOT1210)	PSMN3R3-40MLH	40	3.3	4.2	118	17
	PSMN3R3-40MSH	40	3.3		118	30
	PSMN4R3-40MLH	40	4.3	5.5	95	31
	PSMN4R3-40MSH	40	4.3		95	23
	PSMN5R0-40MLH	40	5	6.4	85	28
	PSMN5R0-40MSH	40	5		85	21
	PSMN6R7-40MLD	40	6.7	8.5	50	10
	PSMN6R7-40MSD	40	6.7		50	16
	PSMN8R5-40MLD	40	8.5	11	60	19
	PSMN8R5-40MSD	40	8.5		60	13.4
	PSMN011-60ML	60	11	13	61	37.2
	PSMN011-60MS	60	11		61	23
 MLPAK33 (SOT8002)	**PXN5R7-60QLA**	60	5.7	4.5 - 7.98	83	16.5
	PXN6R2-60QLA	60	6.2	4.5 - 8.7	77	14.1
	PXN6R8-60QLA	60	6.8	4.5 - 9.5	70	12.3
	PXN7R7-60QLA	60	7.7	4.5 - 10.8	62	11
	PXN9R1-60QLA	60	9.1	4.5 - 12.7	56	9.3
	PXN011-60QLA	60	11	4.5 - 15.4	46	7.8
	PXN014-60QLA	60	14	4.5 - 19.6	39	5.9
	PXN012-60QL	60	11.5	17.6	42	9.64
 MLPAK56 (SOT8038)	**PXN4R1-60RLA**	60	4.1			
	PXN5R0-60RLA	60	5			
	PXN5R9-60RLA	60	5.9			
	PXN7R3-60RLA	60	7.3			

N-channel 75 V - 200 V power MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 D²PAK (SOT404)	PSMN2R8-80BS	80	3		120	139
	PSMN3R3-80BS	80	3.5		120	111
	PSMN4R4-80BS	80	4.5		100	125
	PSMN5R0-80BS	80	5.1		100	101
	PSMN6R5-80BS	80	6.9		100	71
	PSMN8R7-80BS	80	8.7		90	52
	PSMN012-80BS	80	11		74	36
	PSMN017-80BS	80	17		50	26
	PSMN3R8-100BS	100	3.9		120	170
	PSMN3R7-100BSE	100	3.95		120	176
	PSMN4R8-100BSE	100	4.8		120	196
	PSMN5R6-100BS	100	5.6		100	141
	PSMN7R0-100BS	100	6.8		100	125
	PSMN7R6-100BSE	100	7.6		75	128
	PSMN8R9-100BSE	100	9.4		108	128
	PSMN9R5-100BS	100	9.6		89	82
	PSMN013-100BS	100	14		68	59
	PSMN016-100BS	100	16		57	49
	PSMN027-100BS	100	27		37	30
	PSMN034-100BS	100	35		32	23.8
	PSMN057-200B	200	57		39	96
 CCPAK1212 (SOT8000A)	**PSMNR90-80ASF**	80	0.85		505	309
	PSMNR90-80ASE	80	0.9		495	336
	PSMN1R0-100ASF	100	0.99		460	359
	PSMN1R0-100ASE	100	1.04		430	339
	PSMN1R1-80ASF	80	1.11		385	242
	PSMN1R2-80ASE	80	1.18		375	233
	PSMN1R3-100ASF	100	1.3		355	255
	PSMN1R4-100ASE	100	1.36		340	244
 CCPAK1212i (SOT8005A)	**PSMNR90-80CSF**	80	0.9		505	309
	PSMN1R0-80CSE	80	0.95		495	336
	PSMN1R0-100CSF	100	1.04		460	359
	PSMN1R1-100CSE	100	1.09		430	339
	PSMN1R1-80CSF	80	1.16		385	242
	PSMN1R2-80CSE	80	1.23		375	233
	PSMN1R4-100CSF	100	1.35		355	255
	PSMN1R4-100CSE	100	1.42		340	244
 LFPAK56E (SOT1023)	**PSMN2R6-80YSF**	80	2.4		231	85
	PSMN3R5-80YSF	80	3.5		150	75
	PSMN4R2-80YSE	80	4.2		170	73
	PSMN3R9-100YSF	100	4		120	80
	PSMN4R8-100YSE	100	4.8		120	80

N-channel 75 V - 200 V power MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 LFPAK56; Power-SO8 (SOT669)	**PSMN3R3-80YSF**	80	3.3		160	70
	PSMN4R5-80YSF	80	4.5		100	60
	PSMN8R2-80YS	80	8.5		82	55
	PSMN010-80YL	80	10	11	84	84.7
	PSMN011-80YS	80	11		67	45
	PSMN013-80YS	80	12.9		60	37
	PSMN014-80YL	80	14	15	62	56.9
	PSMN018-80YS	80	18		45	26
	PSMN025-80YL	80	25	27	37	34.3
	PSMN026-80YS	80	28		34	20
	PSMN041-80YL	80	41	45	25	21.9
	PSMN045-80YS	80	45		24	12.5
	PSMN5R5-100YSF	100	5.6		115	64
	PSMN7R2-100YSF	100	6.9		111	50
	PSMN8R7-100YSF	100	8.7		100	39
	PSMN9R8-100YSF	100	10.2		80	34
	PSMN011-100YSF	100	10.9		79.5	34.3
	PSMN012-100YL	100	12	12	85	118
	PSMN012-100YS	100	12		60	64
	PSMN012-100YSF	100	11.8		65	29
	PSMN013-100YSE	100	13		82	75
	PSMN015-100YL	100	15	15	69	86.3
	PSMN015-100YSF	100	15.5		55	24
	PSMN016-100YS	100	16		51	54
	PSMN019-100YL	100	19	19	56	72.4
	PSMN021-100YL	100	21	22	49	65.6
	PSMN020-100YS	100	21		43	41
	PSMN028-100YS	100	28		42	33
	PSMN038-100YL	100	38	38	30	39.2
	PSMN039-100YS	100	39		28.1	23
	PSMN069-100YS	100	72		17	14
	PSMN059-150Y	150	59		43	27.9
	PSMN102-200Y	200	102		21.5	30.7
 LFPAK56D (SOT1205)	**PSMN025-100HS**	100	24.5		29.5	38.1
	PSMN029-100HL	100	27.0	29.0	30	29.6
	PSMN028-100HS	100	27.5		29	34.0
	PSMN033-100HL	100	31	33	26	27.3
	PSMN038-100HS	100	37.6		21.4	25.9
	PSMN045-100HL	100	42	45	21	18.5
 LFPAK33 (SOT1210)	PSMN040-100MSE	100	37		30	30
	PSMN075-100MSE	100	71		18	16.4

N-channel 75 V - 200 V power MOSFETs

Types in **bold** represent new products
Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ V_{GS} = 10 V (mΩ)	$R_{DS(on)}$ [max] @ V_{GS} = 4.5 V or 5 V (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
 LFPAK88 (SOT1235)	**PSMN1R3-80SSF**	80	1.2		335	164
	PSMN1R8-80SSF	80	1.8		270	148
	PSMN1R9-80SSE	80	1.9		286	155
	PSMN1R9-80SSJ	80	1.9			
	PSMN2R3-80SSF	80	2.3		240	123
	PSMN2R5-80SSE	80	2.5		225	116
	PSMN2R8-80SSF	80	3		205	95
	PSMN2R0-100SSF	100	2.07		267	161
	PSMN2R3-100SSE	100	2.28		255	161
	PSMN2R3-100SSJ	100	2.3			
	PSMN2R9-100SSE	100	2.9		385	125
	PSMN2R6-100SSF	100	2.6		200	127
	PSMN3R3-100SSF	100	3.3		180	106
 MLPAK33 (SOT8002-2)	**PXN011-100QL**	100	11		56	18
	PXN011-100QS	100	11		56	25
	PXN012-100QL	100	12		50	14
	PXN012-100QS	100	12		50	22
	PXN020-100QS	100	20		31	13
	PXN028-100QL	100	28		24	7
	PXN040-100QS	100	40		17	6.6
 MLPAK56 (SOT8038)	**PXN2R8-100RL**	100	2.8	4.5 - 3.4	184	51
	PXN2R9-100RS	100	2.9	4.5	180	74
 DFN2020M-6 (SOT1220-2)	**PSMN047-100NSE**	100	53.4		18	9
	PSMN071-100NSE	100	82.3		10	7

Premium & application specific MOSFETs nomenclature

PSM N R51 - 25 Y L H

Segment
PSM = Power Silicon Max

Channel
N = N-channel
P = P-channel
X = Dual
C = Complementary

$R_{DS(on)}$ in mΩ
R51 means 0.51 mΩ max at 25 °C
1R7 means 1.7 mΩ max at 25 °C
130 means 130 mΩ max at 25°C

Voltage rating
BV_{DSS} rating

Package type
A = CCPAK1212
B = D2PAK
C = CCPAK1212i
E = I2PAK
H = LFPAK56D
M = LFPAK33
N = DFN2020-2
P = TO-220
Q = MLPAK33
R = MLPAK56
S = LFPAK88
U = LFPAK56-UL2595
V = LFPAK56D half-bridge
Y = LFPAK56/E

Technology family, e.g.
B = NextPowerS3 optimized for EMC
C = NextPower
D = NextPowerS3 (Super-fast switching with soft recovery)
E = ASFETs for Hotswap or PoE
F = NextPower 60/80/100/150 V
H = NextPowerS3 (Very low $R_{DS(on)}$)
J = ASFETs for Current Sharing
N = NextPowerS3 improved $R_{DS(on)}$ & EMC performance

Gate threshold voltage
E = Enhanced logic
L = Logic level
S = Standard level
U = Ultra low gate
X = Extremely low gate

Standard MOSFETs nomenclature

PX N 5R0 - 30 Q L A

Segment
PX = Standard automotive MOSFETs

Channel
N = N-channel
P = P-channel

$R_{DS(on)}$ in mΩ
5R0 means 5 mΩ max at 25 °C
012 means 12 mΩ max at 25 °C
190 means 190 mΩ max at 25 °C

Voltage rating
BV_{DSS} rating

Package
B = D^2PAK
D = DPAK
E = I2PAK
L = TOLL
P = TO220
Q = MLPAK33
R = MLPAK56
W =TO-247
X = TO220-FP

Gate threshold voltage
L = Logic level
S = Standard level

Technology Description
A = Generation 1
B = Generation 2

Technology Variant
" " = Standard
F = Fast Diode

P-channel power MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
 LFPAK56 (Power-SO8)	PSMP033-60YE	60	33	38	1.4
	PSMP061-60YE		61	22	2.3
 MLPAK33 (SOT8002-2)	PXP3R7-12QU	12		31	
	PXP8R3-20QX	20	8	20	
	PXP011-20QX		11	17	
	PXP018-20QX		18	14	
	PXP020-20QX			12	
	PXP6R1-30QL	30	6	22	
	PXP6R7-30QL		7	21	
	PXP9R1-30QL		9	18	
	PXP012-30QL		12.8	15	
	PXP013-30QL		13	15	
	PXP015-30QL		15.8	12.8	
	PXP400-100QS	100	400	1.4	12
	PXP1500-100QS		1500	0.7	20.5
	PXP700-150QS	150	700	1	7.7

Small-signal MOSFETs in DFN0603, DFN0606, DFN1006 packages

Package																DFN0603 (SOT8013)	DFN0606-3 (SOT8001)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
																			
Size (mm)																0.63 x 0.33 x 0.25	0.6 x 0.6 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P_{tot} (mW)																300	250	250	250
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} = 10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V				
N-channel	20	8	1.9	0.45	0.95	5.3	16	1.6	2	-	120	160	210	270	-			PMZ130UNE	
				0.5	0.9				2		130					PMX100UNE			
			1.6	0.45	0.95	5.3	16	1.6	2	-	170	200	240	300	-				PMZB150UNE
			1	0.5	0.95	6	86	0.45	2	-	270	360	470	600	-			PMZ290UNE2	PMZB290UNE2
			1.2	0.45	0.95	1	4	0.18	1.8	-	310	420	-	-	-		PMH260UNE		
			0.9	0.45	0.95	1	4	0.15	1.7	-	460	575	-	-	-		PMH400UNE		
			0.8	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMH600UNE		
			0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210			PMZ600UNE	PMZB600UNE
		12	1.3	0.5	0.9	1	4	0.4			122	230	360			PMX100UN			
	30	8	1.5	0.45	0.95	5	17	1.6	2	-	210	240	270	300	-			PMZ200UNE	PMZB200UNE
				0.5	0.9				2		360					PMX300UNE			
			1	0.45	0.95	4	12	0.8	2	-	390	460	30	610	-			PMZ390UNE	PMZB390UNE
			0.77	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMH550UNE		
			0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-			PMZ550UNE	PMZB550UNE
	50	8	0.35	0.4	0.9	1	5	0.11	2	-	2800	3000	-	-	-		NX5008NBKH		
			0.35	0.4	0;9	3	17	0.1	2	-	2800	3000	-	-	-			NX5008NBKM	
	60	20	0.26	0.8	1.5	1	3	0		3		4					NX138AKH		
			0.27	0.8	1.5	1	3	0		3		4						NX138AKM	
			0.3	1	2.5	1	7	1		680	760					PMX700EN			
			0.5	1	2.5	2	20	0.1		800	870					PMX800ENE			
			0.45	1.1	2.1	5	12	0.5	2	1000	1300	-	-	-	-			2N700BKM	2N7002BKMB
			0.35	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-		NX7002BKH		
			0.35	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-			NX7002BKM	NX7002BKMB
			0.38	0.5	1.5	7.9	12.5	0.1	2	2300	2900	4800	-	-	-		NX138BKH		
			0.38	0.5	1.5	7.9	12.5	0	2	2300	2900	4800	-	-	-			NX138BKM	
P-channel	20	8	1.4	0.45	0.95	4	26	1.3	1.8	-	330	420	520	-	-			PMZ350UPE	PMZB350UPE
				0.5	0.9				2		430					PMX400UPE			
			0.8	0.45	0.95	2	5	0	1.8	-	640	930	-	-	-		PMH550UPE		
			0.53	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		PMH950UPE		
			0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500			PMZ950UPE	PMZB950UPE
		12	0.9	0.5	0.9	1.5	7	0.4			334	298	490			PMX400UP			
	30	8	1	0.45	0.95	2.9	22	1.45	2	-	430	470	750	950	-			PMZ320UPE	PMZB320UPE
				0.5	0.9				2		680					PMX800UPE			
			0.6	0.45	0.95	6	2	0.14	1.8	-	1000	1700	-	-	-		PMH850UPE		
			0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-			PMZ1200UPE	PMZB1200UPE
		10	0.52	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		PMH1200UPE		
	50	20	0.23	1.1	2.1	13	48	0.26	1	4500	5700	-	-	-	-			BSS84AKM	BSS84AKMB

Small-signal MOSFETs in DFN1010D-3 single and DFN1010B-3 dual packages

Package											DFN1010D-3 (SOT1215)	DFN1010B-6 (SOT1216)
												
Size (mm)											1.1 x 1.0 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)											1000	350
Configuration	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =							
											10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V		
Single	N-channel	12	8	3.2	0.4	0.9	6	18	6.6	1	-	34	39	46	50	121	PMXB40UNE	
		20		3.2	0.5	0.9	6	17	5.7	1	-	42	48	56	64	-	PMXB43UNE	
		30	20	3.2	1	2	3	11	3.6	-	49	56	-	-	-	-	PMXB56EN	
				3.2	1	2.5	3	11	6	1	44	56	-	-	-	-	PMXB65ENE	
		80		1.1	1.3	2.7	2	9	3	2	345	390	-	-	-	-	PMXB360ENEA	
	P-channel	12	8	3.2	0.4	1	6.2	27	6.7	1.5	-	59	78	120	198	880	PMXB65UPE	
		20		2.9	0.4	1	6	29	6.8	1	-	69	86	130	205	950	PMXB75UPE	
				1.2	0.45	0.95	3	18	1.25	1.5	-	350	450	600	760	1200	PMXB350UPE	
		30	20	2.4	1	2.5	4	16	6.2	1	100	125	-	-	-	-	PMXB120EPE	
Dual	N-ch	20	8	0.93	0.5	1	1	5	0.6	2		270	360	470	600			PMDXB290UNE
				0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMDXB600UNE
		30		0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMDXB550UNE
		60	20	0.26	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-		PMDXB590UPE
	P-ch	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		PMCXB290UE
		30		0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		
Complementary	N	20		0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMCXB900UE
	P			0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		
	N	30		0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMCXB1000UE
	P			0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		

Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages

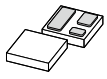
Types in **bold** represent new products

Package															DFN2020MD-6 (SOT1220)	DFN2020M-6 (SOT1220-2)
																
Size (mm)															2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65
P_{tot} (mW)															1250	1250
Configuration	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} = 10 V	4.5 V	2.5 V	1.8 V		
Single	N-channel	20	8	13	0.4	0.9	5	31	20			4.9	8	14.9	PMPB4R6UN	
				10.1	0.4	0.9	5	31	20			9	10	16	PMPB8XN	
				11.4	0.4	0.9	10	32	10.9	1	-	16	20	20	PMPB12UNE	
				12.9	0.4	0.9	13	54	23	2.2	-	10	12	16	PMPB10XNE	
				5.9	0.75	1.25	16	49	31	2	-	14	20	-	PMPB20XNEA	
				10.4	0.4	0.9	9	31	13.4	-	-	18	21	23	PMPB15XN	
				10.1	0.4	0.9	9	31	11.6	2	-	19	23	31	PMPB23XNE	
			12	16.4	0.4	0.9	5	31	20	-		7	8.5	14.5		PMPB07R0UN
		30	8	13.5	0.4	0.9	6	33	6		-	13	16	-	PMPB10XN	
				11.3	0.4	0.9	12	54	24	1	-	13	14	17	PMPB13XNE	
				5	0.4	0.9	8	33	12.4	1	-	28	32	37	PMPB29XNE	
				5.5	0.45	1.2	6	21	5.1	-	-	37	55	-	PMPB33XN	
				14	1	2	9	17	13.7		10	13			PMPB10EN	
				13	1	2	9	17	13.7	-	12	14	-	-	PMPB11EN	
				10.4	1	2	9	9	7.2	-	16.5	20.5	-	-	PMPB20EN	
				10	1	2.5	6	28	13	2	17	28	-	-	PMPB25ENE	
				6.9	1	2.5	4	17	6	2	30	39	-	-	PMPB50ENE	
				5.1	1	2.5	3	15	3.5	2	54	70	-	-	PMPB100ENE	
			12	17	0.5	1	6	31	22			6.4	9.3	26		PMPB06R3XN
				15	0.4	0.9	4	18	8.2							PMPB07R3XN
				15	1	1	6	31	7			9	12	26		PMPB08R5XN
				13	0.4	0.9	4	18	8.1			9.1	11.1	14.6		PMPB09R1XN
				13	0.4	0.9	3	16	6.6			10.3	12.5	16.1		PMPB10R3XN
				10	0.4	0.9	3	10	4.3			13.7	17.5	24		PMPB13R6XN
				10	0.4	0.9	3	10	4.3			14.8	18.4	24.6		PMPB14R8XN
				10	0	0.9	8	33	2.1			17	20	27		PMPB16R5XNE
				19	1.2	2.2	3	16	15			5.4	7.3			PMPB05R4EN
				18	1	1.7	3	13	1.6			6.2	8			PMPB06R2EN
			20	17	1	1.7	3	13	1.6		7	9				PMPB07R3EN
				15	1	2	9	17	1.7		9	11				PMPB08R6EN
		40	8	11.5	0	0.9	5	35	5.6	-	-	18	22	-	PMPB14XN	
		60	20	4	1.3	2.7	4.5	13.5	7.5	2	42	48	-	-	PMPB55ENEA	
				3	1.3	2.7	4	10.5	6.2	2	72	85	-	-	PMPB85ENEA	
		80	20	2.8	1.3	2.7	5	15	9.9	2	80	92	-	-	PMPB95ENEA	
				1.9	1.3	2.7	3.5	9.5	4.8	2	175	195	-	-	PMPB215ENEA	
	P-channel	12	8	17.5	0.47	0.9	3	201	7.4			7	9.2	12		PMPB07R3VP
				16.7	0.47	0.9	4	149	7.6			8	11.5	16		PMPB08R4VP
				14	0.4	0.9	7	69	8.3			11	15.2	22		PMPB11R2VP
				13	0.4	0.9	7	69	26			13	17	24	PMPB13UP	
				12.7	0.45	0.9	6	64	22	-	-	14	19	24	PMPB14XP	
			12	15	0.4	0.9	6	86	10			10	13	20		PMPB09R5VP
				11.8	0.47	0.9	18	85	67			15	17		PMPB15XP	
		20	8		0.45	0.9						13	17			PMPB12R5UPE
				20	8	0.9						16	22			PMPB19R0UPE
				12	0.47	0.9	16	43	28.8	-	-	19	21	27	PMPB19XP	
				10.3	0.47	0.9	13	92	30	2.4	-	19	22	28	PMPB20XPE	
				5	0.47	0.9	12	91	30	2.3	-	28	31	36	PMPB29XPE	
				8.5	0.75	1.25	10	43	12.5	2	-	29	45	-	PMPB30XPE	
				7.9	0.47	0.9	12	62	15	-	-	30	35	45	PMPB33XP	
		30	12	5	0.47	0.9	15	28	14	-	-	47	54	74	PMPB47XP	
			20	12	1		3	60	6.2		14.5	19				PMPB14R7EP
				20	1	2.5	3	67			12.7	16				PMPB12R7EP
				12	1	2	2	145	5		14	18				PMPB14R0EP
				13	1	2	2	121	5		12.5	16				PMPB12R5EP
				11	1	2.5	3	47	31	-	17.5	24			PMPB17EP	
				6.8	1	2.5	7.4	27	17	-	40	55	-	-	PMPB48EP	
			25	10.6	1	2.5	3	60	29		16	22			PMPB16EP	

Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages

Package											DFN2020-6 (SOT1118)
											
Size (mm)											2.0 x 2.0 x 0.65
P_{tot} (mW)											1250
Configuration	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} = 10 V	4.5 V	2.5 V	1.8 V	
Dual	N-ch	20	12	5.3	0.4	0.9	4	40	14.4	-	-	32	40	60	PMDPB30XN
		30	12	3.1	0.75	1.25	9	19	2.9	2	-	55	72	-	PMDPB56XNEA
					0.5	1.5	6	18	1.65	1.8	-	95	130	-	PMDPB95XNE2
	P-channel	20	8	4.5	0.45	0.95	7	41	6.3	2	-	58	74	97	PMDPB58UPE
				3.7	0.45	0.95	6	47	5.4	2	-	82	107	142	PMDPB85UPE
			12	4.5	0.47	0.9	4	135	16.5	-	-	55	75	110	PMDPB55XP
				4.2	0.75	1.25	7	33	5	2	-	66	98		PMDPB70XPE
					0.4	1	6	120	5.7	-	-	80	95	120	PMDPB80XP
		30	12	3.8	0.45	1	3	112	5.2	-	-	70	89	-	PMDPB70XP
Complementary	N	20	12	5.3	0.4	0.9	4	40	14.4	-	-	26	33	50	PMCPB5530X
	P	20	12	4.5	0.4	0.9	4	40	8.1	-	-	55	75	110	

Small-signal MOSFETs in DSN and WLCSP packages

Package															WLCSP4	WLCSP6	DSN1010-3	DSN1006-3
																		
Size (mm)															0.78 x 0.78 x 0.35	1.48 x 0.98 x 0.35	0.96 x 0.96 x 0.24	1.0 × 0.6 × 0.2
P_{tot} (mW)															1300	1300	2500	
Configuration	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} = 4.5 V	2.5 V	1.8 V	1.5 V				
Single	N	12	8	14	0.4	0.9	3	16	8	-	13	16	22	-			PMCA14UN	
				6	0.4	0.9	6.3	30	6	2	36	46	60	86	PMCM4401VNE			
		20	8	5.4	0.4	0.9	4	27	6	2	43	55	65	75	PMCM4401UNE			
		30	12	4.8	0.6	1.1	2	5	1		40	48	65					PMCB60XN
					0.6	1.1				2	40	49						PMCB60XNE
	P	12	8	4.9	0.4	0.9	4.8	25.1	6.8	2	55	77	110	-	PMCM4401VPE			
		20	8	4	0.4	0.9	4	31	5.9	2	75	95	130	-	PMCM4401UPE			
				4.2	0.4	0.9	4	26	6	2	65	88	120	-	PMCM4402UPE			
	N	12	8	9.6	0.4	0.9	10.8	97.5	16.1	2	15	18	22	30		PMCM6501VNE		
		20	8	8.7	0.4	0.9	7	100	19	2	17	20	22	30		PMCM6501UNE		
	P	12	8	8.2	0.4	0.9	8	72	19.6	2	19	25	37	-		PMCM6501VPE		

Small-signal MOSFETs single (N-channel)

Package												
Size (mm)												
P_{tot} (mW)												
V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =			
									10 V	4.5 V	2.5 V	1.8 V
20	8	7	0.4	1	10	32	11	0.5	-	15	18	-
		4.7	0.45	1	8.2	39.5	6.2	2	-	24	29	40
		2.5	0.45	1	5	9	6	-	-	41	48	57
		1.9	0.4	1	8	31	2.2	2	-	63	77	114
		2.2	0.4	1	6	21	2.6	2	-	64	78	110
		1.9	0.45	0.95	5.3	16	1.6	2	-	120	155	195
		1.6	0.45	0.95	5.3	16	1.6	2	-	155	190	235
		1	0.5	0.95	6	86	0.45	2	-	270	360	470
		0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845
	12	6.3	0.75	1.25	16	44	9.9	2	-	16	24	-
		8.6	0.47	0.9	7	135	7.7	-	-	15	18	22
		9.1	0.4	0.9	9	31	12	1	-	15	19	22
		7.3	0.6	1.3	4	15	3	2	-	17	25	-
		5.4	0.4	0.9	7	35	6.2	-	-	24	30	40
		6	0.4	0.9	5.5	22	5.1	1	-	28	38	42
30	8	2	0.4	0.9	4	32	5.8	-	-	50	57	66
		2.3	0.4	0.9	4	32	1.4	-	-	50	57	66
		1.5	0.45	0.95	5	17	1.6	2	-	210	240	270
		1	0.45	0.95	4	12	0.8	2	-	390	460	530
		0.59	0.45	0.95	4	12	0.6	2	-	550	660	770
		0.4	0.6	1.1	26	88	0.52	2	-	1000	1400	2000
	12	7.2	0.4	0.9	8	33	12.4	2	-	19	22	17
		5.7	0.4	0.9	9	34	7	-	-	33	42	54
		4.4	0.4	0.9	9	34	7	-	-	36	43	56
		3.4	0.6	1.25	2	7	1	1	-	60	102	
		1	0.75	1.25	2	6	0.2	2	-	230	295	470
		0.9	0.5	1.5	8	11	0.74	2	-	234	324	-
	20	7.6	1	2	9	9	7.2	-	17	21	-	-
		5.5	1	2.5	8	33	12.6	2	17	22	-	-
		3.9	1	2.5	6.3	14.1	6	2	28	36	-	-
		3.1	1	2.5	18	78	6.5	-	28	37	-	-
		4.5	1	2.5	3	11	6	1	30	44	-	-
		5.1	1	2	3	11	3.6	-	35	43	-	-
		2.1	1	2.5	3	15	2.6	2	70	90	-	-
		0.18	0.8	1.5	10	51	0.34	-	2700	3000	4000	-
40	20	6.2	1.3	2.7	2	12	11	-	19	23	-	-
		5.4	1	2.5	4	20	7.8	2	23	30	-	-
		2.7	1	2.5	6	12	4.1	1	64	79	-	-
		2.5	1	2.5	14	14	2.4	1	95	120	-	-
55	10	0.3	0.4	1.3	4	11	1	3	-	2300	2400	3100
60	8	0.27	0.4	0.9	1	5	0	2	-	2	2	2
	20	4.2	1.3	2.7	3	11	10	-	32	38	-	-
		3.1	1.3	2.7	9	33	12.7	2	46	52	-	-
		2.1	1.3	2.7	6.4	15.9	5.9	2	96	108	-	-
		1.5	1.3	2.7	6.3	13	3.9	2	176	196	-	-
		0.8	1.3	2.7	5.3	10.2	2.4	2	300	332	-	-
		0.19	0.8	1.5	6	11	0.33	yes	2800	3500	4500	-
		0.27	0.5	1.5	7.9	12.5	0.49	2	2100	2200	2600	-
		0.1	0.6	1.4	2	5	-	2	2800	3800	-	-
		0.19	1.1	2.1	12	34	0.33	yes	3000	3700	-	-
		0.27	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-
100	20	1.5	1.3	2.7	4.8	9.3	4.5	1	285	300	-	-

	SOT457 (SC-74)	SOT23	SOT323 (SC-70)
			
	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
	600	250	200
		PMV15UNEA	
	PMN28UNE	PMV28UNEA	
		NXV40UN	
			PMF63UNE
		PMV65UNE	
		PMV20XNEA	
		PMV16XN	
	PMN16XNE		
		PMV13XNEA	
		PMV30UN2	
	PMN30UNE		
		NXV50UN	
		NXV55UN	
		NX3008NBK	NX3008NBKW
		PMV20XNE	
	PMN30UN		
		PMV40UN2	
		PMV50XNEA	
		BSH103BK	
			PMF250XNE
		PMV20EN	
	PMN25ENE	PMV15ENE	
		PMV28ENE	
		PMV37EN2	
	PMN40ENE	PMV42ENE	
		PMV45EN2	
		PMV90ENE	
		NX3020NAK	NX3020NAKW
	PMN20ENA		
	PMN30ENEA	PMV30ENEA	
		PMV60ENEA	
		PMV130ENEA	
		BSH111BK	
		NX6008NBK	NX6008NBKW
	PMN40ENA		
	PMN55ENE	PMV52ENE	
	PMV30ENEA	PMV88ENE	
	PMN230ENE	PMV164ENE	
		PMV450ENEA	
		NX138AK	
		NX138BK	NX138BKW
		BSN20BK	
		2N7002NXAK	NX7002AKW
		2N7002NXBK	NX7002BKW
	PMN280ENEA	PMV280ENEA	

Small-signal MOSFETs single (P-channel)

Package												
Size (mm)												
P_{tot} (mW)												
V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =			
									10 V	4.5 V	2.5 V	1.8 V
20	8	5.6	0.45	0.95	11	83	14.7	2	-	27	38	50
		5.3	0.45	0.95	41	122	14.7	2	-	30	38	51
		5.4	0.45	0.95	34	128	15.5	-	-	34	42	57
		4	0.47	0.9	400	2180	10.5	3	-	50	57	70
		2	0.5	1	6	46	5.8	-	-	55	74	101
		2	0.5	1	5	36	4.2	-	-	75	103	-
		2	0.5	1.1	7	50	6	-	-	100	155	210
		1.2	0.45	0.95	33	52	3.3	-	-	170	210	280
		2.3	0.45	0.95	5	43	3.7	-	-	120	150	200
	12	4.5	0.75	1.25	7.9	59	11	2	-	28	42	-
		6.8	0.47	0.9	12	62	15	-	-	30	35	48
		4.1 / 3.5	0.75	1.25	24	84	8.5	-	-	48	71	-
		4.4	0.47	0.9	7	135	7.7	-	-	48	60	82
		4.7	0.47	0.9	5.1	141	8.5	-	-	50	64	88
		3.9	0.55	0.95	28	101	7.6	-	-	65	90	-
		3.3	0.75	1.25	7	36	5	2	-	67	99	-
		3.9	0.47	0.9	6	120	5	-	-	72	88	110
		3.2	0.47	0.9	6	120	5	-	-	77	95	120
		2	0.65	1.15	48	64	4.8	-	-	90	125	-
		2.3	0.7	1.3	5.3	36	3.4	2	-	100	155	-
		1	0.65	1.15	26	44	2.6	-	-	175	240	-
		0.23	0.6	1.1	49	103	0.55	2	-	2800	5300	-
	12	1.5	0.5	0.9	5	40	4.2	-	-	104	131	175
	20	5.3	1	3	6	36	12.8	2	35	49	-	-
		4.4	1	3	5	19	6.5	2	60	96	-	-
		1.5	1	3	4	18	5.2	-	98	135	-	-
40	20	1.8	1	2.5	10	40	4.7	1	180	220	-	-
50	20	0.2	1.1	2.1	24	73	0.26	1	5300	6000	-	-
100	25	1.2	2	4	8	23	2.6	-	365	-	-	-

	SOT457 (SC-74)	SOT23	SOT363 (SC-88)	SOT323 (SC-70)
				
	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95
	600	250	300	200
		PMV27UPE		
		PMV33UPE		
		PMV32UP		
		PMV50UPE		
		NXV65UP		
		NXV75UP		
		NX2301P		
		PMV160UP		
		BSH205G2		
	PMN30XPE	PMV30XPEA		
	PMN30XP			
	PMN48XP	PMV48XP		
		PMV50XP		
	PMN52XP			
		PMV65XP		
		PMV65XPE		
	PMN70XP			
		PMV75UP		
			PMG85XP	
		PMV100XPEA		
				PMF170XP
		NX3008PBK		NX3008PBKW
		NXV100XP		
	PMN50EPE	PMV35EPE		
	PMN70EPE	PMV74EPE		
		NXV90EP		
		PMV250EPEA		
		BSS84AK		BSS84AKW
		PMV240SP		

Small-signal MOSFETs dual

Package										
Size (mm)										
P_{tot} (mW)										
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	
N-channel	20	8	0.93	0.5	1	1	5	0.6	2	
			0.6	0.45	0.95	5.6	19	0.4	1	
		12	5.3	0.4	0.9	4	40	14.4	-	
	30	8	0.59	0.45	0.95	4	12	0.6	2	
			0.35	0.6	1.1	26	88	0.52	2	
		12	3.1	0.75	1.25	9	19	2.9	2	
			3.1	0.5	1.5	6	18	1.65	1.8	
			1	0.5	1.5	6.5	14	0.7	2	
		20	0.18	0.8	1.5	10	51	0.34	yes	
	60	8	0.22	0.4	0.9	1	5	0.11	2	
		20	0.18	0.8	1.5	6	11	0.33	yes	
			0.26	0.5	1.5	7.9	12.5	0.49	2	
			0.17	1.1	2.1	12	34	0.33	yes	
			0.26	1.1	2.1	4.7	6.9	1	2	
P-channel	20	8	4.5	0.45	0.95	7	41	6.3	2	
			0.26	1.1	2.1	4.7	6.9	1	2	
			0.5	0.45	0.95	2.3	13.5	1.19	1	
			3.7	0.45	0.95	6	47	5.4	2	
		12	4.5	0.47	0.9	4	135	16.5	-	
			4.2	0.75	1	7	33	5	2	
			3.7	0.4	1	6	120	5.7	-	
	30	8	0.41	0.45	0.95	3	14	0.7	2	
			0.2	0.6	1.1	49	103	0.55	2	
		12	3.8	0.45	1	3	112	5.2	-	
	50	20	0.16	1.1	2.1	24	73	0.26	1	

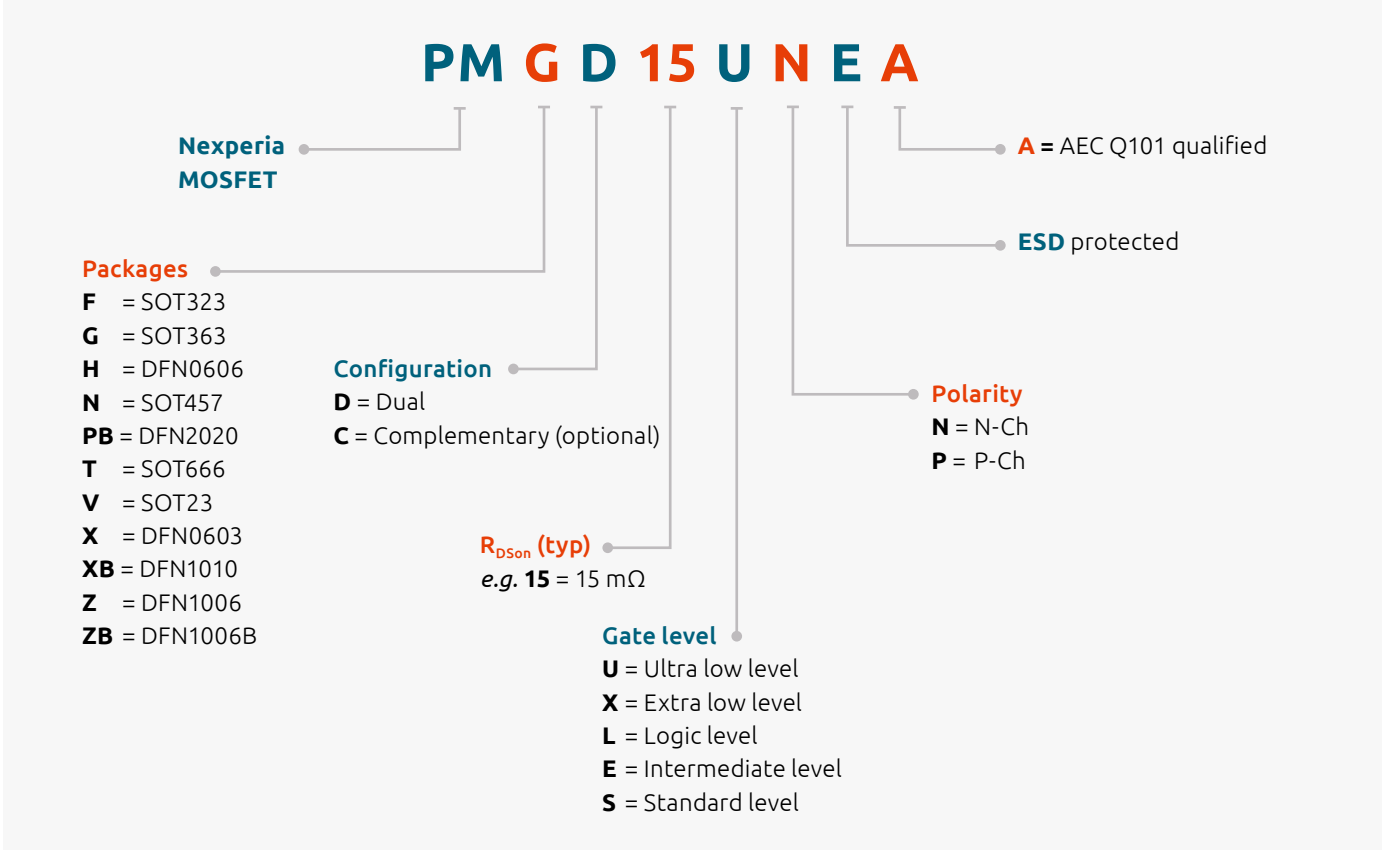
Small-signal MOSFETs complementary

Package	Type	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	V_{GSth} min (V)	V_{GSth} max (V)
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	NX3008CBKS	N	30	8	0.35	0.6	1.1
		P	30	8	0.2	0.6	1.1
	NX6020CAKS	N	60	20	0.17	1.1	2.1
		P	50	20	0.16	1.1	2.1
 DFN1010B-6 (1.1 x 1.0 x 0.37)	PMCXB900UE	N	20	8	0.6	0.45	0.95
		P	20	8	0.5	0.45	0.95
	PMCXB1000UE	N	30	8	0.59	0.45	0.95
		P	30	8	0.41	0.45	0.95
 DFN2020-6 (2.0 x 2.0 x 0.65)	PMCPB5530X	N	20	12	5.3	0.4	0.9
		P	20	12	4.5	0.47	0.9

				SOT363 (SC-88)	DFN2020-6 (SOT1118)	DFN1010B-6 (SOT1216)
						
				2.0 x 1.25 x 0.95	2.0 x 2.0 x 0.65	1.0 x 1.0 x 0.37
				300	1250	350
	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =					
	10 V	4.5 V	2.5 V	1.8 V		
	-	270	360	470			PMDXB290UE
	-	470	620	845			PMDXB600UNE
	-	32	40	60		PMDPB30XN	
	-	550	660	770			PMDXB550UNE
	-	1000	1400	2000	NX3008NBKS		
	-	55	72	-		PMDPB56XNEA	
	-	95	130	-		PMDPB95XNE2	
	-	170	240	-	PMGD175XNE		
	2700	3000	4000	-	NX3020NAKS		
		2700	2900	-	NX6008NBKS		
	2800	3500	4500	-	NX138AKS		
	2100	2200	2600	-	NX138BKS		
	3000	3700	-	-	NX7002AKS		
	2200	2500	-	-	NX7002BKS		NX7002BKXB
	-	58	74	97		PMDPB58UPE	
	-	590	980	1170			PMDXB590UPE
	-	1020	1270	1700			PMDXB950UPE
	-	82	107	142		PMDPB85UPE	
	-	55	75	110		PMDPB55XP	
	-	66	98	-		PMDPB70XPE	
	-	80	95	120		PMDPB80XP	
	-	1200	1700	2100			PMDXB1200UPE
	-	2800	5300	-	NX3008PBKS		
	-	70	89	-		PMDPB70XP	
	4500	5700	-	-	BSS84AKS		

	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =					
					10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	6	20	0.33	yes	3000	3700				
	13	48	0.26	1	4500	5700				
	5.6	19	0.4	1	-	470	620	845	1125	2210
	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500
	4	12	0.6	2	-	550	660	770	890	-
	3	14	0.7	2	-	1200	1700	2100	3000	-
	19	56	14.4	-	-	26	33	50	-	-
	18	56	16.5	-	-	55	75	110	-	-

Small-signal MOSFETs nomenclature



Silicon carbide MOSFETs

5

Silicon carbide MOSFETs

Addressing the growing demand for high-power and highvoltage industrial applications, Nexperia's Silicon Carbide MOSFETs, with their excellent RDSon temperature stability, fast switching speed, and high short-circuit ruggedness, make them the product of choice for E-vehicle charging infrastructure, photovoltaic inverters, and motor drives.

Design benefits

- Very low switching losses
- Fast reverse recovery
- Fast switching speed
- Temperature independent turn-off switching losses
- Very fast and robust intrinsic body diode
- Faster commutation and improved switching due to the additional Kelvin source pin

Key technical features

- Best-in-class $R_{DS(on)}$ temperature stability
- Superior gate charge and beneficial gate charge ratio
  - Low power consumption of gate drivers
  - High tolerance against parasitic turn-on
- Ultra small threshold voltage tolerance
- Robust body diode with very low forward voltage
- Lower leakage current up to 1200 V

Key applications

- E-vehicle charging infrastructure
- Photovoltaic inverters
- Switch mode power supply
- Uninterruptable power supply
- Motor drives

Types in **bold red** are in development

Type number	V_{DS} max (V)	$R_{DS(on)}$ typ (mΩ) @ T_J = 25 °C	I_D max (A) @ TC = 25 °C	T_J max (°C)	Package
NSF017120T1A0-Q	1200	17	107	175	 QDPAK
NSF017120T1A0		17	107		
NSF030120T1A0-Q		30	65		
NSF030120T1A0		30	65		
NSF040120T1A1-Q		40	51		
NSF040120T1A1		40	51		
NSF060120T1A0-Q		60	33		
NSF060120T1A0		60	33		
NSF080120T1A1-Q		80	31		
NSF080120T1A1		80	31		
NSF017120T2A0-Q		17	107		 X.PAK
NSF017120T2A0		17	107		
NSF030120T2A0-Q		30	65		
NSF030120T2A0		30	65		
NSF040120T2A1-Q		40	51		
NSF040120T2A1		40	51		
NSF060120T2A0-Q		60	33		
NSF060120T2A0		60	38		
NSF080120T2A1-Q		80	31		
NSF080120T2A1		80	31		
NSF017120C7A0-Q		17	107		 TO-263-7
NSF017120C7A0		17	107		
NSF030120D7A0-Q		30	65		
NSF030120D7A0		30	67		

Types in **bold red** are in development

Type number	V_{DS} max (V)	$R_{DS(on)}$ @ 18 V V_{GS}	I_D max (A) @ TC = 25 °C	T_j max (°C)	Package
NSF040120D7A0	1200	30	65	175	 TO-263-7
NSF040120D7A1-Q		40	51		
NSF040120D7A1		40	51		
NSF060120D7A0-Q		60	33		
NSF060120D7A0		60	38		
NSF080120D7A0		60	33		
NSF080120D7A1-Q		80	31		
NSF080120D7A1		80	31		
NSF017120L4A0		17	107		 TO-247-4
NSF017120L4A0-Q		17	107		
NSF030120L4A0-Q		30	65		
NSF030120L4A0		30	67		
NSF040120L4A0		30	65		
NSF040120L4A1-Q		40	51		
NSF040120L4A1		40	51		
NSF060120L4A0-Q		60	33		
NSF060120L4A0		60	37		
NSF080120L4A0		60	35		
NSF080120L4A1-Q		80	31		
NSF080120L4A1		80	31		
NSF030120L3A0		30	67		 TO-247-3
NSF040120L3A0		30	65		
NSF060120L3A0		60	37		
NSF080120L3A0		60	35		

SiC MOSFET nomenclature

NSF 040 120 L3 AO -Q

NEXPERIA
Silicon carbide
MOSFET

R_{DSon}
017 17 mΩ
020 20 mΩ
030 30 mΩ
040 40 mΩ
060 60 mΩ
080 80 mΩ
160 160 mΩ

Max. reverse voltage
120 1200 V

Qualification scheme
Standard
-Q Automotive

Version indicator

Package indicator
L3 TO-247-3
L4 TO-247-4
C7/D7 D2PAK-7
Tn TopCool
Bn Bare die

Power GaN FETs 6

Power GaN FETs naming conventions

GAN T RRR-VVV(7) P S A A

Product ID

Technology
B = Bi-Directional
C or **“”** = Cascode (Si LV + D-mode)
E or **“”** = E-mode (“” if 1st batch)

Max $R_{DS(on)}$
020 = 20 mΩ
2R0 = 2 mΩ

Voltage rating
A = 040 = 40 V
B = 060 = 60 V
C = 080 = 80 V
D = 100 = 100 V
E = 150 = 150 V
F = 200 = 200 V
G = 400 = 400 V
H = 600 = 600 V
S = 700 = 700 V
I = 650 = 650 V
J = 900 = 900 V
K = 1200 = 1200 V

Package
W = TO-247
N = CCPAK1212/i
F = DFN 5x6
E = DFN 8x8
C = WLCSP
L = LGA
D = Bare die
B = DPAK
Q = FCQFN 4x6

Package details
S = Source TAB (TO-247)
B = Bottom-side cooling
T = Top-side cooling
D = Dual-side cooling

Generation
A = H1 - E1 (≥2nd batch)
B = H2 - E2
C = H3 - E3
D = H4
E = E1 (1st batch)

Grade
A = Automotive
Blank = Industrial

Low voltage e-mode GaN FETs

Types in **bold** represent new products
Types in **bold red** are in development

Package	Type number	V_{DS} max (V)	$R_{DS(on)}$ max @ V_{GS} = 5 V (mΩ)	T_j max (°C)	I_D max (A)	$Q_{G(tot)}$ [typ] (nC)	Q_{OSS} [typ] (nC)
WLCSP8 (SOT8072)	GAN3R2-100CBE	100	3.2	150	60	9.2	50
WLCSP6 (SOT8090)	**GANE7R0-100CBA**		7	150	29	4.5	25
WLCSP22 (SOT8089)	**GANE2R7-100CBA**		2.7	150	64	13	77
VQFN7 (SOT8091-1)	**GANE1R8-100QBA**		1.8	150	100	22	125
	GANE3R9-150QBA	150	3.9	150	100	20	130
FCLGA3 (SOT8073-1)	GAN7R0-150LBE		7	150	28	7.6	47

650 - 700 V e-mode GaN FETs

Package	Type number	V_{DS} max (V)	$R_{DS(on)}$ max @ V_{GS} = 6 V (mΩ)	T_j max (°C)	I_D max (A)	$Q_{G(tot)}$ [typ] (nC)	Q_{OSS} [typ] (nC)
DFN5060-5 (SOT8075-1)	GAN140-650FBE	650	140	150	17	3.5	33
	GAN190-650FBE		190	150	11.5	2.8	24.5
	GANE350-650FBA		350	150	6	1.5	60
	GANE600-650FBA		600	150	3.3	0.7	7.3
DFN8080-8 (SOT8074-1)	GAN080-650EBE		80	150	29	6.2	60
	GAN140-650EBE		140	150	17	3.5	33
	GAN190-650EBE		190	150	11.5	2.8	24.5
DPAK (SOT428-2)	**GANE140-700BBA**	700	140	150	17	3.5	33
	GANE190-700BBA		190	150	11.5	2.8	24.5
	GANE240-700BBA		240	150	10	2	21
	GANE350-700BBA		350	150	6	1.5	13

Bi-directional e-mode GaN FETs

Package	Type number	V_{DS} max (V)	$R_{DS(on)}$ max @ V_{GS} = 5 V (mΩ)	T_j max (°C)	I_D max (A)	$Q_{G(tot)}$ [typ] (nC)	Q_{OSS} [typ] (nC)
VQFN16 (SOT8092-1)	**GANB1R2-040QBA**	40	1.2	125	100	60	45
WLCSP22 (SOT8086)	**GANB4R8-040CBA**		4.8	125	20	15.8	12.2
WLCSP16 (SOT8087)	**GANB8R0-040CBA**		8	125	14	10.1	8
WLCSP12 (SOT8088)	**GANB012-040CBA**		12	125	10	7.2	5.6

650 V cascode GaN FETs

Package	Type number	V_{DS} max (V)	$R_{DS(on)}$ max @ V_{GS} = 10 V (mΩ)	T_j max (°C)	I_D max (A)	$Q_{G(tot)}$ [typ] (nC)	Q_{OSS} [typ] (nC)
CCPAK1212 (SOT8000)	**GAN039-650NBB**	650	39	150	58.5	26	173
CCPAK1212i (SOT8005)	**GAN039-650NTB**		39	150	58.5	26	173
TO-247-3L (SOT429-3)	**GAN041-650WSB**		41	175	47.2	22	150
TO-247-3 (SOT429)	GAN063-650WSA (NRND)		60	175	34.5	15	125
	GAN111-650WSB		114	175	21	4.9	65

IGBTs 7

650 V IGBTs

Addressing the growing demand for efficient, high-voltage power conversion and motor drives, Nexperia's IGBTs feature a robust and cost-effective carrier stored trench-gate (CSTBT) advanced field-stop (FS) construction. Delivering high ruggedness reliability and enhanced inverter power density for industrial applications.

Design Benefits

- Low conduction and switching losses
- High ruggedness reliability
- Stable and tight parameters for easy parallel operation
- Maximum junction temperature of 175 °C
- Fully rated as a Soft Fast Reverse Recovery Diode
- 5 µs short circuit capability (For M3)
- Enabling outstanding system efficiency and reliability

Key applications

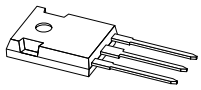
- Industrial motor drives – particularly 5 <> 20 kW (20 kHz) servo motors
  - robotics, elevators, operating grippers, in-line manufacturing
- Power inverters
  - Uninterruptible Power Supply (UPS)
  - photovoltaic (PV) strings
  - EV-charging
- Induction heating, welding

Key technical features

- Ultra low diode Vf
- Ultra low IGBT turn off loss
- Trade off for total power loss

650 V products

Types in **bold red** are in development

Type name	Voltage / Current @ Tc=100°C	IGBT type	Copak Diode rating	SCWT	Package
NGW40T65M3DFP	650 / 40	MS	full	5µs	 TO-247-3L
NGW50T65H3DFP	650 / 50	HS			
NGW75T65H3DF	650 / 75	HS			
NGW30T65M3DFP	**650 / 30**	**MS**		**5µs**	
NGW50T65M3DFP	**650 / 50**	**MS**		**5µs**	
NGW60T65M3DFP	**650 / 60**	**MS**		**5µs**	
NGW75T65M3DFP	**650 / 75**	**MS**		**5µs**	
NGW40T65H3DFP	**650 / 50**	**HS**			
NGW75T65H3DFP	**650 / 75**	**HS**			

Analog & Logic ICs 8

Q100 Functions and Standard Packages (>10 pins)

Logic - Buffer / Inverters

Type number	Description	Features				Package (suffix)									
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)
74AHC04-Q100	Hex inverter	2.0 - 5.5	± 8	3.0	-40 to 125	•	•	•							
74AHCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 8	3.0	-40 to 125	•	•	•							
74AHC125-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.0	-40 to 125	•	•	•							
74AHCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40 to 125	•	•	•							
74AHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40 to 125	•	•	•							
74AHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40 to 125	•	•	•							
74AHCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40 to 125						•	•	•		
74AHC244-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40 to 125						•	•	•		
74AHCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40 to 125						•	•	•		
74AHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40 to 125						•	•	•		
74AHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40 to 125						•	•	•		
74AHCU04-Q100	Hex inverter; unbuffered	2.0 - 5.5	± 8	2.4	-40 to 125	•	•	•							
74ALVC125-Q100	Quad buffer/line driver (3-state)	1.65 - 3.6	± 24	1.8	-40 to 85	•	•	•							
74ALVC541-Q100	Octal buffer/line driver (3-state)	1.65 - 3.6	± 24	2.3	-40 to 85						•	•	•		
74HC05-Q100	Hex inverter; open-drain	2.0 - 6.0	5.2	11	-40 to 125	•	•	•							
74HC04-Q100	Hex inverter	2.0 - 6.0	± 5.2	7.0	-40 to 125	•	•	•							
74HCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 4.0	8.0	-40 to 125	•	•	•							
74HC125-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40 to 125	•	•								
74HCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40 to 125	•	•								
74HC126-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40 to 125	•	•								
74HCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40 to 125	•	•								
74HC240-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40 to 125						•	•	•		
74HCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	9.0	-40 to 125						•	•	•		
74HC244-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40 to 125						•	•	•		
74HCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40 to 125						•	•	•		
74HC365-Q100	Hex buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40 to 125				•	•					
74HCT365-Q100	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40 to 125				•	•					
74HC366-Q100	Hex inverter/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40 to 125				•	•					
74HCT366-Q100	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40 to 125				•	•					
74HC540-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40 to 125						•				
74HCT540-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40 to 125						•				
74HC541-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40 to 125						•	•			

Logic - Buffer / Inverters

Type number	Description	Features				Package (suffix)									
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)
74HCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40 to 125						•	•			
74HCU04-Q100	Hex inverter; unbuffered	2.0 - 6.0	± 5.2	5.0	-40 to 125	•	•	•							
74LV244-Q100	Octal buffer/line driver (3-state)	1.0 - 5.5	± 16	8.0	-40 to 125						•	•			
74LVC04A-Q100	Hex inverter	1.65 - 5.5	± 24	2.0	-40 to 125	•	•	•							
74LVC06A-Q100	Hex inverter; open-drain	1.65 - 5.5	32	2.2	-40 to 125	•	•	•							
74LVC07A-Q100	Hex buffer; open-drain	1.65 - 5.5	32	2.2	-40 to 125	•	•	•							
74LVC125A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40 to 125	•	•	•							
74LVC126A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40 to 125	•	•	•							
74LVC541A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	3.3	-40 to 125						•	•	•		
74LVC16240A-Q100	16-bit inverter/line driver (3-state)	1.2 - 3.6	± 24	2.7	-40 to 125									•	
74LVC244A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	2.8	-40 to 125						•	•	•		
74LVCH244A-Q100	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	2.8	-40 to 125						•	•	•		
74LVC16244A-Q100	16-bit buffer/line driver (3-state)	1.2 - 3.6	± 24	3.0	-40 to 125									•	•
74LVCH16244A-Q100	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	3.0	-40 to 125									•	•
74LVCU04A-Q100	Hex inverter; unbuffered	1.2 - 3.6	± 24	2.0	-40 to 125	•	•								
74LVT04-Q100	Hex inverter	2.7 - 3.6	-20 / +32	2.6	-40 to 85	•	•								
74LVT244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40 to 85						•	•	•		
74LVTH244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40 to 85						•	•	•		
74VHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40 to 125	•	•	•							
74VHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40 to 125	•	•	•							
74VHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40 to 125						•	•	•		
74VHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40 to 125						•	•	•		
HEF4049B-Q100	Hex inverter/line driver	3.0 - 15.0	-3 / +20	20	-40 to 85				•						
HEF4050B-Q100	Hex buffer/line driver	3.0 - 15.0	-3 / +20	40	-40 to 85				•						
HEF4069UB-Q100	Hex inverter; unbuffered	3.0 - 15.0	± 3.4	15	-40 to 85	•	•								

Logic - Transceivers

Type number	Description	Features				Package (suffix)				
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)
74AHC245-Q100	Octal transceiver (3-state)	2.0 - 5.5	± 8	3.5	-40 to 125	•	•	•		
74AHCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 8	5.0	-40 to 125	•	•	•		
74HC245-Q100	Octal transceiver (3-state)	2.0 - 6.0	± 7.8	7.0	-40 to 125	•	•	•		
74HCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 6	10	-40 to 125	•	•	•		
74LVC245A-Q100	Octal transceiver (3-state)	1.2 - 3.6	± 24	2.9	-40 to 125	•	•	•		
74LVCH245A-Q100	Octal transceiver with bus hold (3-state)	1.2 - 3.6	± 24	2.9	-40 to 125	•	•	•		
74LVC16245A-Q100	16-bit bus transceiver with dIRection pin; 5 V tolerant (3-state)	1.2 - 3.6	± 24	5.2	-40 to 125				•	•
74LVC162245A-Q100	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	± 12	3.3	-40 to 125				•	•
74LVCH16245A-Q100	16-bit bus transceiver with bus hold with dIRection pin; 5 V tolerant (3-state)	1.2 - 3.6	± 24	5.2	-40 to 125				•	•

Logic - Gates

Type number	Description	Features				Package (suffix)			
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT765-1 (DC)
74AHC00-Q100	Quad 2-input NAND gate	2.0 - 5.5	± 8	3.2	-40 to 125	•	•	•	
74AHCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40 to 125	•	•	•	
74AHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40 to 125	•	•	•	
74AHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40 to 125	•	•	•	
74AHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-40 to 125	•	•	•	
74AHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40 to 125	•	•	•	
74AHC30-Q100	8-input NAND gate	2.0 - 5.5	± 8	3.6	-40 to 125	•	•	•	
74AHCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40 to 125	•	•	•	
74AHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40 to 125	•	•	•	
74AHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40 to 125	•	•	•	
74AHC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40 to 125	•	•	•	
74AHCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.4	-40 to 125	•	•	•	
74ALVC00-Q100	Quad 2-input NAND gate	1.65 - 3.6	± 24	2.1	-40 to 85	•	•	•	
74ALVC32-Q100	Quad 2-input OR gate	1.65 - 3.6	± 24	2.0	-40 to 125	•	•	•	
74AUP2G00-Q100	Dual 2-input NAND gate	2.0 - 5.5	± 8	3.2	-40 to 125				•
74HC00-Q100	Quad 2-input NAND gate	2.0 - 6.0	± 5.2	7.0	-40 to 125	•	•	•	
74HCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	10	-40 to 125	•	•	•	
74HC02-Q100	Quad 2-input NOR gate	2.0 - 6.0	± 5.2	7.0	-40 to 125	•	•	•	
74HCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	9.0	-40 to 125	•	•	•	
74HC03-Q100	Quad 2-input NAND gate; open-drain	2.0 - 6.0	5.2	8.0	-40 to 125	•	•		
74HCT03-Q100	Quad 2-input NAND gate; open-drain; TTL-enabled	4.5 - 5.5	± 4	10	-40 to 125	•	•		
74HC08-Q100	Quad 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40 to 125	•	•	•	
74HCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40 to 125	•	•	•	
74HC10-Q100	Triple 3-input NAND gate	2.0 - 6.0	± 5.2	9.0	-40 to 125	•	•		
74HCT10-Q100	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40 to 125	•	•		

Logic - Schmitt-trigger IC's

Type number	Description	Features				Package (suffix)				
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74AHC14-Q100	Hex inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40 to 125	•	•	•		
74AHCT14-Q100	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40 to 125	•	•	•		
74AHC132-Q100	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	± 8	3.3	-40 to 125	•	•	•		
74AHCT132-Q100	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	3.5	-40 to 125	•	•	•		
74HC7014-Q100	Hex buffer precision Schmitt-trigger	2.0 - 6.0	± 5.2	27	-40 to 125	•				
74HC14-Q100	Hex inverter Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40 to 125	•	•	•		
74HCT14-Q100	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40 to 125	•	•	•		
74HC132-Q100	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	± 5.2	11	-40 to 125	•	•	•		
74HCT132-Q100	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40 to 125	•	•			
74HC7541-Q100	Octal buffer/line driver Schmitt-trigger (3-State)	2.0 - 6.0	± 7.8	11	-40 to 125				•	•
74HCT7541-Q100	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	± 6	16	-40 to 125				•	•
74LV132-Q100	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	± 12	10	-40 to 125	•	•	•		
74LV7032A-Q100	Quad 2-input OR gate Schmitt-trigger	2.0 - 5.5	± 12	4.3	-40 to 125		•			
74LVC14A-Q100	Hex inverter Schmitt-trigger	1.2 - 3.6	± 24	3.2	-40 to 125	•	•	•		
74LVC132A-Q100	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	± 24	3.4	-40 to 125	•	•	•		
HEF4093B-Q100	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	± 24	30	-40 to 125	•				
HEF40106B-Q100	Hex inverter Schmitt-trigger	4.5 - 15.5	± 2.4	30	-40 to 85	•	•			

Logic - Flip-flops

Type number	Description	Features				Package (suffix)									
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74AHC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	± 8	3.7	-40 to 125	•	•	•							
74AHCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.3	-40 to 125	•	•	•							
74AHC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	± 8	4.2	-40 to 125						•	•	•		
74AHCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40 to 125						•	•	•		
74AHC374-Q100	Octal D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	4.4	-40 to 125						•	•			
74AHCT374-Q100	Octal D-type flip-flop; positive-edge trigger (3-state); TTL-enabled (3-state)	4.5 - 5.5	± 8	4.3	-40 to 125						•	•			
74HC73-Q100	Dual JK flip-flop with reset; negative-edge trigger	2.0 - 6.0	± 5.2	16	-40 to 125	•									
74HC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	14	-40 to 125	•	•	•							
74HCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40 to 125	•	•	•							
74HC107-Q100	Dual J-K flip-flop with reset; negative-edge trigger	2.0 - 6.0	± 5.2	16	-40 to 125	•	•								
74HCT107-Q100	Dual J-K flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40 to 125	•									
74HC109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40 to 125				•						
74HCT109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40 to 125				•	•					
74HC174-Q100	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40 to 125				•	•					

Logic - Flip-flops

Type number	Description	Features				Package (suffix)									
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74HCT174-Q100	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	18	-40 to 125				•	•					
74HC175-Q100	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40 to 125				•	•					
74HCT175-Q100	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40 to 125				•	•					
74HC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40 to 125						•	•	•		
74HCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40 to 125						•	•	•		
74HC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	± 7.8	13	-40 to 125						•	•			
74HCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 6	14	-40 to 125						•	•			
74HC574-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	± 7.8	14	-40 to 125						•	•	•		
74HCT574-Q100	"Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)"	4.5 - 5.5	± 6	15	-40 to 125						•	•			
74LV74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	± 12	11	-40 to 125	•	•								
74LVC74A-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	± 24	2.5	-40 to 125	•	•	•							
74LVC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	± 24	6	-40 to 125						•	•	•		
74LVC374A-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	2.7	-40 to 125						•	•	•		
74LVC573A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.4	-40 to 125						•	•	•		
74LVC16374A-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40 to 125										•
74LVCH16374A-Q100	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40 to 125										•
HEF4013B-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15	± 2.4	30	-40 to 85	•	•								
HEF4027B-Q100	Dual J-K flip-flop	3.0 - 15	± 2.4	30	-40 to 85				•						

Logic - Latches / Registered drivers

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)
74AHC573-Q100	Octal D-type transparent latch (3-state)	2.0 - 5.5	± 8	4.2	-40 to 125				•	•	•		
74AHCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.9	-40 to 125				•	•	•		
74HC259-Q100	8 bit addressable latch	2.0 - 6.0	± 5.2	18	-40 to 125	•	•	•					
74HCT259-Q100	8 bit addressable latch; TTL-enabled	4.5 - 5.5	± 4	20	-40 to 125	•	•	•					
74HC373-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	12	-40 to 125				•	•	•		
74HCT373-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	14	-40 to 125				•	•	•		
74HC573-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	14	-40 to 125				•	•	•		
74HCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	17	-40 to 125				•	•	•		
74LVC373A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.0	-40 to 125				•	•	•		
74LVC16373A-Q100	16-bit D-type transparent latch (3-state)	1.2 - 3.6	± 24	2.4	-40 to 125							•	•
74LVCH16373A-Q100	16-bit D-type transparent latch with bushold (3-state)	1.2 - 3.6	± 24	2.4	-40 to 125							•	•
HEF4043B-Q100	Quad R/S latch with set and reset (3-state)	3.0 - 15	± 2.4	25	-40 to 85	•							

Logic - Shift Registers

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74AHC164-Q100	8-bit serial-in/parallel-out shift register	2.0 - 5.5	± 8	4.5	-40 to 125	•	•	•					
74AHCT164-Q100	8-bit serial-in/parallel-out shift register; TTL-enabled	4.5 - 5.5	± 8	3.4	-40 to 125	•	•	•					
74AHC594-Q100	8-bit serial-in/parallel-out shift register with output register	2.0 - 5.5	± 8	4.1	-40 to 125				•	•	•		
74AHCT594-Q100	8-bit serial-in/parallel-out shift register with output register; TTL-enabled	4.5 - 5.5	± 8	3.8	-40 to 125				•	•	•		
74AHC595-Q100	8-bit serial-in/parallel-out shift register with output register (3-state)	2.0 - 5.5	± 8	4.0	-40 to 125				•	•	•		
74AHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40 to 125				•	•	•		
74HC164-Q100	8-bit serial-in/parallel-out shift register	2.0 - 6.0	± 5.2	12	-40 to 125	•	•	•					
74HCT164-Q100	8-bit serial-in/parallel-out shift register; TTL-enabled	4.5 - 5.5	± 4	12	-40 to 125	•	•	•					
74HC165-Q100	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	± 5.2	16	-40 to 125				•	•	•		
74HCT165-Q100	8-bit parallel or serial-in/serial-out shift register; TTL-enabled	4.5 - 5.5	± 4	14	-40 to 125				•	•	•		
74HC166-Q100	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	± 5.2	15	-40 to 125				•	•			
74HCT166-Q100	8-bit parallel or serial-in/serial-out shift register; TTL-enabled	4.5 - 5.5	± 4	23	-40 to 125				•				
74HC299-Q100	8-bit universal shift register; 3-state	2.0 - 6.0	± 7.8	15	-40 to 125							•	
74HC594-Q100	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	± 7.8	14	-40 to 125	•	•	•					
74HCT594-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled	4.5 - 5.5	± 6	15	-40 to 125				•				
74HC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 6.0	± 7.8	16	-40 to 125				•	•	•		
74HCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 6	25	-40 to 125				•	•	•		
74HC597-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register	2.0 - 6.0	± 5.2	16	-40 to 125				•	•			
74HCT597-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register; TTL-enabled	4.5 - 5.5	± 4	20	-40 to 125				•				
74HC4094-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	2.0 - 6.0	± 5.2	15	-40 to 125				•	•			
74HCT4094-Q100	8-bit serial-in/serial or parallel-out shift register with output register; TTL-enabled (3-state)	4.5 - 5.5	± 4	19	-40 to 125				•				
74LV164-Q100	8-bit serial-in/parallel-out shift register	1.0 - 5.5	± 12	12	-40 to 125	•	•	•					
74LV165-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	18	-40 to 125				•	•			
74LV165A-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	7.5	-40 to 125				•	•			
74LVC594A-Q100	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	± 24	3.1	-40 to 125				•	•	•		
74VHC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	± 8	4.0	-40 to 125				•	•	•		
74VHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40 to 125				•	•	•		
HEF4014B-Q100	8-bit shift register with synchronous parallel enable	3.0 - 15	± 2.4	40	-40 to 85				•				
HEF4021B-Q100	8-bit shift register with asynchronous parallel load	3.0 - 15	± 2.4	40	-40 to 85				•	•			
HEF4094B-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	3.0 - 15	± 2.4	50	-40 to 85				•	•			
HEF4794B-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40 to 85				•				
HEF4894B-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40 to 85							•	•

Logic - Counter / Frequency dividers

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74HC161-Q100	Presettable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	± 5.2	19	-40 to 125				•	•	
74HC193-Q100	Presettable synchronous 4-bit binary up/down counter	2.0 - 6.0	± 5.2	20	-40 to 125				•	•	
74HCT193-Q100	Presettable synchronous 4-bit binary up/down counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40 to 125				•	•	
74HC393-Q100	Dual 4-bit binary ripple counter	2.0 - 6.0	± 5.2	12	-40 to 125	•	•	•			
74HCT393-Q100	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40 to 125	•	•	•			
74HC4017-Q100	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	± 5.2	18	-40 to 125				•	•	•
74HCT4017-Q100	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	± 4.0	21	-40 to 125				•		•
74HC4020-Q100	14-stage binary ripple counter	2.0 - 6.0	± 5.2	11	-40 to 125				•	•	•
74HCT4020-Q100	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	15	-40 to 125				•	•	•
74HC4024-Q100	7-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40 to 125	•					
74HC4040-Q100	12-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40 to 125				•	•	•
74HCT4040-Q100	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	16	-40 to 125				•	•	•
74HC4060-Q100	14-stage binary ripple counter with oscillator	2.0 - 6.0	± 5.2	31	-40 to 125				•	•	•
74HCT4060-Q100	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	± 4.0	31	-40 to 125				•		•
74HC4520-Q100	Dual 4-bit synchronous binary counter	2.0 - 6.0	± 5.2	24	-40 to 125				•	•	
74HCT4520-Q100	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	± 4.0	24	-40 to 125				•		
74LV393-Q100	Dual 4-bit binary ripple counter	1.0 - 3.6	± 6	12	-40 to 125	•	•				
74LV4060-Q100	14-stage binary ripple counter with oscillator	1.0 - 5.5	± 6	29	-40 to 125				•	•	
HEF4017B-Q100	5-stage Johnson decade counter	3.0 - 15	± 2.4	40	-40 to 85				•		
HEF4020B-Q100	14-stage binary ripple counter	3.0 - 15	± 2.4	30	-40 to 85				•		
HEF4040B-Q100	12-stage binary ripple counter	3.0 - 15	± 2.4	35	-40 to 85				•		
HEF4060B-Q100	14-stage binary ripple counter with oscillator	3.0 - 15	± 2.4	50	-40 to 85				•		
HEF4520B-Q100	Dual 4-bit synchronous binary counter	3.0 - 15	± 2.4	15	-40 to 85				•		
HEF4541B-Q100	Programmable timer	3.0 - 15	- 4/ + 2.7	38	-40 to 85	•					

Logic - Decoders / Demultiplexers

Type number	Description	Features				Package (suffix)			
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT355-1 (PW)
74AHC138-Q100	3-to-8 line decoder/demultiplexer; inverting	2.0 - 5.5	± 8	4.4	-40 to 125	•	•	•	
74AHCT138-Q100	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	± 8	4.4	-40 to 125	•	•	•	
74AHC139-Q100	Dual 2-to-4 line decoder/demultiplexer	2.0 - 5.5	± 8	3.9	-40 to 125	•	•		
74AHCT139-Q100	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	± 8	3.6	-40 to 125	•	•		
74HC237-Q100	3-to-8 decoder/demultiplexer with address latches	2.0 - 6.0	± 5.2	18	-40 to 125	•			
74HC138-Q100	3-to-8 line decoder/demultiplexer; inverting	2.0 - 6.0	± 5.2	12	-40 to 125	•	•	•	
74HCT138-Q100	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	± 4	19	-40 to 125	•	•	•	
74HC139-Q100	Dual 2-to-4 line decoder/demultiplexer	2.0 - 6.0	± 5.2	14	-40 to 125	•	•		
74HCT139-Q100	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	± 4	16	-40 to 125	•	•		
74HC238-Q100	3-to-8 decoder/demultiplexer	2.0 - 6.0	± 5.2	14	-40 to 125	•	•	•	
74HCT238-Q100	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 - 5.5	± 4	18	-40 to 125	•	•	•	
74HC4514-Q100	4-to-16 decoder/demultiplexer with address latches	2.0 - 6.0	± 5.2	27	-40 to 125				•
74LVC138A-Q100	3-to-8 line decoder/demultiplexer; inverting	1.2 - 3.6	± 24	2.7	-40 to 125	•	•	•	
HEF4555B-Q100	Dual 1-to-4 line decoder/demultiplexer	3.0 - 15	± 2.4	30	-40 to 85	•			

Logic - Digital multiplexers

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74AHC157-Q100	Quad 2-input multiplexer	2.0 - 5.5	± 8	3.2	-40 to 125	•	•	•
74AHCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 8	3.2	-40 to 125	•	•	•
74AHC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 5.5	± 8	2.9	-40 to 125	•	•	
74AHCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 8	3.7	-40 to 125	•	•	
74HC151-Q100	8-input multiplexer	2.0 - 6.0	± 5.2	17	-40 to 125	•	•	
74HCT151-Q100	8-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40 to 125	•	•	
74HC153-Q100	Dual 4-input multiplexer	2.0 - 6.0	± 5.2	17	-40 to 125	•	•	
74HCT153-Q100	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40 to 125	•	•	
74HC157-Q100	Quad 2-input multiplexer	2.0 - 6.0	± 5.2	11	-40 to 125	•	•	•
74HCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	13	-40 to 125	•	•	•
74HC251-Q100	8-input multiplexer (3-State)	2.0 - 6.0	± 5.2	18	-40 to 125	•	•	
74HCT251-Q100	8-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 4	22	-40 to 125	•	•	
74HC253-Q100	Dual 4-input multiplexer (3-State)	2.0 - 6.0	± 7.8	17	-40 to 125	•		
74HCT253-Q100	Dual 4-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	17	-40 to 125	•		
74HC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 6.0	± 7.8	11	-40 to 125	•	•	
74HCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	13	-40 to 125	•	•	
74LVC157A-Q100	Quad 2-input multiplexer	1.2 - 3.6	± 24	2.5	-40 to 125	•	•	•

Logic - Specialty logic

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74AHC123A-Q100	Dual retriggerable monostable multivibrator with reset	2.0 - 5.5	± 8	5.1	-40 to 125	•	•	•
74AHCT123A-Q100	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	± 8	5.0	-40 to 125	•	•	•
74HC123-Q100	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	± 7.8	9.0	-40 to 125	•	•	•
74HCT123-Q100	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	± 4	26	-40 to 125	•	•	
74HC4538-Q100	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	± 5.2	27	-40 to 125	•	•	
74HCT4538-Q100	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	± 4	30	-40 to 125	•	•	
HEF4047B-Q100	Retriggerable astable multivibrator	3.0 - 15	± 2.4	50	-40 to 85	•		
HEF4528B-Q100	Dual retriggerable monostable multivibrator with reset	3.0 - 15	± 2.4	40	-40 to 85	•		
HEF4538B-Q100	Dual retriggerable precision monostable multivibrator	3.0 - 15	± 2.4	60	-40 to 85	•		

Voltage translators (Level-shifters)

Type number	Description	Features				Package (suffix)										
		V_{CC}(A) (V)	V_{CC}(B) (V)	I_O (mA)	T_{amb} (°C)	SOT1174-1 (GU12)	SOT1161-1 (GU)	SOT109-1 (D)	SOT402-1 (PW)	SOT403-1 (PW)	SOT360-1 (PW)	SOT355-1 (PW)	SOT762-1 (BQ)	SOT763-1 (BQ)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)
74ALVC164245-Q100	16-bit dual-supply voltage level translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	± 24	-40 to 125												•	
74AVC4T245-Q100	4-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125		•	•		•				•				
74AVC4T3144-Q100	4-bit dual-supply voltage-translating buffer (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125		•			•				•				
74AVC4T774-Q100	4-bit dual supply translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125	•												
74AVC4TD245-Q100	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125									•				
74AVC8T245-Q100	8-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125							•				•		
74AVC16T245-Q100	16-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125													•
74AVCH4T245-Q100	4-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125			•		•				•				
74LVC4T3144-Q100	4-bit dual supply buffer/line driver (3-state)	1.2 to 5.5	1.2 to 5.5	± 24	-40 to 125				•									
74LVC4245A-Q100	8-bit dual-supply voltage translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	± 24	-40 to 125							•				•		
74LVC8T245-Q100	8-bit dual-supply voltage translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40 to 125							•				•		
74LVCH8T245-Q100	8-bit dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40 to 125							•				•		
HEF4104B-Q100	Quad low-to-high voltage translator (3-state)	3.0 - 15.0	3.0 - 15.0	± 2.4	-40 to 85			•										
LSF0108-Q100	8-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	+64	-40 to 125						•				•			
LSF0204-Q100	4-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	+64	-40 to 125	•			•									
NXB0104-Q100	4-bit Dual supply translating transceiver; auto direction sensing; 3-state	1.2 - 3.6	1.65 - 5.5	± 0.02	-40 to 125	•			•				•					
NXB0106-Q100	6-bit Dual supply translating transceiver; auto direction sensing; 3-state	1.2 - 3.6	1.65 - 5.5	± 0.02	-40 to 125					•				•				
NXB0108-Q100	8-bit Dual supply translating transceiver; auto direction sensing; 3-state	1.2 - 3.6	1.65 - 5.5	± 0.02	-40 to 125						•				•			
NXS0104-Q100	4-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	-0.02/+1	-40 to 125	•			•				•					
NXS0108-Q100	8-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	-0.02/+1	-40 to 125						•				•			
NXS0506-Q100	SD 3.0-compatible memory card integrated auto-direction control and level translator with EMI filter and ESD protection	1.1 - 1.95	1.7 - 3.6	± 2	-40 to 85		•											

Voltage translators (Level-shifters)

Type number	Description	Features				Package (suffix)											
		V_{CC}(A) (V)	V_{CC}(B) (V)	I_O (mA)	T_{amb} (°C)	SOT1174-1 (GU12)	SOT1161-1 (GU)	SOT109-1 (D)	SOT402-1 (PW)	SOT403-1 (PW)	SOT360-1 (PW)	SOT355-1 (PW)	SOT762-1 (BQ)	SOT763-1 (BQ)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)
NXU1014-Q100	4-bit dual-supply voltage level translating buffer with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	+/-25	-40 to 125	•			•				•					
NXU0204-Q100	4-bit dual-supply voltage level translating buffer with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	+/-25	-40 to 125	•			•				•					
NXU0304-Q100	4-bit dual-supply voltage level translating buffer with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	+/-25	-40 to 125	•			•				•					

Analog switches and multiplexers - Analog switches

Type number	Description	Features					Package (suffix)								
		Configuration	V_{CC} (V)	R_{ON} (Ω)	R_{ON} (FLAT) (Ω)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT355-1 (PW)	SOT815-1 (BQ)	SOT163-1 (D)
74HC4051-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40 to 125				•	•	•			
74HCT4051-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	225	20	-40 to 125				•	•	•			
74HC4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	200	20	-40 to 125				•	•	•			
74HCT4052-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	200	20	-40 to 125				•	•	•			
74HC4053-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	2.0 - 10.0	200	20	-40 to 125				•	•	•			
74HCT4053-Q100	Triple single-pole, double-throw analog switch; TTL-enabled	SPDT-Z	4.5 - 5.5	200	20	-40 to 125				•	•	•			
74HC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	2.0 - 10.0	105	23	-40 to 125	•	•	•						
74HCT4066-Q100	Quad single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40 to 125	•	•	•						
74HC4067-Q100	Single-pole, 16-throw analog switch	SP16T-Z	2.0 - 10.0	200	25	-40 to 125							•	•	
74HCT4067-Q100	Single-pole, 16-throw analog switch; TTL-enabled	SP16T-Z	4.5 - 5.5	225	25	-40 to 125							•	•	
74HC4351-Q100	Single-pole. octal-throw analog switch with latch	SP8T-Z	2.0 - 10.0	200	20	-40~125									•
74HCT4351-Q100	Single-pole. octal-throw analog switch with latch; TTL enabled	SP8T-Z	4.5 - 5.5	225	20	-40~125									•
74HCT4316-Q100	Quad single-pole. single-throw analog switch with translation; TTL enabled	SPST-NO	4.5 - 5.5	400	50	-40~125				•					
74HC4851-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	220	-	-40 to 125				•	•	•			
74HCT4851-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	240	-	-40 to 125				•	•	•			
74HC4852-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	220	-	-40 to 125				•	•	•			
74HCT4852-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	240	-	-40 to 125				•	•	•			
74LV4051-Q100	8-channel analog multiplexer/demultiplexer	SP8T-Z	1.0 - 6.0	135	35	-40 to 125					•				
74LV4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	1.0 - 6.0	125	15	-40 to 125				•	•				
74LV4053-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	1.0 - 6.0	150	30	-40 to 125				•	•	•			
74LVC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40 to 125	•	•	•						
HEF4051B-Q100	Single-pole, octal-throw analog switch	SP8T-Z	3.0 - 15	175	30	-40 to 85				•	•				
HEF4052B-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	3.0 - 15	175	30	-40 to 85				•	•				
HEF4053B-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	3.0 - 15	175	30	-40 to 85				•	•				
HEF4066B-Q100	Quad single-pole, single-throw analog switch	SPST-NO	3.0 - 15	175	20	-40 to 85	•								
HEF4067B-Q100	Single-pole, 16-throw analog switch	SP16T-Z	3.0 - 15	175	20	-40 to 85							•		
NMUX1308-Q100	Single-pole octal-throw analog switch; injection current control	SP8T-Z	1.5 - 5.5	60	-	-40 to 125					•	•			
NMUX1309-Q100	Dual single-pole quad-throw analog switch; injection current control	2 x SP4T-Z	1.5 - 5.5	60	-	-40 to 125					•	•			

Analog switches and multiplexers - Bus switches

Type number	Description	Features				Package (suffix)								
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} (°C)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT355-1 (PW)
74CBTLV3125-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40 to 125	•	•							
74CBTLV3126-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40 to 125	•	•							
74CBTLV3244-Q100	4-bit bus switch with four output enables	2.3 - 3.6	3.3	7	-40 to 125								•	
74CBTLV3245-Q100	8-bit bus switch with one output enable	2.3 - 3.6	3.3	7	-40 to 125							•	•	
74CBTLVD3245-Q100	Octal bus switch level translator	3.0 - 3.6	1.8	7	-40 to 125								•	
CBT3245A-Q100	Octal bus switch	4.0 - 5.5	3.9	7	-40 to 85								•	
CBTD3384-Q100	10-bit bus switch level translator	4.5 - 5.5	3.3	7	-40~85									•

Analog switches and multiplexers - Multiplexers / Demultiplexers

Type number	Description	Features				Package (suffix)				
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} (°C)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74CB3Q3257-Q100	Quad 1-of-2 FET multiplexer/demultiplexer with charge pump	2.3 - 3.6	3.3	4	-40 to 85				•	
74CBTLV3253-Q100	Dual 4:1 mux/demux	2.3 - 3.6	3.3	7	-40 to 125			•	•	•
74CBTLV3257-Q100	Quad 2:1 mux/demux	2.3 - 3.6	3.3	7	-40 to 125			•	•	•
CBT3257A-Q100	Quad 1-of-2 multiplexer/demultiplexer	4.0 - 5.5	3.9	7	-40 to 85				•	

Interface - I²C general purpose I/O (GPIO)

Type number	Description	Features				Package (suffix)	
		V_{CC}(A) (V)	V_{CC}(B) (V)	I_O (mA)	T_{amb} (°C)	SOT355-1 (PW)	SOT8041-1 (BY)
NCA9535BY-Q100	Low-voltage 16-Bit I²C and SMBus low-power I/O expander with interrupt output and configuration registers	1.65 - 5.5	n.a.	- 10 / 25	-40~125	•	
NCA9535PW-Q100	Low-voltage 16-Bit I²C and SMBus low-power I/O expander with interrupt output and configuration registers	1.65 - 5.5	n.a.	- 10 / 25	-40~125		•
NCA9539BY-Q100	Low-voltage 16-Bit I²C and SMBus low-power I/O expander with interrupt output, reset pin and configuration registers	1.65 - 5.5	n.a.	- 10 / 25	-40~125	•	
NCA9539PW-Q100	Low-voltage 16-Bit I²C and SMBus low-power I/O expander with interrupt output, reset pin and configuration registers	1.65 - 5.5	n.a.	- 10 / 25	-40~125		•
NCA9555BY-Q100	Low-voltage 16-bit I²C and SMBus I/O expander with interrupt output and configuration registers	1.65 - 5.5	n.a.	- 10 / 25	-40~125	•	
NCA9555PW-Q100	Low-voltage 16-bit I²C and SMBus I/O expander with interrupt output and configuration registers	1.65 - 5.5	n.a.	- 10 / 25	-40~125		•
NCA9595PW-Q100	Low voltage 16-Bit I²C and SMBus I/O expander with interrupt output, configuration registers and programmable pull-up resistors	1.65 - 5.5	n.a.	- 10 / 25	-40~125	•	

Q100 Functions and Mini-Logic Packages (≤10 pins)

Logic - Buffers / Inverters

Type number	Description	Features				Package (suffix)								
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT886 (GM)	SOT1202 (GS)	SOT8065-1 (GZ)
74AHC1GU04-Q100	Single inverter; unbuffered	2.0 - 5.5	± 8	2.6	-40 to 125	•	•							•
74AHC3GU04-Q100	Triple inverter; unbuffered	2.0 - 5.5	± 8	2.5	-40 to 125					•	•			
74AHC1G04-Q100	Single inverter	2.0 - 5.5	± 8	3.1	-40 to 125	•	•							•
74AHCT1G04-Q100	Single inverter; TTL-enabled	4.5 - 5.5	± 8	3.4	-40 to 125	•	•							•
74AHC1G07-Q100	Single buffer; open-drain	2.0 - 5.5	8	4.2	-40 to 125	•	•							•
74AHC1G17-Q100	Single buffer with Schmitt-trigger inputs	2.0 - 5.5	± 8	3.2	-40 to 125	•								•
74AHCT1G17-Q100	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 - 5.5	± 8	4.1	-40 to 125	•								•
74AHC1G125-Q100	Single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40 to 125	•	•							•
74AHCT1G125-Q100	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40 to 125	•	•							•
74AHC1G126-Q100	Single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40 to 125	•	•							•
74AHCT1G126-Q100	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40 to 125	•	•							•
74AHC2G125-Q100	Dual buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40 to 125					•	•			
74AHCT2G125-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40 to 125					•	•			
74AHC2G126-Q100	Dual buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40 to 125					•	•			
74AHCT2G126-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40 to 125						•			
74AHC2G241-Q100	Dual buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40 to 125					•	•			
74AHCT2G241-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40 to 125						•			
74AHC3G04-Q100	Triple inverter	2.0 - 5.5	± 8	3.1	-40 to 125					•	•			
74AHCT3G04-Q100	Triple inverter; TTL-enabled	4.5 - 5.5	± 8	3.0	-40 to 125						•			
74AUP1G04-Q100	Single inverter	1.1 - 3.6	± 1.9	4.0	-40 to 125	•	•							•
74AUP1G06-Q100	Single inverter; open-drain	1.1 - 3.6	1.9	4.5	-40 to 125	•								•
74AUP1G07-Q100	Buffer; open-drain	0.8 - 3.6	1.9	4.5	-40 to 125	•								•
74AUP1G34-Q100	Single buffer	1.1 - 3.6	± 1.9	3.9	-40 to 125	•								•
74AUP1G125-Q100	Single buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40 to 125	•						•	•	•
74AUP2G04-Q100	Dual inverter	1.1 - 3.6	± 1.9	4.0	-40 to 125			•						
74AUP2GU04-Q100	Dual inverter; unbuffered	1.1 - 3.6	± 1.9	2.3	-40 to 125			•				•		
74HC1GU04-Q100	Single inverter; unbuffered	2.0 - 6.0	± 2.6	5.0	-40 to 125	•	•							
74HC2GU04-Q100	Dual inverter; unbuffered	2.0 - 6.0	± 5.2	5.0	-40 to 125			•	•					
74HC3GU04-Q100	Triple inverter; unbuffered	2.0 - 6.0	± 5.2	6.0	-40 to 125					•	•			
74HC1G04-Q100	Single inverter	2.0 - 6.0	± 2.6	7.0	-40 to 125	•	•							
74HCT1G04-Q100	Single inverter; TTL-enabled	4.5 - 5.5	± 2.0	8.0	-40 to 125	•	•							
74HC1G125-Q100	Single buffer/line driver (3-state)	2.0 - 6.0	± 2.6	9.0	-40 to 125	•	•							
74HCT1G125-Q100	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 2.0	10	-40 to 125	•	•							

Logic - Buffers / Inverters

Type number	Description	Features				Package (suffix)								
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT886 (GM)	SOT1202 (GS)	SOT8065-1 (GZ)
74HC2G04-Q100	Dual inverter	2.0 - 6.0	± 5.2	8.0	-40 to 125			•	•					
74HCT2G04-Q100	Dual inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40 to 125			•	•					
74HC2G34-Q100	Dual buffer	2.0 - 6.0	± 5.2	9.0	-40 to 125			•	•					
74HCT2G34-Q100	Dual buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40 to 125			•	•					
74HC2G125-Q100	Dual buffer/line driver (3-state)	2.0 - 6.0	± 5.2	10	-40 to 125					•	•			
74HCT2G125-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 4.0	12	-40 to 125					•	•			
74HC3G04-Q100	Triple inverter	2.0 - 6.0	± 5.2	8.0	-40 to 125					•	•			
74HCT3G04-Q100	Triple inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40 to 125					•	•			
74HC3G07-Q100	Triple buffer; open-drain	2.0 - 6.0	5.2	9.0	-40 to 125					•	•			
74HCT3G07-Q100	Triple buffer; open-drain; TTL-enabled	4.5 - 5.5	4	9.0	-40 to 125					•	•			
74HC3G34-Q100	Triple buffer	2.0 - 6.0	± 5.2	9.0	-40 to 125					•	•			
74HCT3G34-Q100	Triple buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40 to 125					•	•			
74LV1T04-Q100	Single supply translating inverter	1.6 - 5.5	± 8.0	6.2	-40 to 125	•	•							
74LV1T34-Q100	Single supply translating buffer	1.6 - 5.5	± 8.0	6.3	-40 to 125	•	•							•
74LVC1G04-Q100	Single inverter	1.65 - 5.5	± 32	2.0	-40 to 125	•	•							•
74LVC1G16-Q100	Single buffer	1.65 - 5.5	± 32	2.0	-40 to 125	•								
74LVC1G06-Q100	Single inverter; open-drain	1.65 - 5.5	32	2.3	-40 to 125	•	•							•
74LVC1G07-Q100	Single buffer; open-drain	1.65 - 5.5	32	2.2	-40 to 125	•	•						•	•
74LVC1G34-Q100	Single buffer	1.65 - 5.5	± 32	2.0	-40 to 125	•	•							•
74LVC1G125-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.1	-40 to 125	•	•					•		•
74LVC1G126-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.0	-40 to 125	•	•							•
74LVC1G240-Q100	Single inverter/line driver (3-state)	1.65 - 5.5	± 32	2.1	-40 to 125	•								
74LVC1GU04-Q100	Single inverter; unbuffered	1.65 - 5.5	± 32	1.6	-40 to 125	•	•							•
74LVC2G04-Q100	Dual inverter	1.65 - 5.5	± 32	2.7	-40 to 125			•	•				•	
74LVC2G06-Q100	Dual inverter; open-drain	1.65 - 5.5	32	2.3	-40 to 125			•	•					
74LVC2G07-Q100	Dual buffer; open-drain	1.65 - 5.5	32	2.6	-40 to 125			•	•					
74LVC2G34-Q100	Dual buffer	1.65 - 5.5	± 32	2.3	-40 to 125	•	•					•		
74LVC2G125-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.3	-40 to 125					•	•			
74LVC2G126-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.4	-40 to 125					•	•			
74LVC2G240-Q100	Dual inverter/line driver (3-state)	1.65 - 5.5	± 32	2.5	-40 to 125					•	•			
74LVC2G241-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.6	-40 to 125					•	•			
74LVC2GU04-Q100	Dual inverter; unbuffered	1.65 - 5.5	± 32	2.3	-40 to 125			•	•	•				
74LVC3G04-Q100	Triple inverter	1.65 - 5.5	± 32	2.7	-40 to 125					•	•			
74LVC3G07-Q100	Triple buffer; open-drain	1.65 - 5.5	32	2.1	-40 to 125					•	•			
74LVC3G34-Q100	Triple buffer	1.65 - 5.5	± 32	2.2	-40 to 125					•	•			
74LVC3GU04-Q100	Triple unbuffered inverter	1.65 - 5.5	± 32	2.3	-40 to 125						•			

Logic - Gates

Type number	Description	Features				Package (suffix)									
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT886 (GM)	SOT1203 (GS)	SOT1160 (GU)	SOT8065-1 (GZ)
74AHC1G09-Q100	Single 2-input AND gate; open-drain	2.0 - 5.5	± 8	3.2	-40 to 125	•	•								•
74AHC1G00-Q100	Single 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40 to 125	•	•								•
74AHCT1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40 to 125	•	•								
74AHC1G02-Q100	Single 2-input NOR gate	2.0 - 5.5	± 8	3.2	-40 to 125	•	•								•
74AHCT1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40 to 125	•	•								•
74AHC1G08-Q100	Single 2-input AND gate	2.0 - 5.5	± 8	3.2	-40 to 125	•	•								•
74AHCT1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40 to 125	•	•								•
74AHC1G32-Q100	Single 2-input OR gate	2.0 - 5.5	± 8	3.2	-40 to 125	•	•								•
74AHCT1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40 to 125	•	•								•
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40 to 125	•	•								•
74AHCT1G86-Q100	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40 to 125	•	•								
74AHC2G00-Q100	Dual 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40 to 125					•	•				
74AHCT2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40 to 125						•				
74AHC2G08-Q100	Dual 2-input AND gate	2.0 - 5.5	± 8	3.2	-40 to 125					•	•				
74AHCT2G08-Q100	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40 to 125					•	•				
74AHC2G32-Q100	Dual 2-input OR gate	2.0 - 5.5	± 8	3.2	-40 to 125					•	•				
74AHCT2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40 to 125					•	•				
74AUP1G00 Q100	Single 2-input NAND gate	1.1 - 3.6	± 1.9	8.3	-40 to 125	•									•
74AUP1G02-Q100	Single 2-input NOR gate	1.1 - 3.6	± 1.9	8.2	-40 to 125	•									•
74AUP1G08-Q100	Single 2-input AND gate	1.1 - 3.6	± 1.9	8.2	-40 to 125	•						•			•
74AUP1G09-Q100	Single 2-input AND gate; open-drain	2.0 - 5.5	± 8	3.2	-40 to 125	•									•
74AUP1G32-Q100	Single 2-input OR gate	1.1 - 3.6	±1.9	7.9	-40 to 125	•						•			•
74AUP1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	3.3	-40 to 125	•									
74AUP1Z04-Q100	Crystal driver with enable and internal resistor	1.1 - 3.6	± 1.9	5.6	-40 to 125			•							
74AUP2G00-Q100	Dual 2-input NAND gate	1.1 - 3.6	± 1.9	8.3	-40 to 125						•				
74AUP2G57-Q100	Configurable gate; Schmitt-trigger	1.1 - 3.6	± 1.9	8.7	-40 to 125									•	
74HC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 2.6	9.0	-40 to 125	•	•								•
74HCT1G86-Q100	Single 2-input EXCLUSIVE-OR gate	4.5 - 5.5	± 2	10	-40 to 125	•	•								•
74HC1G00-Q100	Single 2-input NAND gate	2.0 - 6.0	± 2.6	7.0	-40 to 125	•	•								•
74HCT1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 2	10	-40 to 125	•	•								•
74HC1G02-Q100	Single 2-input NOR gate	2.0 - 6.0	± 2.6	7.0	-40 to 125	•	•								•
74HCT1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 2.0	9.0	-40 to 125	•	•								•
74HC1G08-Q100	Single 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40 to 125	•	•								•
74HCT1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 2	11	-40 to 125	•	•								•
74HC1G32-Q100	Single 2-input OR gate	2.0 - 6.0	± 2.6	8.0	-40 to 125	•	•								•
74HCT1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40 to 125	•	•								•
74HC2G00-Q100	Dual 2-input NAND gate	2.0 - 6.0	± 5.6	9.0	-40 to 125					•	•				
74HCT2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40 to 125					•	•				
74HC2G02-Q100	Dual 2-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40 to 125					•	•				

Logic - Gates

Type number	Description	Features				Package (suffix)								
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT886 (GM)	SOT1203 (GS)	SOT8065-1 (GZ)
74HCT2G02-Q100	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	12	-40 to 125					•	•			
74HC2G08-Q100	ual 2-input AND gate	2.0 - 6.0	± 5.2	9.0	-40 to 125					•	•			
74HCT2G08-Q100	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	± 4	14	-40 to 125					•	•			
74HC2G32-Q100	Dual 2-input OR gate	2.0 - 6.0	± 5.2	9.0	-40 to 125					•	•			
74HCT2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	13	-40 to 125					•	•			
74HC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	9.0	-40 to 125					•	•			
74HCT2G86-Q100	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4.0	11	-40 to 125					•	•			
74LVC1G00-Q100	Single 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40 to 125	•	•							•
74LVC1G02-Q100	Single 2-input NOR gate	1.65 - 5.5	± 32	2.1	-40 to 125	•	•							•
74LVC1G08-Q100	Single 2-input AND gate	1.65 - 5.5	± 32	2.1	-40 to 125	•	•					•		•
74LVC1G10-Q100	Single 3-input NAND gate	1.65 - 5.5	± 32	2.6	-40 to 125			•						
74LVC1G11-Q100	Single 3-input AND gate	1.65 - 5.5	± 32	2.6	-40 to 125			•	•					
74LVC1G27-Q100	Single 3-input NOR gate	1.65 - 5.5	± 32	2.6	-40 to 125			•						
74LVC1G32-Q100	Single 2-input OR gate	1.65 - 5.5	± 32	2.1	-40 to 125	•	•					•		•
74LVC1G38-Q100	Single 2-input NAND gate; open-drain	1.65 - 5.5	32	2.3	-40 to 125	•	•							•
74LVC1G57-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40 to 125			•	•					
74LVC1G58-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40 to 125			•	•					
74LVC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.4	-40 to 125	•	•							•
74LVC1G97-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	6.3	-40 to 125			•						
74LVC1G98-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	6.3	-40 to 125				•					
74LVC1G332-Q100	Single 3-input OR gate	1.65 - 5.5	± 32	2.6	-40 to 125			•	•					
74LVC1GX04-Q100	Crystal driver	1.65 - 5.5	± 24	2.8	-40 to 125			•	•					
74LVC2G00-Q100	Dual 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40 to 125						•			
74LVC2G02-Q100	Dual 2-input NOR gate	1.65 - 5.5	± 32	2.4	-40 to 125					•	•			
74LVC2G08-Q100	Dual 2-input AND gate	1.65 - 5.5	± 24	2.1	-40 to 125					•	•		•	
74LVC2G32-Q100	Dual 2-input OR gate	1.65 - 5.5	± 32	2.2	-40 to 125					•	•			
74LVC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.3	-40 to 125					•	•			

Logic - Schmitt-trigger IC's

Type number	Description	Features				Package (suffix)								
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT886 (GM)	SOT1269-2(GX4)	SOT8065-1 (GZ)
74AHC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40 to 125	•	•							•
74AHCT1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40 to 125	•	•							•
74AHC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40 to 125					•	•			
74AHCT3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40 to 125					•	•			
74AUP1G14-Q100	Low-power Schmitt trigger inverter	0.8 - 3.6	± 1.9	3.7	-40 to 125								•	
74AUP1G17-Q100	Low-power Schmitt trigger	0.8 - 3.6	± 1.9	3.6	-40 to 125	•								
74AUP1G132-Q100	Single 2-input NAND gate; Schmitt-trigger	1.1 - 3.6	± 1.9	10	-40 to 125	•								•
74HC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 6.0	± 2.6	10	-40 to 125	•	•							
74HCT1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 2.0	15	-40 to 125	•	•							
74HC2G14-Q100	Dual inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40 to 125			•	•					
74HCT2G14-Q100	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40 to 125			•	•					
74HC2G17-Q100	Dual buffer Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40 to 125			•	•					
74HCT2G17-Q100	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40 to 125			•	•					
74HC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40 to 125					•	•			
74HCT3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40 to 125					•	•			
74LVC1G14-Q100	Single inverter Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40 to 125	•	•					•	•	•
74LVC1G17-Q100	Single buffer Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40 to 125	•	•					•		•
74LVC2G14-Q100	Dual inverter Schmitt-trigger	1.65 - 5.5	± 32	3.9	-40 to 125			•	•			•		
74LVC2G17-Q100	Dual buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40 to 125			•	•					
74LVC3G17-Q100	Triple buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40 to 125					•	•			

Logic - Flip-flops

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT833 (GT)	SOT8065-1 (GZ)
74AHC1G79-Q100	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	3.5	-40 to 125	•	•						
74AHCT1G79-Q100	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.5	-40 to 125	•	•						•
74AUP1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	± 1.9	8.1	-40 to 125						•		
74AUP1G175-Q100	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	± 1.9	7.4	-40 to 125			•					
74AUP1G374-Q100	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	± 1.9	7.9	-40 to 125			•					
74AUP2G79-Q100	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	8.5	-40 to 125						•		
74LVC1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40 to 125					•	•	•	
74LVC1G79-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.2	-40 to 125	•	•						•
74LVC1G80-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.4	-40 to 125	•	•						•
74LVC1G175-Q100	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	± 32	3.1	-40 to 125			•	•				
74LVC2G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40 to 125					•	•		

Logic - Latches / Registered drivers

Type number	Description	Features				Package (suffix)
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)
74AUP1G373-Q100	Single D-type transparent latch (3-state)	1.1 - 3.6	±1.9	8.5	-40 to 125	•

Logic - Counter / Frequency dividers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	Output drive capability (mA)	Logic switching levels	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)
74AHC1G4208-Q100	08-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	14	-40 to 125	•
74AHC1G4210-Q100	10-stage divider and oscillator	2.0 - 5.5	±8	CMOS	14	-40 to 125	•
74AHC1G4212-Q100	12-stage divider and oscillator	2.0 - 5.5	±8	CMOS	20	-40 to 125	•
74AHC1G4214-Q100	14-stage divider and oscillator	2.0 - 5.5	±8	CMOS	23	-40 to 125	•
74AHC1G4215-Q100	15-stage divider and oscillator	2.0 - 5.5	±8	CMOS	24	-40 to 125	•

Logic - Decoders / Demultiplexers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)	SOT457 (GV)
74LVC1G18-Q100	1-to-2 demultiplexer (3-state)	1.65 - 5.5	± 32	2.3	-40 to 125	•	•
74LVC1G19-Q100	1-to-2 demultiplexer	1.65 - 5.5	± 32	1.8	-40 to 125	•	

Logic - Digital multiplexers

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)	SOT457 (GV)	SOT886 (GM)
74AUP1G157-Q100	Single 2-input multiplexer	1.1 - 3.6	± 1.9	3.2	-40 to 125			•
74LVC1G157-Q100	Single 2-input multiplexer	1.65 - 5.5	± 32	2.2	-40 to 125	•	•	

Logic - Specialty logic

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT505-2 (DP)	SOT765-1 (DC)
74LVC1G123-Q100	Single retriggerable monostable multivibrator	1.65 - 5.5	± 32	3.5	-40 to 125	•	•

Voltage translator (Level-shifters)

Type number	Description	Features				Package (suffix)										
		V_{CC}(A) (V)	V_{CC}(B) (V)	I_O (mA)	T_{amb} (°C)	SOT353-1 (GW)	SOT363 (GW)	SOT753 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT552-1 (DP)	SOT833-1 (GT)	SOT886 (GM)	SOT1202 (GS)	SOT1203 (GS)	SOT1160-1 (GU)	SOT8065-1 (GZ)
74AUP1T08-Q100	2-input AND gate with voltage-level translator	2.3 - 3.6	n.a	± 1.9	-40 to 125	•											
74AUP1T34-Q100	Single dual supply translating buffer	1.1 - 3.6	1.1 - 3.6	± 1.9	-40 to 125	•							•				•
74AUP1T97-Q100	Configurable gate with voltage level translation	2.3 - 3.6	n.a	± 1.9	-40 to 125		•										
74AUP1T98-Q100	Configurable gate with voltage level translation	2.3 - 3.6	n.a.	± 1.9	-40 to 125		•										
74AVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125		•						•	•			
74AVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125		•										
74AVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125				•	•		•		•			
74AVCH2T45-Q100	Dual-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125					•							
74AVC2T245-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40 to 125											•	
74LV1T04-Q100	Single supply translating inverter	1.6 - 5.5	n.a	± 8	-40 to 125	•											•
74LV1T125-Q100	Single supply translating buffer/line driver; 3-state	1.6 - 5.5	n.a.	± 8	-40 to 125	•											
74LV1T34-Q100	Single supply translating buffer	1.6 - 5.5	n.a	± 8	-40 to 125	•		•									
74LVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40 to 125		•						•				
74LVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40 to 125		•										
74LVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40 to 125					•		•			•		
74LVCH2T45-Q100	Dual-bit dual-supply voltage level translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40 to 125					•							
LSF0101-Q100	1-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	n.a.	-40 to 125		•										
LSF0102-Q100	2-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	+64	-40 to 125				•	•							
NCA9306-Q100	2-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	n.a.	-40 to 125					•							
NXB0101-Q100	1-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	± 0.02	-40 to 125		•							•			
NXB0102-Q100	2-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	± 0.02	-40 to 125					•							
NXS0101-Q100	1-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	- 0.02 / 1.0	-40 to 125		•										
NXS0102-Q100	2-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	- 0.02 / 1.0	-40 to 125					•							
NXT4558-Q100	SIM card interface level translator with enable pin	1.08 - 1.98	1.62 - 3.3	± 1	-40 to 125											•	
NXU0101-Q100	1-bit dual-supply buffer/level translator with Schmitt-trigger;	0.09 - 5.5	0.09 - 5.5	+/-25	-40 to 125	•							•	•			
NXU0102-Q100	2-bit dual-supply buffer/level translator with Schmitt-trigger;	0.09 - 5.5	0.09 - 5.5	+/-25	-40 to 125					•		•					
NXU0202-Q100	2-bit dual-supply buffer/level translator with Schmitt-trigger;	0.09 - 5.5	0.09 - 5.5	+/-25	-40 to 125					•		•					

Analog switches and multiplexers - Analog switches

Type number	Description	Features					Package (suffix)								
		Configuration	V_{CC} (V)	R_{ON} (Ω)	R_{ON}(FLAT) (Ω)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)	SOT552-1 (DP)	SOT886 (GM)	SOT8065-1 (GZ)
74AHC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	2.0 - 5.5	40	5	-40 to 125	•	•							
74AHCT1G66-Q100	Single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	40	5	-40 to 125	•	•							
74HC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	2.0 - 9.0	105	23	-40 to 125	•	•							
74HCT1G66-Q100	Single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40 to 125	•	•							
74HC2G66-Q100	Dual single-pole, single-throw analog switch	SPST-NO	2.0 - 9.0	105	23	-40 to 125					•	•			
74HCT2G66-Q100	Dual single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40 to 125					•	•			
74LVC1G53-Q100	Single-pole, double-throw analog switch	SPDT-Z	1.65 - 5.5	15	1.5	-40 to 125					•	•			
74LVC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40 to 125	•	•							•
74LVC1G384-Q100	Single-pole, single-throw analog switch	SPST-NC	1.65 - 5.5	15	1.5	-40 to 125	•	•							•
74LVC1G3157-Q100	Single-pole, double-throw analog switch	SPDT	1.65 - 5.5	15	1.5	-40 to 125			•	•				•	
74LVC2G3157-Q100	Dual 10 Ω single-pole double-throw analog switch	SPDT	1.65 - 5.5	15	1.5	-40 to 125							•		
74LVC2G66-Q100	Dual single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40 to 125					•	•			
XS5A1T4157-Q100	Low-ohmic single-pole double-throw analog switch	SPDT-Z	4.5 - 5.5	4	0.9	-40 to 125			•						

Analog switches and multiplexers - Bus switches

Type number	Description	Features					Package (suffix)	
		Logic switching levels	V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)
74CBTLV1G125-Q100	Single bus switch	CMOS/LVTTL	2.3 - 3.6	3.3	7	-40~125	•	•

Buffers / Inverters

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74ABT04	Hex inverter	4.5 - 5.5	TTL	-15 / 20	50	2.2	100	-40 to 85
74ABT125	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.1	100	-40 to 85
74ABT126	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.0	100	-40 to 85
74ABT162244	16-bit buffer/line driver with 30 Ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	50	3.2	100	-40 to 85
74ABT16240A	16-bit inverter/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.0	150	-40 to 85
74ABT16244A	16-bit buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.1	150	-40 to 85
74ABT244	Octal buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.9	100	-40 to 85
74AHC04	Hex inverter	2.0 - 5.5	CMOS	±8	50	3.0	60	-40 to 125
74AHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40 to 125
74AHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40 to 125
74AHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
74AHC1G04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40 to 125
74AHC1G07	Single buffer; open-drain	2.0 - 5.5	CMOS	±8	50	2.5	60	-40 to 125
74AHC1G125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
74AHC1G126	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
74AHC1G14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
74AHC1G17	Single buffer with Schmitt-trigger inputs	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
74AHC1GU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.6	60	-40 to 125
74AHC244	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40 to 125
74AHC2G125	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
74AHC2G126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
74AHC2G241	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
74AHC3G04	Triple inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40 to 125
74AHC3G14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
74AHC3GU04	Triple inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.5	60	-40 to 125
74AHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40 to 125
74AHC9541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±8	15	3.4	60	-40 to 125
74AHCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125
74AHCT04A	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.1	60	-40 to 125
74AHCT07A	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	±8	15	4.0	60	-40 to 125
74AHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125
74AHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125
74AHCT14	Hex inverting; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT14A	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.7	60	-40 to 125
74AHCT17A	Hex buffer; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.2	60	-40 to 125
74AHCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40 to 125
74AHCT1G17	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40 to 125
74AHCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125

Buffers / Inverters

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74AHCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40 to 125
74AHCT244A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40 to 125
74AHCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT2G126	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT2G241	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
74AHCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125
74AHCT3G14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40 to 125
74AHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40 to 125
74AHCT541A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40 to 125
74AHCU04	Hex inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.4	60	-40 to 125
74AHCV05A	Hex inverter; Schmitt trigger; open-drain	2.0 - 5.5	CMOS	± 16	15	8.5	10	-40 to 125
74AHCV07A	Hex buffer; Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	15	3.8	60	-40 to 125
74AHCV14A	Hex inverter; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40 to 125
74AHCV17A	Hex buffer; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40 to 125
74AHCV244A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40 to 125
74AHCV541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40 to 125
74ALVC04	Hex inverter	1.65 - 3.6	TTL	±24	30	2.0	150	-40 to 85
74ALVC125	Quad buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	1.8	145	-40 to 85
74ALVC14	Hex inverter; Schmitt-trigger	1.65 - 3.6	TTL	±24	30	2.4	150	-40 to 85
74ALVC16244	16-bit buffer/line driver (3-state)	1.2 - 3.6	TTL	±24	50	1.9	150	-40 to 85
74ALVC244	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.9	130	-40 to 85
74ALVC541	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.3	130	-40 to 85
74ALVCH162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	30	2.7	150	-40 to 85
74ALVCH16244	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	TTL	±24	30	1.9	150	-40 to 85
74ALVCH162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	30	2.9	150	-40 to 85
74ALVCH16825	18-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40 to 85
74ALVCH16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40 to 85
74ALVT16244	16-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTL	-32 / 64	50	1.5	200	-40 to 85
74ALVT162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	LVTTL	±12	50	2.2	75	-40 to 85
74ALVT16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTL	-32 / 64	50	1.3	200	-40 to 85
74AUP1G04	Single inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40 to 125
74AUP1G06	Single inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40 to 125
74AUP1G07	Single buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40 to 125
74AUP1G125	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40 to 125
74AUP1G126	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40 to 125
74AUP1G14	Single inverter; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40 to 125
74AUP1G16	Single buffer	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40 to 125
74AUP1G240	Single inverter/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.2	70	-40 to 125
74AUP1G34	Single buffer	1.1 - 3.6	CMOS	±1.9	30	3.9	70	-40 to 125
74AUP1GU04	Single inverter; unbuffered	1.1 - 3.6	CMOS	±1.9	30	2.3	70	-40 to 125
74AUP1T04	Single supply voltage-translating inverter	2.3 - 3.6	CMOS	±4	15	3.7	70	-40 to 125

Buffers / Inverters

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74AUP1T14	Single supply voltage-translating inverter	2.3 - 3.6	CMOS	±4	15	3.7	70	-40 to 125
74AUP1T17	Single supply voltage-translating buffer	2.3 - 3.6	CMOS	±4	15	3.7	70	-40 to 125
74AUP1T50	Single supply voltage-translating buffer	2.3 - 3.6	CMOS	±4	15	3.7	70	-40 to 125
74AUP2G04	Dual inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40 to 125
74AUP2G06	Dual inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40 to 125
74AUP2G07	Dual buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40 to 125
74AUP2G125	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+-1.9	30	4.3	70	-40 to 125
74AUP2G126	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+-1.9	30	4.3	70	-40 to 125
74AUP2G14	Dual inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+-1.9	30	4.7	70	-40 to 125
74AUP2G16	Dual buffer	1.1 - 3.6	CMOS	+-1.9	30	4.7	70	-40 to 125
74AUP2G17	Dual buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+-1.9	30	7.8	70	-40 to 125
74AUP2G240	Dual inverter/line driver (3-state)	1.1 - 3.6	CMOS	+-1.9	30	4.2	70	-40 to 125
74AUP2G241	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+- 1.9	30	4.3	70	-40 to 125
74AUP2G34	Dual buffer	1.1 - 3.6	CMOS	+-1.9	30	3.9	70	-40 to 125
74AUP2GU04	Dual inverter; unbuffered	1.1 - 3.6	CMOS	+-1.9	30	2.3	70	-40 to 125
74AUP3G04	Triple inverter	1.1 - 3.6	CMOS	+-1.9	30	4.0	70	-40 to 125
74AUP3G07	Triple buffer; open-drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40 to 125
74AUP3G14	Triple inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+-1.9	30	4.7	70	-40 to 125
74AUP3G16	Triple buffer	1.1 - 3.6	CMOS	+-1.9	30	4.0	70	-40 to 125
74AUP3G17	Triple buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+-1.9	30	4.7	70	-40 to 125
74AUP3G34	Triple buffer	1.1 - 3.6	CMOS	+-1.9	30	4.0	70	-40 to 125
74AVC9112	1-to-4 fan-out buffer	0.8 - 3.6	CMOS/LVTTL	±12	15	4.0	200	-40 to 125
74HC04	Hex inverter	2.0 - 6.0	CMOS	+-5.2	50	7.0	36	-40 to 125
74HC05	Hex inverter; open drain	2.0 - 6.0	CMOS	5.2	50	11	36	-40 to 125
74HC125	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+-7.8	50	9.0	36	-40 to 125
74HC126	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+-7.8	50	9.0	36	-40 to 125
74HC14	Hex inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+-5.2	50	12	36	-40 to 125
74HC1G04	Single inverter	2.0 - 6.0	CMOS	+-2.6	50	7.0	36	-40 to 125
74HC1G125	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+-2.6	50	9.0	36	-40 to 125
74HC1G126	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+-2.6	50	9.0	36	-40 to 125
74HC1G14	Single inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+-2.6	50	10	36	-40 to 125
74HC1GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	+- 2.6	50	5.0	36	-40 to 125
74HC240	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	+-7.8	50	9.0	36	-40 to 125
74HC241	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+-7.8	50	7.0	36	-40 to 125
74HC244	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+-7.8	50	9.0	36	-40 to 125
74HC2G04	Dual inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40 to 125
74HC2G125	Dual buffer/line driver (3-state)	2.0 - 6.0	CMOS	±5.2	50	10	36	-40 to 125
74HC2G14	Dual inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40 to 125
74HC2G16	Dual buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40 to 125
74HC2G17	Dual buffer; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	12	36	-40 to 125
74HC2G34	Dual buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40 to 125

Buffers / Inverters

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74HC2GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	±2.6	50	5.0	36	-40 to 125
74HC365	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40 to 125
74HC366	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40 to 125
74HC367	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	8.0	36	-40 to 125
74HC368	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40 to 125
74HC3G04	Triple inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40 to 125
74HC3G06	Triple inverter; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40 to 125
74HC3G07	Triple buffer; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40 to 125
74HC3G14	Triple inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40 to 125
74HC3G16	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40 to 125
74HC3G34	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40 to 125
74HC3GU04	Triple inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	6.0	36	-40 to 125
74HC540	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40 to 125
74HC541	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40 to 125
74HC7014	Hex buffer; precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	27	36	-40 to 125
74HC7540	Octal inverter/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	11	36	-40 to 125
74HC7541	Octal buffer/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	10	36	-40 to 125
74HC9114	9-bit inverter; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40 to 125
74HC9115	9-bit buffer; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40 to 125
74HCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	8.0	36	-40 to 125
74HCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40 to 125
74HCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	17	36	-40 to 125
74HCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±2	50	8.0	36	-40 to 125
74HCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40 to 125
74HCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40 to 125
74HCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2	50	15	36	-40 to 125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	9.0	36	-40 to 125
74HCT241	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT2G04	Dual inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40 to 125
74HCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	12	36	-40 to 125
74HCT2G14	Dual inverter; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40 to 125
74HCT2G16	Dual buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	32	-40 to 125
74HCT2G17	Dual buffer; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40 to 125
74HCT2G34	Dual buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	32	-40 to 125
74HCT365	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT366	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT367	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT368	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40 to 125

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Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74HCT3G06	Triple inverter; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40 to 125
74HCT3G07	Triple buffer; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40 to 125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	21	36	-40 to 125
74HCT3G34	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40 to 125
74HCT540	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40 to 125
74HCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40 to 125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40 to 125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40 to 125
74HCT9114	9-bit inverter Schmitt-trigger; open-drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	15	13	36	-40 to 125
74HCU04	Hex inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	5.0	36	-40 to 125
74LV04	Hex inverter	1.0 - 5.5	CMOS	±12	50	6.0	30	-40 to 125
74LV04AT	Hex buffer	4.5 - 5.5	TTL	±12	15	3.3	60	-40 to 125
74LV05A	Hex inverter; open-drain	2.0 - 5.5	CMOS	12	15	2.9	60	-40 to 125
74LV07A	Hex buffer; open-drain	2.0 - 5.5	CMOS	16	15	3.6	60	-40 to 125
74LV07AT	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	16	15	3.5	60	-40 to 125
74LV14	Hex inverter; Schmitt-trigger	1.0 - 5.5	TTL	±12	50	13	30	-40 to 125
74LV14A	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40 to 125
74LV17A	Hex buffer; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40 to 125
74LV1T04	Single supply translating inverter	1.6 - 5.5	CMOS	±8	15	6.2	60	-40 to 125
74LV1T34	Single supply tanslating buffer	1.6 - 5.5	CMOS	±8	15	6.3	60	-40 to 125
74LV1T125	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	CMOS	±8	15	6.5	60	-40 to 125
74LV1T126	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	CMOS	±8	15	6.5	60	-40 to 125
74LV244	Octal buffer/line driver (3-state)	1.0 - 5.5	CMOS	±16	50	8.0	30	-40 to 125
74LV244A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40 to 125
74LV244AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40 to 125
74LV540A	Octal buffer/line driver (3-state); inverting	1.65 - 5.5	CMOS/LVTTL	±16	15	3.1	60	-40 to 125
74LV541A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40 to 125
74LV541AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40 to 125
74LVC04A	Hex inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40 to 125
74LVC06A	Hex inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40 to 125
74LVC07A	Hex buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40 to 125
74LVC125A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40 to 125
74LVC126A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40 to 125
74LVC14A	Hex inverter; Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	50	3.2	175	-40 to 125
74LVC162244A	16-bit buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40 to 125
74LVC16240A	16-bit inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40 to 125
74LVC16241A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40 to 125
74LVC16244A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40 to 125
74LVC1G04	Single inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40 to 125
74LVC1G06	Single inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40 to 125
74LVC1G07	Single buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40 to 125

Buffers / Inverters

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74LVC1G125	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.1	175	-40 to 125
74LVC1G126	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40 to 125
74LVC1G14	Single inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40 to 125
74LVC1G16	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40 to 125
74LVC1G17	Single buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40 to 125
74LVC1G240	Single inverter/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.1	175	-40 to 125
74LVC1G34	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40 to 125
74LVC1GU04	Single inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	1.6	175	-40 to 125
74LVC2244A	Octal buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	3.1	175	-40 to 125
74LVC240A	Octal inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.5	175	-40 to 125
74LVC244A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40 to 125
74LVC2G04	Dual inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.7	175	-40 to 125
74LVC2G06	Dual inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40 to 125
74LVC2G07	Dual buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.6	175	-40 to 125
74LVC2G125	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40 to 125
74LVC2G126	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.4	175	-40 to 125
74LVC2G14	Dual inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.9	175	-40 to 125
74LVC2G16	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40 to 125
74LVC2G17	Dual buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40 to 125
74LVC2G240	Dual inverter/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.5	175	-40 to 125
74LVC2G241	Dual buffer/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.6	175	-40 to 125
74LVC2G34	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40 to 125
74LVC2GU04	Dual inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40 to 125
74LVC3G04	Triple inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.7	175	-40 to 125
74LVC3G06	Triple inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.0	175	-40 to 125
74LVC3G07	Triple buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.1	175	-40 to 125
74LVC3G14	Triple inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.2	175	-40 to 125
74LVC3G16	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40 to 125
74LVC3G17	Triple buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40 to 125
74LVC3G34	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40 to 125
74LVC3GU04	Triple inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40 to 125
74LVC541A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.3	175	-40 to 125
74LVCH162244A	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	2.9	175	-40 to 125
74LVCH16244A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40 to 125
74LVCH16541A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40 to 125
74LVCH244A	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40 to 125
74LVCU04A	Hex inverter; unbuffered	1.2 - 3.6	CMOS/LVTTL	±24	50	2.0	175	-40 to 125
74LVT04	Hex inverter	2.7 - 3.6	TTL	-20 / 32	50	2.6	150	-40 to 85
74LVT125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40 to 85
74LVT126	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.4	150	-40 to 85
74LVT14	Hex inverter; Schmitt-trigger	2.7 - 3.6	TTL	-32 / 64	50	3.8	150	-40 to 85

Buffers / Inverters

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t_{pd} (ns)	f_{max} (MHz)	T_{amb} (°C)
74LVT162240A	16-bit inverter/line driver with bus hold and 30 Ω termination (3-state)	2.7 - 3.6	TTL	±12	50	2.6	150	-40 to 85
74LVT162244B	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	2.8	150	-40 to 85
74LVT16240A	16-bit inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40 to 85
74LVT16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40 to 85
74LVT2241	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	3.3	150	-40 to 85
74LVT2244	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	2.9	150	-40 to 85
74LVT240	Octal inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.5	150	-40 to 85
74LVT241	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.8	150	-40 to 85
74LVT244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40 to 85
74LVT244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40 to 85
74LVTH125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40 to 85
74LVTH16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40 to 85
74LVTH244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40 to 85
74LVTH244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40 to 85
74LVTN16244B	16-bit buffer/line driver (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40 to 85
74VHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40 to 125
74VHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40 to 125
74VHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
74VHC244	Octal inverter/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40 to 125
74VHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40 to 125
74VHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125
74VHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40 to 125
74VHCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40 to 125
74VHCT244	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	5.0	60	-40 to 125
74VHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40 to 125
HEF40244B	Octal buffer/line driver (3-state)	3.0 - 15.0	CMOS	-62 / 45	50	30	10	-40 to 125
HEF4049B	Hex inverter/line driver	3.0 - 15.0	CMOS	-3 / 20	50	20	10	-40 to 125
HEF4050B	Hex buffer/line driver	3.0 - 15.0	CMOS	-3 / 20	50	40	10	-40 to 125
HEF4069UB	Hex inverter; unbuffered	3.0 - 15.0	CMOS	±3.4	50	15	10	-40 to 125
XC7SET04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.5	60	-40 to 125
XC7SET125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40 to 125
XC7SET14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40 to 125
XC7SH04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.5	60	-40 to 125
XC7SH125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
XC7SH14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
XC7SHU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	3.5	60	-40 to 125
XC7WH126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40 to 125
XC7WH14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40 to 125
XC7WT14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40 to 125

Transceivers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Number of bits	f_{max} (MHz)	T_{vv} (°C)
74ABT162245A	16-bit transceiver with 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	100	-40 to 85
74ABT16245B	16-bit transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.3	16	150	-40 to 85
74ABT245	Octal transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.9	8	100	-40 to 85
74ABTH162245A	16-bit transceiver with bus hold and 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	80	-40 to 85
74AHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40 to 125
74AHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40 to 125
74AHCT245A	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.0	8	60	-40 to 125
74AHCV245A	Octal transceiver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	8	60	-40 to 125
74ALVC16245	16-bit transceiver (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40 to 85
74ALVC245	Octal transceiver (3-state)	1.65 - 3.6	TTL	±24	2.3	8	130	-40 to 85
74ALVCH162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±12	2.4	16	150	-40 to 85
74ALVCH16245	16-bit transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40 to 85
74ALVCH162601	18-bit universal bus transceiver with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±12	3.1	18	150	-40 to 85
74ALVCH16500	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.9	18	150	-40 to 85
74ALVCH16501	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40 to 85
74ALVCH16543	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.8	16	150	-40 to 85
74ALVCH16600	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40 to 85
74ALVCH16601	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40 to 85
74ALVCH16646	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40 to 85
74ALVCH16652	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40 to 85
74ALVCH16952	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.2	16	150	-40 to 85
74ALVT162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	2.3	16	75	-40 to 85
74HC245	Octal transceiver (3-state)	2.0 - 6.0	CMOS	±7.8	7.0	8	36	-40 to 125
74HCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	10	8	36	-40 to 125
74LV245	Octal transceiver (3-state)	1.0 - 5.5	TTL	±16	7.0	8	30	-40 to 125
74LV245A	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±16	3	8	60	-40 to 125
74LV245AT	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	3	8	60	-40 to 125
74LVC162245A	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/ LVTTL	±12	3.3	16	175	-40 to 125
74LVC16245A	16-bit transceiver (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	3.0	16	175	-40 to 125
74LVC2245A	Octal transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/ LVTTL	±12	3.3	8	175	-40 to 125
74LVC245A	Octal transceiver (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	2.9	8	175	-40 to 125
74LVCH162245A	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/ LVTTL	±12	3.3	16	175	-40 to 125
74LVCH16245A	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	3.0	16	175	-40 to 125
74LVCH245A	Octal transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	2.9	8	175	-40 to 125
74LVT162245B	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	2.5	16	150	-40 to 85
74LVT16245B	16-bit transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40 to 85
74LVT16543A	16-bit registered transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	2.2	16	150	-40 to 85

Transceivers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Number of bits	f_{max} (MHz)	T_{vv} (°C)
74LVT16543A	16-bit registered transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	2	16	150	-40 to 85
74LVT2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	3.2	8	150	-40 to 85
74LVT245	Octal transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	2.4	8	150	-40 to 85
74LVT245B	Octal transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	2	8	150	-40 to 85
74LVT640	Octal transceiver with bus hold; inverting (3-state)	2.7 - 3.6	TTL	-32 / 64	2.4	8	150	-40 to 85
74LVTH16245B	16-bit transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40 to 85
74LVTH2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	3.2	8	150	-40 to 85
74LVTN16245B	16-bit transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40 to 85
74VHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40 to 125
74VHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40 to 125

AND gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74ABT08	Quad 2-input AND gate	4.5 - 5.5	TTL	-15 / 20	2.4	50	100	4	-40 to 85
74AHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40 to 125
74AHC1G08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
74AHC1G09	Single 2-input AND gate; open drain	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
74AHC2G08	Dual 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	2	-40 to 125
74AHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40 to 125
74AHCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40 to 125
74AHCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40 to 125
74ALVC08	Quad 2-input AND gate	1.65 - 3.6	CMOS/ LVTTL	±24	2.0	50	145	4	-40 to 85
74AUP1T08	Single supply 2-input voltage-translating AND gate	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40 to 125
74AUP2G08	Dual 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30	70	2	-40 to 125
74AXP1G08	Single 2-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40 to 85
74AXP1G09	Single 2-input AND gate with open-drain output	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40 to 85
74AXP1G11	Single 3-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40 to 85
74HC08	Quad 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40 to 125
74HC11	Triple 3-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50	36	3	-40 to 125
74HC1G08	Single 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	1	-40 to 125
74HC21	Dual 4-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50	36	2	-40 to 125
74HC2G08	Dual 2-input AND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40 to 125
74HCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	4	-40 to 125
74HCT11	Triple 3-input AND gate	4.5 - 5.5	TTL	±4	11	50	36	3	-40 to 125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±2	11	50	36	1	-40 to 125
74HCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50	36	2	-40 to 125
74LV08	Quad 2-input AND gate	1.0 - 5.5	TTL	±12	7.0	50	30	4	-40 to 125
74LV08A	Quad 2-input AND gate	2.0 - 5.5	CMOS	±12	4.3	15	45	4	-40 to 125
74LV1T08	Single supply 2-input translating AND gate	1.6 - 5.5	CMOS	±8	6.5	15	60	1	-40 to 125
74LVC08A	Quad 2-input AND gate	1.2 - 3.6	CMOS / LVTTL	±24	2.1	50	150	4	-40 to 125
74LVC11	Triple 3-input AND gate	1.2 - 3.6	CMOS / LVTTL	±24	3.7	50	150	3	-40 to 125
74LVC1G08	Single 2-input AND gate	1.65 - 5.5	CMOS / LVTTL	±24	2.1	50	150	1	-40 to 125
74LVC1G11	Single 3-input AND gate	1.65 - 5.5	CMOS / LVTTL	±24	2.6	50	150	1	-40 to 125
74LVC2G08	Dual 2-input AND gate	1.65 - 5.5	CMOS / LVTTL	±24	2.1	50	150	2	-40 to 125
74LVT08	Quad 2-input AND gate	2.7 - 3.6	TTL	-20 / 32	3.4	50	150	4	-40 to 85
74VHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40 to 125
74VHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40 to 125
HEF4073B	Triple 3-input AND gate	3.0 - 15	CMOS	±2.4	20	50	10	3	-40 to 85
HEF4081B	Quad 2-input AND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40 to 85
HEF4082B	Dual 4-input AND gate	3.0 - 15	CMOS	±2.4	25	50	10	2	-40 to 85
XC7SET08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40 to 125
XC7SH08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125

NAND gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74ABT00	Quad 2-input NAND gate	4.5 - 5.5	TTL	-15 / 20	2.5	50	100	4	-40 to 85
74AHC00	Quad 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	4	-40 to 125
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40 to 125
74AHC1G00	Single 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	1	-40 to 125
74AHC2G00	Dual 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	2	-40 to 125
74AHCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	4	-40 to 125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40 to 125
74AHCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40 to 125
74AHCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40 to 125
74AUP1T00	Single supply 2-input voltage-translating NAND gate	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40 to 125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40 to 125
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40 to 125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40 to 125
74LV00A	Quad 2-input NAND gate	2.0 - 5.5	CMOS	± 12	4.3	15	45	4	-40 to 125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40 to 125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/ LVTTL	±24	3.4	50	175	4	-40 to 125
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	3.0	50	10	4	-40 to 85
74AHC30	8-input NAND gate	2.0 - 5.5	CMOS	±8	3.6	50	60	1	-40 to 125
74AHCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40 to 125
74ALVC00	Quad 2-input NAND gate	1.65 - 3.6	CMOS/ LVTTL	±24	2.1	50	145	4	-40 to 85
74AUP1G00	Single 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40 to 125
74AUP1G132	Single 2-input NAND gate Schmitt trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	1	-40 to 125
74AUP1G38	Single 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	1	-40 to 125
74AUP2G00	Dual 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40 to 125
74AUP2G38	Dual 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	2	-40 to 125
74HC00	Quad 2-input NAND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40 to 125
74HC03	Quad 2-input NAND gate; open drain	2.0 - 6.0	CMOS	5.2	8.0	50	36	4	-40 to 125
74HC10	Triple 3-input NAND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	3	-40 to 125
74HC1G00	Single 2-input NAND gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40 to 125
74HC20	Dual 4-input NAND gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	2	-40 to 125
74HC2G00	Dual 2-input NAND gate	2.0 - 6.0	CMOS	±5.6	9.0	50	36	2	-40 to 125
74HC30	8-input NAND gate	2.0 - 6.0	CMOS	±5.2	12	50	36	1	-40 to 125
74HCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	4	-40 to 125
74HCT03	Quad 2-input NAND gate; TTL-enabled; open drain	4.5 - 5.5	TTL	±4	10	50	36	4	-40 to 125
74HCT10	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	3	-40 to 125
74HCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±2	10	50	36	1	-40 to 125
74HCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40 to 125
74HCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	1	-40 to 125
74LV00	Quad 2-input NAND gate	1.0 - 5.5	TTL	±12	7	50	30	4	-40 to 125
74LV03	Quad 2-input NAND gate; TTL-enabled; open drain	1.0 - 5.5	TTL	±12	8.0	50	30	4	-40 to 125
74LV1T00	Single supply 2-input translating NAND gate	1.6 - 5.5	CMOS	±8	6.4	15	60	1	-40 to 125
74LVC00A	Quad 2-input NAND gate	1.2 - 3.6	CMOS/ LVTTL	±24	2.1	50	150	4	-40 to 125
74LVC10A	Triple 3-input NAND gate	1.2 - 3.6	CMOS/ LVTTL	±24	3.9	50	150	3	-40 to 125

NAND gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74LVC1G00	Single 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.2	50	175	1	-40 to 125
74LVC1G10	Single 3-input NAND gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.6	50	175	1	-40 to 125
74LVC1G38	Single 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTL	32	2.3	50	175	1	-40 to 125
74LVC2G00	Dual 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.2	50	175	2	-40 to 125
74LVC2G38	Dual 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTL	32	2.1	50	175	2	-40 to 125
HEF4011B	Quad 2-input NAND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40 to 85

OR gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	F_{max} (MHz)	Number of bits	T_{amb} (°C)
74ABT32	Quad 2-input OR gate	4.5 - 5.5	TTL	-15 / 20	2.3	50	100	4	-40 to 85
74AHC1G32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
74AHCT1G32	Single 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40 to 125
74AHC2G32	Dual 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	2	-40 to 125
74AHCT2G32	Dual 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50	60	2	-40 to 125
74AHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40 to 125
74AHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40 to 125
74ALVC32	Quad 2-input OR gate	1.65 - 3.6	CMOS/ LVTTL	±24	2.0	50	150	4	-40 to 125
74AUP1G32	Single 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30	70	1	-40 to 125
74AUP1G332	Single 3-input OR gate	1.1 - 3.6	CMOS	±1.9	6.8	30	70	1	-40 to 125
74AUP1T32	Single supply 2-input voltage-translating OR gate	2.3 - 3. 6	CMOS	±4	3.7	15	70	1	-40 to 125
74AUP2G32	Dual 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30	70	2	-40 to 125
74HC1G32	Single 2-input OR gate	2.0 - 6.0	CMOS	±2.6	8.0	50	36	1	-40 to 125
74HCT1G32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50	36	1	-40 to 125
74HC2G32	Dual 2-input OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40 to 125
74HCT2G32	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	13	50	36	2	-40 to 125
74HC32	Quad 2-input OR gate	2.0 - 6.0	CMOS	±5.2	6.0	50	36	4	-40 to 125
74HCT32	Quad 2-input OR gate	4.5 - 5.5	TTL	±4.0	9.0	50	36	4	-40 to 125
74HC4075	Triple 3-input OR gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	3	-40 to 125
74HCT4075	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	3	-40 to 125
74LV1T32	Single supply 2-input translating OR gate	1.6 - 5.5	CMOS	±8	6.6	15	60	1	-40 to 125
74LV32A	Quad 2-input OR gate	2.0 - 5.5	CMOS	±12	4.2	15	45	4	-40 to 125
74LV7032A	Quad 2-input OR gate; Schmitt trigger	2.0 - 5.5	CMOS	±12	4.3	15	45	4	-40 to 125
74LVC1G32	Single 2-input OR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.1	50	150	1	-40 to 125
74LVC1G332	Single 3-input OR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.6	50	150	1	-40 to 125
74LVC2G32	Dual 2-input OR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.2	50	150	2	-40 to 125
74LVC32A	Quad 2-input OR gate	1.2 - 3.6	CMOS/ LVTTL	±24	2.1	50	150	4	-40 to 125
74VHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40 to 125
74VHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40 to 125
HEF4071B	Quad 2-input OR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40 to 125
XC7SET32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40 to 125
XC7SH32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125

NOR gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50	60	4	-40 to 125
74AHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50	60	4	-40 to 125
74AHC1G02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
74AHCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40 to 125
74ALVC02	Quad 2-input NOR gate	1.65 - 3.6	CMOS/ LVTTL	±24	2.2	50	150	4	-40 to 85
74AUP1G02	Single 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40 to 125
74AUP1T02	Single supply 2-input voltage-translating NOR gate	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40 to 125
74AUP2G02	Dual 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40 to 125
74HC02	Quad 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40 to 125
74HCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	9.0	50	36	4	-40 to 125
74HC1G02	Single 2-input NOR gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40 to 125
74HCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	9.0	50	36	1	-40 to 125
74HC27	Triple 3-input NOR gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	3	-40 to 125
74HCT27	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	3	-40 to 125
74HC2G02	Dual 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40 to 125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40 to 125
74HC4002	Dual 4-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40 to 125
74LV02A	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±12	4.3	15	45	4	-40 to 125
74LV1T02	Single supply 2-input translating NOR gate	1.6 - 5.5	CMOS	±8	6.6	15	60	1	-40 to 125
74LVC02A	Quad 2-input NOR gate	1.2 - 3.6	CMOS/ LVTTL	±24	2.1	50	150	4	-40 to 125
74LVC1G02	Single 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.1	50	150	1	-40 to 125
74LVC1G27	Single 3-input NOR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.6	50	150	1	-40 to 125
74LVC2G02	Dual 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.4	50	150	2	-40 to 125
74LVT02	Quad 2-input NOR gate	2.7 - 3.6	TTL	-20 / 32	2.8	50	150	4	-40 to 85
74VHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50	60	4	-40 to 125
74VHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50	60	4	-40 to 125
HEF4001B	Quad 2-input NOR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40 to 85
XC7SET02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40 to 125
XC7SH02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125

EXCLUSIVE-OR gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AHC1G86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	1	-40 to 125
74AHCT1G86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40 to 125
74AHC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	4	-40 to 125
74AHCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.4	50	60	4	-40 to 125
74AUP1G386	Single 3-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	8.6	30	70	1	-40 to 125
74AUP1G86	Single 2-input Exclusive-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	1	-40 to 125
74AUP1T86	Single supply 2-input translating EXCLUSIVE-OR gate	2.3 - 3.6	CMOS	±1.9	3.9	15	70	1	-40 to 125
74AUP2G86	Dual 2-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	2	-40 to 125
74HC1G86	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±2.6	9.0	50	36	1	-40 to 125
74HCT1G86	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50	36	1	-40 to 125
74HC2G86	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40 to 125
74HCT2G86	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	11	50	36	2	-40 to 125
74HC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40 to 125
74HCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50	36	4	-40 to 125
74LV1T86	Single supply 2-input translating EXCLUSIVE-OR gate	1.6 - 5.5	CMOS	±8	7.3	15	60	1	-40 to 125
74LVC1G386	Single 3-Input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTL	±32	4.5	50	150	1	-40 to 125
74LVC1G86	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.4	50	150	1	-40 to 125
74LVC2G86	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTL	±32	2.3	50	150	2	-40 to 125
74LVC86A	Quad 2-input EXCLUSIVE-OR gate	1.2 - 3.6	CMOS/ LVTTL	±24	3.0	50	150	4	-40 to 125
HEF4030B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50	10	4	-40 to 85
HEF4070B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50	10	4	-40 to 85
XC7SET86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40 to 125
XC7SH86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	1	-40 to 125

EXCLUSIVE-NOR gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	T_{amb} (°C)
74AUP1T87	Single supply 2-input translating EXCLUSIVE-NOR gate	2.3 - 3.6	CMOS	±4	4		70	-40 to 125
74LV1T87	Single supply 2-input translating EXCLUSIVE-NOR gate	1.6 - 5.5	CMOS	±8	7.3		60	-40 to 125
HEF4077B	Quad 2-input EXCLUSIVE-NOR gate	3.0 - 15	CMOS	±2.4	30	50	10	-40 to 85

Combination gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AUP1G0832	Single 3-input AND-OR gate	1.1 - 3.6	CMOS	±1.9	6.7	30	70	1	-40 to 125
74AUP1G3208	Single 3-input OR-AND gate	1.1 - 3.6	CMOS	±1.9	7.4	30	70	1	-40 to 125
74AUP1G885	Dual function gate	1.1 - 3.6	CMOS	±1.9	7.6	30	70	1	-40 to 125
74AUP1Z04	Crystal driver with enable and internal resistor	1.1 - 3.6	CMOS	±1.9	5.6	30	70	1	-40 to 125
74AUP1Z125	Crystal driver with enable and internal resistor (3-state)	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40 to 125
74AUP2G0604	Inverter with open drain and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	2	-40 to 125
74AUP2G3404	Buffer and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	2	-40 to 125
74AUP2G3407	Buffer and buffer with open drain	1.1 - 3.6	CMOS	±1.9	4.1	30	70	2	-40 to 125
74AUP3G0434	Dual inverter and single buffer	1.1 - 3.6	CMOS	±1.9	4.0	30	70	3	-40 to 125
74AUP3G3404	Dual buffer and single inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	3	-40 to 125
74LVC1GX04	Crystal driver	1.65 - 5.5	CMOS / LVTTL	±24	2.8	50	150	1	-40 to 125
HEF4007UB	Dual complementary pair and inverter	3.0 - 15	CMOS	±3.4	15	50	10	2	-40 to 85

Configurable gates

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (typ) (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40 to 125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40 to 125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40 to 125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40 to 125
74AUP1G3208	Configurable multiple function gate	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40 to 125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.9	15	70	1	-40 to 125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.9	15	70	1	-40 to 125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.9	15	70	1	-40 to 125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.9	15	70	1	-40 to 125
74AUP2G57	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40 to 125
74AUP2G58	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40 to 125
74AUP2G97	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40 to 125
74AUP2G98	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40 to 125
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTL	±32	8.4	50	150	1	-40 to 125

Schmitt-triggers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40 to 125
74AHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40 to 125
74AHC1G14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
74AHC1G17	Single buffer Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
74AHC3G14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40 to 125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL- enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40 to 125
74AHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	60	6	-40 to 125
74AHCT17A	Hex buffer Schmitt-trigger	4.5 - 5.5	TTL	±8	3.2	50	60	8	-40 to 125
74AHCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40 to 125
74AHCT1G17	Single buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40 to 125
74AHCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40 to 125
74AHCV05A	Hex inverter; Schmitt trigger; open-drain	2.0 - 5.5	CMOS	± 16	5.8	15	10	6	-40 to 125
74AHCV07A	Hex buffer Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	3.8	15	60	6	-40 to 125
74AHCV14A	Hex inverter Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40 to 125
74AHCV17A	Hex buffer Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40 to 125
74AHCV244A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40 to 125
74AHCV245A	Octal transceiver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	15	60	8	-40 to 125
74AHCV541A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40 to 125
74ALVC14	Hex inverter Schmitt-trigger	1.65 - 3.6	TTL	±24	2.4	50	150	6	-40 to 85
74AUP1G132	Single 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10.0	30	70	1	-40 to 125
74AUP1G14	Single inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40 to 125
74AUP1G17	Single buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	1	-40 to 125
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40 to 125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40 to 125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40 to 125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40 to 125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40 to 125
74AUP2G14	Dual inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	2	-40 to 125
74AUP2G17	Dual buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	2	-40 to 125
74AUP2G58	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40 to 125
74AUP2G97	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40 to 125
74AUP2G98	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	2	-40 to 125
74AUP3G14	Triple inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40 to 125

Schmitt-triggers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AUP3G17	Triple Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40 to 125
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40 to 125
74HC14	Hex inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	6	-40 to 125
74HC1G14	Single inverter Schmitt-trigger	2.0 - 6.0	CMOS	±2.6	10	50	36	1	-40 to 125
74HC2G14	Dual inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	2	-40 to 125
74HC2G17	Dual buffer Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	2	-40 to 125
74HC3G14	Triple inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	3	-40 to 125
74HC7014	Hex buffer precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	27	50	36	6	-40 to 125
74HC7540	Octal inverter/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40 to 125
74HC7541	Octal buffer/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40 to 125
74HC9114	9-bit inverter Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5.2	12	50	36	9	-40 to 125
74HC9115	9-bit buffer Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5.2	12	50	36	9	-40 to 125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL- enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40 to 125
74HCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	6	-40 to 125
74HCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2.0	15	50	36	1	-40 to 125
74HCT2G14	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40 to 125
74HCT2G17	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40 to 125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	3	-40 to 125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL- enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40 to 125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL- enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40 to 125
74HCT9114	9-bit inverter Schmitt-trigger; open drain; TTL- enabled (3-state)	4.5 - 5.5	TTL	4	13	50	36	9	-40 to 125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40 to 125
74LV14	Hex inverter Schmitt-trigger	1.0 - 5.5	TTL	±12	13	50	30	6	-40 to 125
74LV14A	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±12	3.4	15	60	6	-40 to 125
74LV7032A	Quad 2-input OR gate; Schmitt trigger	2.0 - 5.5	CMOS	±12	4.3	15	45	4	-40 to 125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	175	4	-40 to 125
74LVC14A	Hex inverter Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	175	6	-40 to 125
74LVC1G14	Single inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40 to 125
74LVC1G17	Single buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40 to 125
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40 to 125

Schmitt-triggers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40 to 125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	8.4	50	150	1	-40 to 125
74LVC2G14	Dual inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.9	50	175	2	-40 to 125
74LVC2G17	Dual buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	2	-40 to 125
74LVC3G14	Triple inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.2	50	175	3	-40 to 125
74LVC3G17	Triple buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	3	-40 to 125
74LVT14	Hex inverter Schmitt-trigger	2.7 - 3.6	TTL	±32	3.8	50	150	6	-40 to 125
74VHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40 to 125
74VHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	6	-40 to 125
HEF40106B	Hex inverter Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	6	-40 to 85
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	4	-40 to 125
XC7SET14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40 to 125
XC7SH14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40 to 125
XC7WH14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40 to 125
XC7WT14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40 to 125

Flip-flops

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	T_{amb} (°C)
74ABT74	Dual D-type flip-flop with set and reset; positive-edge trigger	4.5 - 5.5	TTL	-0.75	3.0	50	250	-40 to 85
74AHC1G79	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.5	50	90	-40 to 125
74AHC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	4.2	50	165	-40 to 125
74AHC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	185	-40 to 125
74AHC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	130	-40 to 125
74AHC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.7	50	170	-40 to 125
74AHCT1G79	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	90	-40 to 125
74AHCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	120	-40 to 125
74AHCT374	Octal D-type flip-flop; positive-edge trigger (3-state)	4.5 - 5.5	TTL	±8	4.3	50	140	-40 to 125
74AHCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	4.4	50	130	-40 to 125
74AHCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	160	-40 to 125
74ALVC374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40 to 85
74ALVC574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40 to 85
74ALVC74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.65 - 3.6	TTL	±24	2.3	50	425	-40 to 85
74ALVCH16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	TTL	±24	2.3	50	350	-40 to 85
74ALVCH16821	20-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±24	2.5	50	350	-40 to 85
74ALVCH16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	TTL	±24	2.1	50	350	-40 to 85
74ALVT162821	20-bit D-type flip-flop with source termination; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±12	3.2	50	150	-40 to 85
74ALVT162823	18-bit D-type flip-flop with source termination; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±12	3.0	50	150	-40 to 85
74ALVT16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	150	-40 to 85
74ALVT16823	18-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.9	50	250	-40 to 85
74AUP1G175	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	7.4	30	70	-40 to 125
74AUP1G374	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	CMOS	±1.9	7.9	30	400	-40 to 125
74AUP1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.2	30	400	-40 to 125
74AUP1G79	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40 to 125
74AUP1G80	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40 to 125
74AUP2G79	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	8.5	30	400	-40 to 125
74AUP2G80	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40 to 125
74HC107	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	78	-40 to 125
74HC109	Dual JK-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	75	-40 to 125
74HC112	Dual JK-type flip-flop with set and reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	66	-40 to 125
74HC173	Quad D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	17	50	88	-40 to 125
74HC174	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	99	-40 to 125
74HC175	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	83	-40 to 125
74HC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	122	-40 to 125
74HC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	83	-40 to 125

Flip-flops

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	T_{amb} (°C)
74HC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	CMOS	±7.8	13	50	83	-40 to 125
74HC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	133	-40 to 125
74HC73	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	77	-40 to 125
74HC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	14	50	82	-40 to 125
74HCT107	Dual JK-type flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	73	-40 to 125
74HCT109	Dual JK-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	61	-40 to 125
74HCT112	Dual JK-type flip-flop with set and reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	70	-40 to 125
74HCT173	Quad D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	88	-40 to 125
74HCT174	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	69	-40 to 125
74HCT175	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	54	-40 to 125
74HCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	36	-40 to 125
74HCT374	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	13	50	48	-40 to 125
74HCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±6	14	50	53	-40 to 125
74HCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	15	50	76	-40 to 125
74HCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	59	-40 to 125
74LV74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	TTL	±12	11	50	75	-40 to 125
74LVC16374A	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	3.8	50	150	-40 to 125
74LVC1G175	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTL	±32	3.1	50	300	-40 to 125
74LVC1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTL	±32	3.5	50	280	-40 to 125
74LVC1G79	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTL	±32	2.2	50	450	-40 to 125
74LVC1G80	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTL	±32	2.4	50	450	-40 to 125
74LVC273	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTL	±24	6.0	50	230	-40 to 125
74LVC2G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTL	±32	3.5	50	280	-40 to 125
74LVC374A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	2.7	50	100	-40 to 125
74LVC377	Octal D-type flip-flop with data enable; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTL	±24	6.0	50	230	-40 to 125
74LVC574A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	3.2	50	150	-40 to 125
74LVC74A	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTL	±24	2.5	50	250	-40 to 125
74LVCH162374A	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	3.8	50	150	-40 to 125
74LVCH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTL	±24	3.8	50	150	-40 to 125
74LVT162374	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	2.7 - 3.6	TTL	±12	3.0	50	150	-40 to 85
74LVT16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 - 3.6	TTL	-32 / 64	3.0	50	150	-40 to 85
74LVTH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 - 3.6	TTL	-32 / 64	3.0	50	150	-40 to 85
HEF4013B	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15.0	CMOS	±2.4	30	50	40	-40 to 85
HEF40175B	Quad D-type flip-flop with reset; positive-edge trigger	3.0 - 15.0	CMOS	±2.4	25	50	45	-40 to 85
HEF4027B	Dual JK-type flip-flop	3.0 - 15.0	CMOS	±2.4	30	50	30	-40 to 85

Latches / Registered drivers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
74AHC373	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.3	50	8	-40 to 125
74AHC573	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.2	50	8	-40 to 125
74AHCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.9	50	8	-40 to 125
74ALVC373	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40 to 85
74ALVC573	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40 to 85
74ALVCH16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	16	-40 to 85
74ALVCH16841	20-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.4	50	20	-40 to 85
74ALVCH16843	18-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	18	-40 to 85
74ALVT16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	16	-40 to 85
74AUP1G373	Single D-type transparent latch (3-state)	1.1 - 3.6	CMOS	±1.9	8.5	30	1	-40 to 125
74HC259	8-bit addressable latch	2.0 - 6.0	CMOS	±5.2	18	50	8	-40 to 125
74HC373	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	12	50	8	-40 to 125
74HC573	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	8	-40 to 125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40 to 125
74HCT259	8-bit addressable latch; TTL-enabled	4.5 - 5.5	TTL	±4	20	50	8	-40 to 125
74HCT373	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	14	50	8	-40 to 125
74HCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	8	-40 to 125
74LVC162373A	16-bit D-type transparent latch with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.2	50	16	-40 to 125
74LVC16373A	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40 to 125
74LVC373A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	8	-40 to 125
74LVC573A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	8	-40 to 125
74LVCH162373A	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	16	-40 to 125
74LVCH16373A	16-bit D-type transparent latch with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40 to 125
74LVT162373	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	2.5	50	16	-40 to 85
74LVT16373A	16-bit D-type transparent latch with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	50	16	-40 to 85
74LVT573	Octal D-type transparent latch (3-state)	2.7 - 3.6	TTL	-32 / 64	2.7	50	8	-40 to 85
HEF4043B	Quad R/S latch with set and reset (3-state)	3.0 - 15.0	CMOS	±2.4	25	50	4	-40 to 85

Shift registers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	f_{max} (MHz)	Number of bits	T_{amb} (°C)
74AHC164	8-bit serial-in/parallel-out shift register	2.0 - 5.5	CMOS	+/- 8	4.5	115	8	-40 to 125
74AHCT164	8-bit serial-in/parallel-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 8	3.4	115	8	-40 to 125
74AHC594	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 5.5	CMOS	+/- 8	4.1	160	8	-40 to 125
74AHCT594	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled	4.5 - 5.5	TTL	+/- 8	3.8	160	8	-40 to 125
74AHC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	CMOS	+/- 8	4	170	8	-40 to 125
74AHCT595	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 8	3.8	170	8	-40 to 125
74HC299	8-bit universal shift register (3-state)	2.0 - 6.0	CMOS	+/- 7.8	19	54	8	-40 to 125
74HC164	8-bit serial-in/parallel-out shift register	2.0 - 6.0	CMOS	+/- 5.2	12	78	8	-40 to 125
74HCT164	8-bit serial-in/parallel-out shift register; TTL enabled	2.0 - 6.0	TTL	+/- 5.2	12	78	8	-40 to 125
74HC165	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	CMOS	+/- 5.2	16	56	8	-40 to 125
74HCT165	8-bit parallel or serial-in/serial-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 4	14	48	8	-40 to 125
74HC166	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	CMOS	+/- 5.2	15	63	8	-40 to 125
74HCT166	8-bit parallel or serial-in/serial-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 4.0	23	50	8	-40 to 125
74HC594	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	CMOS	+/- 7.8	14	109	8	-40 to 125
74HCT594	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled	4.5 - 5.5	TTL	+/- 6	15	100	8	-40 to 125
74HC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 6.0	CMOS	+/- 7.8	16	108	8	-40 to 125
74HCT595	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 6	25	57	8	-40 to 125
74HC597	8-bit parallel or serial-in/parallel-out shift register with parallel input storage register	2.0 - 6.0	CMOS	+/- 5.2	16	108	8	-40 to 125
74HCT597	8-bit parallel or serial-in/parallel-out shift register with parallel input storage register; TTL enabled	4.5 - 5.5	TTL	+/- 4	20	83	8	-40 to 125
74HC4094	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	2.0 - 6.0	CMOS	+/- 5.2	15	95	8	-40 to 125
74HCT4094	8-bit serial-in/serial or parallel-out shift register with output register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 4	19	86	8	-40 to 125
74LV164	8-bit serial-in/parallel-out shift register	1.0 - 5.5	CMOS	+/- 12	12	78	8	-40 to 125
74LV165	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	CMOS	+/- 12	18	78	8	-40 to 125
74LV165A	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	CMOS	+/- 12	7.5	115	8	-40 to 125
74LV595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	1.0 - 3.6	CMOS	+/- 8	15	77	8	-40 to 125
74LV4094	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	1.0 - 3.6	CMOS	+/- 6	14	95	8	-40 to 125
74LVC594A	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	CMOS/LVTTL	+/- 24	3.1	180	8	-40 to 125
74LVC595A	8-bit serial-in/parallel-out shift register with output storage register (3-state)	1.2 - 5.5	CMOS/LVTTL	+/- 24	4	180	8	-40 to 125
74LVC8T595	Dual supply 8-bit serial-in/serial-out or parallel-out shift register; 3-state	1.1 - 5.5	CMOS/ LVTTL	±24	4.1	15	8	-40 to 125
74VHC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	CMOS	+/- 8	4	170	8	-40 to 125
74VHCT595	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 8	3.8	170	8	-40 to 125
HEF4014B	8-bit shift register with synchronous parallel enable	4.5 - 15	CMOS	+/- 2.4	40	40	8	-40 to 85
HEF4015B	dual 4-bit serial-in/parallel-out shift register	4.5 - 15	CMOS	+/- 2.4	40	44	2	-40 to 85
HEF4021B	8-bit shift register with asynchronous parallel load	4.5 - 15	CMOS	+/- 2.4	40	40	8	-40 to 85
HEF4094B	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	4.5 - 15	CMOS	+/- 2.4	50	28	8	-40 to 85
HEF4794B	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 15	CMOS	-20	45	28	8	-40 to 85
HEF4894B	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 15	CMOS	-20	45	28	12	-40 to 85

Counters / Frequency dividers

Type number	Description	V_{CC} (V)	Output drive capability (mA)	Logic switching levels	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	T_{amb} (°C)
74AHC1G4208	08-stage divider and oscillator	2.0 - 5.5	±8	CMOS	14	15	165	-40 to 125
74AHC1G4210	10-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	17	15	125	-40 to 125
74AHC1G4212	12-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	20	15	125	-40 to 125
74AHC1G4214	14-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	23	15	125	-40 to 125
74AHC1G4215	14-stage divider and oscillator	2.0 - 5.5	± 8	CMOS	24	15	165	-40 to 125
74HC161	Presettable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	19	50	48	-40 to 125
74HC191	Presettable synchronous 4-bit binary up/down counter	2.0 - 6.0	±5.2	CMOS	22	50	36	-40 to 125
74HC193	Presettable synchronous 4-bit binary up/down counter; separate up/down clocks	2.0 - 6.0	±5.2	CMOS	20	50	49	-40 to 125
74HCT193	Presettable synchronous 4-bit binary up/down counter; separate up/down clocks; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	43	-40 to 125
74HC390	Dual decade ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	60	-40 to 125
74HCT390	Dual decade ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	18	50	55	-40 to 125
74HC393	Dual 4-bit binary ripple counter	2.0 - 6.0	±5.2	CMOS	12	50	107	-40 to 125
74HCT393	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	53	-40 to 125
74HC4017	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	±5.2	CMOS	18	50	77	-40 to 125
74HCT4017	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	±4.0	TTL	21	50	67	-40 to 125
74HC4020	14-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	11	50	52	-40 to 125
74HCT4020	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	15	50	52	-40 to 125
74HC4040	12-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40 to 125
74HCT4040	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	16	50	79	-40 to 125
74HC4060	14-stage binary ripple counter with oscillator	2.0 - 6.0	±5.2	CMOS	31	50	95	-40 to 125
74HCT4060	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	±4.0	TTL	31	50	88	-40 to 125
74HC4520	Dual 4-bit synchronous binary counter	2.0 - 6.0	±5.2	CMOS	24	50	64	-40 to 125
74HCT4520	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	24	50	64	-40 to 125
74HC40103	8-bit synchronous binary down counter	2.0 - 6.0	±5.2	CMOS	15	50	14	-40 to 125
74HC4024	7-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40 to 125
74HC590	8-bit binary counter with output register (3-state)	2.0 - 6.0	±5.2	CMOS	19	50	61	-40 to 125
74LV393	Dual 4-bit binary ripple counter	1.0 - 3.6	±6	TTL	12	50	90	-40 to 125
74LV4060	14-stage binary ripple counter with oscillator	1.0 - 5.5	±6	TTL	29	50	100	-40 to 125
74LVC161	Presettable synchronous 4-bit binary counter; asynchronous reset	1.2 - 3.6	±24	CMOS/ LVTTL	4.9	50	200	-40 to 125
74LVC163	Presettable synchronous 4-bit binary counter; synchronous reset	1.2 - 3.6	±24	CMOS/ LVTTL	4.9	50	200	-40 to 125
HEF4017B	Johnson decade counter with 10 decoded outputs	3.0 - 15	±2.4	CMOS	40	50	30	-40 to 85
HEF4020B	14-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	35	-40 to 85
HEF4040B	12-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	50	-40 to 85
HEF4060B	14-stage binary ripple counter with oscillator	3.0 - 15	±2.4	CMOS	50	50	30	-40 to 85
HEF4518B	Dual BCD counter	3.0 - 15	±2.4	CMOS	40	50	40	-40 to 85
HEF4520B	Dual 4-bit synchronous binary counter	3.0 - 15	±2.4	CMOS	15	50	40	-40 to 85
HEF4521B	24-stage frequency divider and oscillator	3.0 - 15	±2.4	CMOS	220	50	35	-40 to 85
HEF4541B	Programmable timer	3.0 - 15	- 4/ 2.7	CMOS	38	50	150	-40 to 85

Decoders and Demultiplexers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	T_{amb} (°C)
74AHC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 5.5	CMOS	±8	4.4	50	-40 to 125
74AHC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 5.5	CMOS	±8	3.9	50	-40 to 125
74AHCT138	3-to-8 line decoder/demultiplexer; inverting; TTL- enabled	4.5 - 5.5	TTL	±8	4.4	50	-40 to 125
74AHCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	-40 to 125
74AUP1G18	1-to-2 demultiplexer (3-state)	1.1 - 3.6	CMOS	±1.9	3.2	30	-40 to 125
74AUP1G19	1-to-2 decoder/demultiplexer	1.1 - 3.6	CMOS	±1.9	3.0	30	-40 to 125
74HC137	3-to-8 line decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	18	50	-40 to 125
74HC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 6.0	CMOS	±5.2	12	50	-40 to 125
74HC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40 to 125
74HC154	4-to-16 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	11	50	-40 to 125
74HC237	3-to-8 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	18	50	-40 to 125
74HC238	3-to-8 decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40 to 125
74HC42	BCD to decimal decoder (1-of-10)	2.0 - 6.0	CMOS	±5.2	17	50	-40 to 125
74HC4511	BCD to 7-segment latch/decoder/driver with lamp test input	2.0 - 6.0	CMOS	-10	28	50	-40 to 125
74HC4514	4-to-16 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	27	50	-40 to 125
74HCT138	3-to-8 line decoder/demultiplexer; inverting; TTL- enabled	4.5 - 5.5	TTL	±4	19	50	-40 to 125
74HCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	-40 to 125
74HCT154	4-to-16 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	-40 to 125
74HCT238	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	-40 to 125
74HCT4511	BCD to 7-segment latch/decoder/driver with lamp test input; TTL-enabled	4.5 - 5.5	TTL	-10	28	50	-40 to 125
74HCT4514	4-to-16 decoder/demultiplexer with address latches; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40 to 125
74LV138	3-to-8 line decoder/demultiplexer; inverting	1.0 - 5.5	TTL	±12	12	50	-40 to 125
74LVC138A	3-to-8 line decoder/demultiplexer; inverting	1.2 - 3.6	CMOS/LVTTL	±24	2.7	50	-40 to 125
74LVC139	Dual 2-to-4 line decoder/demultiplexer	1.2 - 3.6	CMOS/LVTTL	±24	2.5	50	-40 to 125
74LVC1G18	1-to-2 demultiplexer (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	2.3	50	-40 to 125
74LVC1G19	1-to-2 decoder/demultiplexer	1.65 - 5.5	CMOS/LVTTL	±32	1.8	50	-40 to 125
HEF4028B	1-of-10 decoder	3.0 - 15.0	CMOS	±2.4	30	50	-40 to 85
HEF4543B	BCD to 7-segment latch/decoder/driver with phase input	3.0 - 15.0	CMOS	±2.4	55	50	-40 to 85
HEF4555B	Dual 1-to-4 line decoder/demultiplexer	3.0 - 15.0	CMOS	±2.4	30	50	-40 to 85

Digital multiplexers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C_L (pF)	t_{pd} (ns)	T_{amb} (°C)
74AHC157	Quad 2-input multiplexer	2.0 - 5.5	CMOS	±8	50	3.2	-40 to 125
74AHC257	Quad 2-input multiplexer (3-state)	2.0 - 5.5	CMOS	±8	50	2.9	-40 to 125
74AHCT157	Quad 2-input multiplexer; TTL- enabled	4.5 - 5.5	TTL	±8	50	3.2	-40 to 125
74AHCT257	Quad 2-input multiplexer; TTL- enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.7	-40 to 125
74AUP1G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.2	-40 to 125
74AUP1G158	Single 2-input multiplexer; inverting	1.1 - 3.6	CMOS	±1.9	30	3.2	-40 to 125
74AUP2G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.4	-40 to 125
74HC151	8-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40 to 125
74HC153	Dual 4-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40 to 125
74HC157	Quad 2-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	11	-40 to 125
74HC251	8-input multiplexer (3-state)	2.0 - 6.0	CMOS	±5.2	50	18	-40 to 125
74HC253	Dual 4-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	17	-40 to 125
74HC257	Quad 2-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	11	-40 to 125
74HCT151	8-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40 to 125
74HCT153	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40 to 125
74HCT157	Quad 2-input multiplexer; TTL- enabled	4.5 - 5.5	TTL	±4	50	13	-40 to 125
74HCT251	8-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	22	-40 to 125
74HCT253	Dual 4-input multiplexer; TTL- enabled (3-state)	4.5 - 5.5	TTL	±6	50	17	-40 to 125
74HCT257	Quad 2-input multiplexer; TTL- enabled (3-state)	4.5 - 5.5	TTL	±6	50	13	-40 to 125
74LVC157A	Quad 2-input multiplexer	1.2 - 3.6	CMOS/LVTTL	±24	50	2.5	-40 to 125
74LVC1G157	Single 2-input multiplexer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	-40 to 125
74LVC257A	Quad 2-input multiplexer (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	-40 to 125

Speciality logic

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	F_{max} (MHz)	T_{amb} (°C)
74HC280	9-bit odd/even parity generator/checker	2.0 - 6.0	CMOS	±5.2	17	50		-40 to 125
74HCT280	9-bit odd/even parity generator/checker; TTL-enabled	4.5 - 5.5	TTL	±4	18	50		-40 to 125
74HC688	8-bit magnitude comparator	2.0 - 6.0	CMOS	±5.2	17	50		-40 to 125
74HCT688	8-bit magnitude comparator; TTL-enabled	4.5 - 5.5	TTL	±4	17	50		-40 to 125
74HC85	4-bit magnitude comparator	2.0 - 6.0	CMOS	±5.2	23	50		-40 to 125
74HCT85	4-bit magnitude comparator; TTL-enabled	4.5 - 5.5	TTL	±4	26	50		-40 to 125
74HC4046A	Phase-locked loop with VCO	3.0 - 6.0	CMOS	±5.2	18	50	21	-40 to 125
74HCT4046A	Phase-locked loop with VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40 to 125
HEF4046B	Phase-locked loop with VCO	3.0 - 15.0	CMOS	±2.4		50	2.7	-40 to 125

Specialty logic - Multivibrators

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	T_{amb} (°C)
74AHC123A	Dual retriggerable monostable multivibrator with reset	2.0 - 5.5	CMOS	±8	5.1	50	-40 to 125
74AHCT123A	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	-40 to 125
74HC123	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±7.8	9.0	50	-40 to 125
74HCT123	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40 to 125
74HCT221	dual non-retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	32	50	-40 to 125
74HC423	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±5.2	23	50	-40 to 125
74HC4538	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	CMOS	±5.2	27	50	-40 to 125
74HCT4538	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40 to 125
74LV123	Dual retriggerable monostable multivibrator with reset	1.0 - 5.5	TTL	±12	20	50	-40 to 125
74LVC1G123	Single retriggerable monostable multivibrator	1.65 - 5.5	CMOS/LVTTL	±32	3.5	50	-40 to 125
HEF4047B	Monostable/astable multivibrator	3.0 - 15	CMOS	±2.4	50	50	-40 to 85
HEF4528B	Dual retriggerable monostable multivibrator with reset	3.0 - 15	CMOS	±2.4	40	50	-40 to 85
HEF4538B	Dual retriggerable precision monostable multivibrator	3.0 - 15	CMOS	±2.4	60	50	-40 to 85

Uni-directional

Type number	Description	$V_{CC(A)}$ (V)	$V_{CC(B)}$ (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
74AUP1T00	Single supply 2-input voltage-translating NAND gate	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40 to 125
74AUP1T02	Single supply 2-input voltage-translating NOR gate	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40 to 125
74AUP1T04	Single supply voltage-translating inverter	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40 to 125
74AUP1T08	Single supply 2-input voltage-translating AND gate	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40 to 125
74AUP1T14	Single supply voltage-translating inverter	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40 to 125
74AUP1T17	Single supply voltage-translating buffer	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40 to 125
74AUP1T32	Single supply 2-input voltage-translating OR gate	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40 to 125
74AUP1T34	Single dual-supply translating buffer	1.1 - 3.6	n.a.	CMOS	±4	5.4	15	1	-40 to 125
74AUP1T45	Single dual-supply voltage-translating transceiver (3-state)	1.1 - 3.6	1.1 - 3.6	CMOS	±4	7.1	15	1	-40 to 125
74AUP1T50	Single supply voltage-translating buffer	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40 to 125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.9	15	1	-40 to 125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.9	15	1	-40 to 125
74AUP1T86	Single supply 2-input voltage-translating XOR gate	2.3 - 3.6	n.a.	CMOS	±4	3.9	15	1	-40 to 125
74AUP1T87	Single supply 2-input voltage-translating XNOR gate	2.3 - 3.6	n.a.	CMOS	±4	4	15	1	-40 to 125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.9	15	1	-40 to 125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.9	15	1	-40 to 125
74AVC1T8128	Single dual-supply translating 2-input NOR with enable	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	4.9	15	1	-40 to 125
74AVC1T8832	Single dual-supply translating 2-input OR with strobe	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.4	15	1	-40 to 125
74AVC1T1004	1-to-4 fan out buffer	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	4.9	15	1	-40 to 125
74AVC1T1022	1-to-4 fan out buffer	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	4.0	30	1	-40 to 125
74AVC4T3144	4-bit dual-supply voltage-translating buffer (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	4.6	15	4	-40 to 125
74LV1T00	2-input single supply translating NAND gate	1.6 - 5.5	n.a.	CMOS	±8	6.4	15	1	-40 to 125
74LV1T02	2-input single supply translating NOR gate	1.6 - 5.5	n.a.	CMOS	±8	6.6	15	1	-40 to 125
74LV1T04	Single supply translating inverter	1.6 - 5.5	n.a.	CMOS	±8	6.2	15	1	-40 to 125
74LV1T08	2-input single supply translating AND gate	1.6 - 5.5	n.a.	CMOS	±8	6.5	15	1	-40 to 125
74LV1T32	2-input single supply translating OR gate	1.6 - 5.5	n.a.	CMOS	±8	6.6	15	1	-40 to 125
74LV1T34	Single supply translating buffer	1.6 - 5.5	n.a.	CMOS	±8	6.3	15	1	-40 to 125
74LV1T86	2-input single supply translating X-OR gate	1.6 - 5.5	n.a.	CMOS	±8	7.3	15	1	-40 to 125
74LV1T87	2-input single supply translating X-NOR gate	1.6 - 5.5	n.a.	CMOS	±8	7.3	15	1	-40 to 125
74LV1T125	Single supply translating buffer (3-state)	1.6 - 5.5	n.a.	CMOS	±8	6.5	15	1	-40 to 125
74LV1T126	Single supply translating buffer (3-state)	1.6 - 5.5	n.a.	CMOS	±8	6.5	15	1	-40 to 125
74LVC4T3144	4-bit dual supply translating buffer; 3-state	1.2 - 5.5	1.2 - 5.5	CMOS	±24	13.2	15	4	-40 to 125
74LVC8T595	Dual supply 8-bit serial-in/serial-out or parallel-out shift register (3-state)	1.1 - 5.5	1.1 - 5.5	CMOS/ LVTTL	±24	4.1	15	8	-40 to 125
HEF4104B	Quad low-to-high voltage translator (3-state)	3.0 - 15	3.0 - 15	CMOS	±2.4	170	50	16	-40 to 85
NXU0101	1-bit dual-supply buffer/level translator with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	CMOS/LVTTL	+/-12	4.5	15	1	-40 to 125
NXU0102	2-bit dual-supply buffer/level translator with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	CMOS/LVTTL	+/-12	4.5	15	2	-40 to 125
NXU0202	2-bit dual-supply buffer/level translator with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	CMOS/LVTTL	+/-12	4.5	15	2	-40 to 125
NXU1014	4-bit dual-supply voltage level translating buffer with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	CMOS/LVTTL	+/-12	4.5	15	4	-40 to 125
NXU0204	4-bit dual-supply voltage level translating buffer with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	CMOS/LVTTL	+/-12	4.5	15	4	-40 to 125
NXU0304	4-bit dual-supply voltage level translating buffer with Schmitt-trigger	0.09 - 5.5	0.09 - 5.5	CMOS/LVTTL	+/-12	4.5	15	4	-40 to 125

Direction controlled

Type number	Description	$V_{CC(A)}$ (V)	$V_{CC(B)}$ (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
74ALVC164245	16-bit dual-supply voltage-translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	CMOS/ LVTTL	±24	2.9	50	16	-40 to 85
74AVC1T45	Single dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	1	-40 to 125
74AVC2T245	Dual-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	2	-40 to 125
74AVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	2	-40 to 125
74AVC4T245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	4	-40 to 125
74AVC4T774	4-bit dual-supply voltage-translating bus transceiver (3-state)	0.8 - 3. 6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	4	-40 to 125
74AVC4TD245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	4	-40 to 125
74AVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	8	-40 to 125
74AVC16T245	16-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	16	-40 to 125
74AVC20T245	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	20	-40 to 125
74AVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	1	-40 to 125
74AVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	2	-40 to 125
74AVCH4T245	4-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	4	-40 to 125
74AVCH8T245	8-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	8	-40 to 125
74AVCH16T245	16-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	16	-40 to 125
74AVCH20T245	20-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTL	±12	2.1	15	20	-40 to 125
AXP1T34	1-bit dual supply translating buffer (3-state)	0.9 - 5.5	0.9 - 5.5	CMOS	± 12	9	5	1	-40 to 125
74AXP1T45	1-bit dual supply translating transceiver; 3-state	0.9 - 5.5	0.9 - 5.5	CMOS	± 12	9.0	5	1	-40 to 125
74AXP2T45	2-bit dual supply translating transceiver; 3-state	0.9 - 5.5	0.9 - 5.5	CMOS	± 12	9.0	5	2	-40 to 125
74AXP4T245	4-bit dual supply translating transceiver; 3-state	0.9 - 5.5	0.9 - 5.5	CMOS	± 12	9.0	5	4	-40 to 125
74AXP8T245	8-bit dual supply translating transceiver; 3-state	0.9 - 5.5	0.9 - 5.5	CMOS	± 12	9.0	5	8	-40 to 125
74LVC1T45	Single dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTL	±24	2.5	50	1	-40 to 125
74LVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTL	±24	2.5	50	2	-40 to 125
74LVC4245A	8-bit dual-supply voltage translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	CMOS/ LVTTL	±24	3.5	50	8	-40 to 125
74LVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTL	±24	3.5	50	8	-40 to 125
74LVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTL	±24	2.5	50	1	-40 to 125
74LVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTL	±24	2.5	50	2	-40 to 125
74LVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTL	±24	3.5	50	8	-40 to 125

Auto direction (Autosense)

Type number	Description	$V_{CC(A)}$ (V)	$V_{CC(B)}$ (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
LSF0101	1-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	CMOS	+64	0.7	30	1	-40 to 125
LSF0102	2-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	CMOS	+64	0.7	30	2	-40 to 125
LSF0202	2-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	CMOS	+ 64	0.7	30	2	-40 to 125
LSF0204	4-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	CMOS	+64	0.6	30	4	-40 to 125
LSF0108	8-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	CMOS	+64	1.4	30	8	-40 to 125
NCA9306	2-bit bidirectional multi-voltage level translator; open-drain; push-pull	0.95 - 5.0	0.95 - 5.0	CMOS	+64	0.4	30	2	-40 to 125
NCA9700	Level translating Fm+ I²C bus repeater/accelerator	1.08 - 3.6	1.08 - 3.6	CMOS	+/- 0.02	14	160	2	-40 to 85
NCA9701A	Level translating Fm+ I²C bus repeater/accelerator	1.08 - 3.6	1.08 - 3.6	CMOS	+/- 0.02	14	160	2	-40 to 85
NXB0101	1-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	CMOS	± 0.02	5.5	15	1	-40 to 125
NXB0102	2-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	CMOS	± 0.02	5.5	15	2	-40 to 125
NXB0104	4-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	CMOS	± 0.02	5.5	15	4	-40 to 125
NXB0106	6-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	CMOS	± 0.02	5.5	15	6	-40 to 125
NXB0108	8-bit Dual supply translating transceiver; auto direction sensing (3-state)	1.2 - 3.6	1.65 - 5.5	CMOS	± 0.02	5.5	15	8	-40 to 125
NXS0101	1-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	CMOS	- 0.02 / 1.0	4.7	15	1	-40 to 125
NXS0102	2-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	CMOS	- 0.02 / 1.0	5.2	15	2	-40 to 125
NXS0104	4-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	CMOS	- 0.02 / 1.0	6	15	4	-40 to 125
NXS0108	8-bit Dual supply translating transceiver; open drain; auto direction sensing	1.65 - 3.6	2.3 - 5.5	CMOS	- 0.02 / 1.0	6.3	15	8	-40 to 125

Application specific

Type number	Description	$V_{CC(A)}$ (V)	$V_{CC(B)}$ (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
NXS0506	SD 3.0-compatible memory card integrated auto-direction control and level translator with EMI filter and ESD protection	1.1 - 1.95	1.7 - 3.6	CMOS	± 2	2.6	15	6	-40 to 85
NXT4556	SIM card interface level translator without enable pin	1.08 - 1.98	1.62 - 3.3	CMOS	± 1	20	50	3	-40 to 85
NXT4556A	SIM card interface level translator without enable pin	1.08 - 1.98	1.62 - 3.3	CMOS	± 1	20	50	3	-40 to 85
NXT4557	SIM card interface level translator with enable pin	1.08 - 1.98	1.62 - 3.3	CMOS	± 1	20	50	3	-40 to 85
NXT4558	SIM card interface level translator with enable pin	1.08 - 1.98	1.62 - 3.3	CMOS	± 1	20	50	3	-40 to 85
NXT4559	SIM card interface level translator with enable pin	1.08 - 1.98	1.62 - 3.3	CMOS	± 1	20	50	3	-40 to 85

Analog switches

Type number	Description	V_{CC} (V)	Logic switching levels	R_{ON} (Ω)	$R_{ON(FLAT)}$ (Ω)	$f_{(-3dB)}$ (MHz)	T_{HD} (%)	X_{talk} (dB)	T_{amb} (°C)
74AHC1G66	Single-pole, single-throw analog switch	2.0 - 5.5	CMOS	40	14	280	0.015		-40 to 125
74AHCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	40	14	280	0.015		-40 to 125
74HC1G66	Single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02		-40 to 125
74HC2G66	Dual single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02	-60	-40 to 125
74HC4051	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02		-40 to 125
74HC4052	Dual single-pole, quad-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02	-60	-40 to 125
74HC4053	Triple single-pole, double-throw analog switch	2.0 - 10	CMOS	200	20	170	0.02	-60	-40 to 125
74HC4066	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	105	23	200	0.02	-60	-40 to 125
74HC4067	Single-pole, 16-throw analog switch	2.0 - 10	CMOS	200	25	100	0.02		-40 to 125
74HC4316	Quad single-pole, single-throw analog switch with translation	2.0 - 10	CMOS	300	80	160	0.4	-60	-40 to 125
74HC4351	Single-pole, octal-throw analog switch with latch	2.0 - 10	CMOS	200	20	180	0.02		-40 to 125
74HC4851	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	220					-40 to 125
74HC4852	Dual single-pole, quad-throw analog switch; TTL-enabled	2.0 - 10	CMOS	220					-40 to 125
74HCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04		-40 to 125
74HCT2G66	Dual single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40 to 125
74HCT4051	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40 to 125
74HCT4052	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04	-60	-40 to 125
74HCT4053	Triple single-pole, double-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	160	0.04		-40 to 125
74HCT4066	Quad single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40 to 125
74HCT4067	Single-pole, 16-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	25	90	0.04		-40 to 125
74HCT4316	Quad single-pole, single-throw analog switch with translation; TTL-enabled	4.5 - 5.5	TTL	400	50	150	0.8	-60	-40 to 125
74HCT4351	Single-pole, octal-throw analog switch with latch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40 to 125
74HCT4851	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40 to 125
74HCT4852	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40 to 125
74LV4051	Single-pole, octal-throw analog switch	1.0 - 6.0	TTL	135	35	200	0.4	-60	-40 to 125
74LV4052	Dual single-pole, quad-throw analog switch	1.0 - 6.0	TTL	125	15	180	0.4	-60	-40 to 125
74LV4053	Triple single-pole, double-throw analog switch	1.0 - 6.0	TTL	150	30	180	0.4	-60	-40 to 125
74LV4066	Quad single-pole, single-throw analog switch	1.0 - 6.0	TTL	50	3.0	180	0.02	-60	-40 to 125
74LVC1G3157	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	300	0.078		-40 to 125
74LVC1G384	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	440	0.001		-40 to 125
74LVC1G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	300	0.078		-40 to 125
74LVC1G66	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	440	0.001		-40 to 125
74LVC2G3157	Dual single-pole, double-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	300	0.078	-54	-40 to 125
74LVC2G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	300	0.078		-40 to 125
74LVC2G66	Dual single-pole, single-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	440	0.005	-56	-40 to 125
74LVC4066	Quad single-pole, single-throw analog switch	1.65 - 5.5	CMOS/LVTTL	15	1.5	440	0.005	-58	-40 to 125
74LVCV2G66	Dual single-pole, single-throw analog switch; overvoltage tolerant	2.3 - 5.5	CMOS/LVTTL	15	3.0	210	0.01	-55	-40 to 125
HEF4016B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	350	65	90	0.04	-50	-40 to 85
HEF4051B	Single-pole, octal-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40 to 85
HEF4052B	Dual single-pole, quad-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40 to 85
HEF4053B	Triple single-pole, double-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40 to 85
HEF4066B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	175	20	90	0.04	-50	-40 to 85
HEF4067B	Single-pole, 16-throw analog switch	3.0 - 15	CMOS	175	20	13	0.04	-50	-40 to 85
XS3A1T5157	Low-ohmic single-pole double-throw analog switch	1.4 - 4.3	CMOS/LVTTL	0.5	0.2	40	0.03	-90	-40 to 125
XS3A1T3157	Low-ohmic single-pole double-throw analog switch	1.4 - 4.3	CMOS/LVTTL	0.5	0.2	40	0.03	-90	-40 to 125
XS3A2467	Dual Low-ohmic dual-pole dual-throw Analog Switch	1.4 - 4.3	CMOS/LVTTL	0.5	0.2	40	0.04	-90	-40 to 125
XS3A4051	Low-ohmic single-pole octal-throw Analog Switch	1.4 - 4.3	CMOS/LVTTL	0.5	0.2	15	0.04	-90	-40 to 125
XS3A4052	Low-ohmic dual-pole quad-throw Analog Switch	1.4 - 4.3	CMOS/LVTTL	0.5	0.13	25	0.04	-90	-40 to 125
XS3A4053	Triple Low-ohmic single-pole dual-throw Analog Switch	1.4 - 4.3	CMOS/LVTTL	0.5	0.13	40	0.04	-90	-40 to 125
XS5A1T4157	Single-pole double-throw analog switch	4.5 - 5.5	CMOS/LVTTL	4	0.9	190	-	-76	-40 to 125
NMUX1237	Single-pole double-throw analog switch; overshoot control	1.08 - 5.5	CMOS	4	1	196		-77	-40 to 125
NMUX1308	Single-pole octal-throw analog switch; injection current control	1.5 - 5.5	CMOS	60	-	325	-	-105	-40 to 125
NMUX1309	Dual single-pole quad-throw analog switch; injection current control	1.5 - 5.5	CMOS	60	-	380	-	-105	-40 to 125

Bus switches

Type number	Description	V_{CC} (V)	V_{PASS} (V)	Logic switching levels	$R_{ON}(\Omega)$	$f_{(-3dB)}$ (MHz)	Number of bits	t_{pd} (ns)	T_{amb} (°C)
74CBTLV1G125	Single bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	1	0.2	-40 to 125
74CBTLV3125	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40 to 125
74CBTLV3126	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40 to 125
74CBTLV3244	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40 to 125
74CBTLV3245	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40 to 125
74CBTLV3306	2-bit bus switch	2.3 - 3.6	5.0	CMOS/LVTTL	7	400	2	0.2	-40 to 125
74CBTLV3384	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40 to 125
74CBTLV3861	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40 to 125
74CBTLVD3244	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40 to 125
74CBTLVD3245	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40 to 125
74CBTLVD3384	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40 to 125
74CBTLVD3861	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40 to 125
CBT3306	Dual bus switch	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40 to 85
CBT3384	10-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	10	0.25	-40 to 85
CBTD3306	Dual bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	2	0.25	-40 to 85
CBTD3384	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40 to 85

Multiplexer / Demultiplexer

Type number	Description	V_{CC} (V)	V_{PASS} (V)	Logic switching levels	$R_{ON}(\Omega)$	$f_{(-3dB)}$ (MHz)	Number of bits	t_{pd} (ns)	T_{amb} (°C)
74CB3Q3253	Dual 1-of-4 FET multiplexer/ demultiplexer with charge pump	2.3 - 3.6	VCC	CMOS/LVTTL	4	500	2	0.2	-40 to 85
74CB3Q3257	Quad 1-of-2 FET multiplexer/ demultiplexer with charge pump	2.3 - 3.6	VCC	CMOS/LVTTL	4	500	4	0.2	-40 to 85
74CBTLV3253	Dual 4:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	2	0.2	-40 to 125
74CBTLV3257	Quad 2:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40 to 125
CBT3251	8:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40 to 85
CBT3253A	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40 to 85
CBT3257A	Quad 2:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40 to 85

I²C General Purpose I/O (GPIO)

Type number	Description	V_{CC}(A) (V)	V_{CC}(B) (V)	Logic switching levels	Power dissipation considerations	Output drive capability (mA)	Number of bits	T_{amb} (°C)
NCA9535	Low-voltage 16-Bit I²C and SMBus low-power I/O expander with interrupt output and configuration registers	1.65 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85
NCA9539	Low-voltage 16-Bit I²C and SMBus low-power I/O expander with interrupt output, reset pin and configuration registers	1.65 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85
NCA9555	Low-voltage 16-bit I²C and SMBus I/O expander with interrupt output and configuration registers	1.65 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85
NCA9595	Low voltage 16-Bit I²C and SMBus I/O expander with interrupt output, configuration registers and programmable pull-up resistors	1.65 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85
PCA9535	Low-voltage 16-bit I²C and SMBus low-power I/O expander with interrupt output and configuration registers	2.3 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85
PCA9539	Low-voltage 16-bit I²C and SMBus low-power I/O expander with interrupt output, reset pin and configuration registers	2.3 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85
PCA9555	Low-voltage 16-bit I²C and SMBus I/O expander with interrupt output and configuration registers	2.3 - 5.5	n.a.	CMOS	low	- 10 / 25	16	-40 to 85

Transformer drivers

Type number	Description	Features															Package (suffix)				
		Minimum Input Voltage (V)	Maximum Input Voltage (V)	Maximum Output Current (A)	Enable Pin	Short-Circuit Protection	Soft-Start	Break-Before-Make Circuitry	Slew-Rate Control	Spread-Spectrum Clocking	Thermal Shutdown	Fail-Safe Inputs	Under-Voltage Lockout	External Clock Support	Minimum Switching Frequency (kHZ)	Maximum Switching Frequency (kHZ)	Package Type	Pin Count	Package Area (mm^2)	Package Size (mm)	Package Code
NXF6505ADA-Q100	Low-noise 1.2 A transformer driver for isolated power supplies	2.25	5.5	1.2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	139	209	TSOT23-6	6	8.12	2.9 x 2.8	SOT8061-1
NXF6505BDA-Q100	Low-noise 1.2 A transformer driver for isolated power supplies	2.25	5.5	1.2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	374	511	TSOT23-6	6	8.12	2.9 x 2.8	SOT8061-1
NXF6501DC-Q100	Low-noise 1.2 A transformer driver for isolated power supplies	2.25	5.5	1.2	N	Y	Y	Y	Y	Y	Y	Y	Y	N	300	620	TSOT23-5	5	8.12	2.9 x 2.8	SOT8098-1

IC's - Battery booster

Type number	Description	Features								Package (suffix)
		V_{VBT} (V)	I_O ACT mode (mA)	I_{CH} (mA)	I_Q standby mode (nA)	Include interface	Capacitor Balance pin	Auto Start mode	T_{amb} (°C)	SOT763-1 (BQ)
NBM5100A	Lithium primary battery life booster with adaptive power optimization	2.4 - 3.6	150	2 / 16	50	I²C	Y	Y	-40~85	•
NBM5100B	Lithium primary battery life booster with adaptive power optimization	2.4 - 3.6	150	2 / 16	50	SPI	Y	N	-40~85	•
NBM7100A	Lithium primary battery life booster with adaptive power optimization	2.4 - 3.6	200	2 / 16	50	I²C	N	Y	-40~85	•
NBM7100B	Lithium primary battery life booster with adaptive power optimization	2.4 - 3.6	200	2 / 16	50	SPI	N	N	-40~85	•
NBM7100A-Q100	Lithium primary battery life booster with adaptive power optimization	2.4 - 3.6	200	2 / 16	50	I²C	N	Y	-40~85	•
NBM7100B-Q100	Lithium primary battery life booster with adaptive power optimization	2.4 - 3.6	200	2/16	50	I²C	N	N	-40~85	•

Power management IC's - Energy harvesting

Type number	Description	Features							
		$V_{BAT(min)}$ (V)	V_{IN} (V)	$I_{STBY(min)}$ / $I_{STBY\ (max)}$ (nA)	$P_{IN(min)}$ / $P_{IN(max)}$ (mW)	$f_{CONV(min)}$ / $f_{CONV(min)}$ (MHz)	t_{MPPT} (s)	T_{amb} (°C)	Package (suffix)
NEH2000BY	Energy harvesting PMIC	2.5	1.65	625/1150	0.035 / 2	0.05 / 1.8	0.7	-40~85	SOT8076-1 (BY)
NEH7100BU	Energy harvesting PMIC with battery protection, LDO, USB charging and I₂C	0	0.27	1500 / 5000	0.015 / 50	0.03 / 1.1	0.5	-40~85	SOT8080-1
NEH7110BU	Energy harvesting PMIC with battery protection, LDO and USB charging	0	0.27	1500 / 5000	0.015 / 50	0.03 / 1.1	1	-40~85	SOT8080-1

LCD bias

Type number	Description	Features										Package (suffix)
		Vin range	Pos Output range	Neg Output range	Iq Standby	Iq Shutdown	Output Accuracy	Maximum Iout	I²C	Efficiency	Protection	SOT8076-1 (BY)
NEX10000UB	80mA dual channel LCD bias	2.7V-5V	4V-6V (0.1V Step)	4V-6V (0.1V Step)	0.73mA	0.5uA	1%	80mA	Yes	86% Iout=40mA	UVLO/OTSD/ OCP	CSP 1.155x1.955-15
NEX10000AUB	120mA dual channel LCD bias	2.7V-5V	4V-6.5V (0.1V Step)	4V-6.5V (0.1V Step)	0.73mA	0.5uA	1%	120mA	Yes	86% Iout=40mA	UVLO/OTSD/ OCP	CSP 1.155x1.955-15
NEX10001UB	220mA dual channel LCD bias	2.7V-5V	4V-6.5V (0.1V Step)	-4V- -6.5V (0.1V Step)	0.73mA	0.5uA	1%	220mA	Yes	85% Iout=80mA	UVLO/OTSD/ OCP	CSP 1.155x1.955-15

Automotive LED Driver

Types in **bold** represent new products

Type number	Description	Channel	Features								
			Input voltage range	Output Current	Function Safety	Output current accuracy	Interface	Data rate	Dropout voltage (typ.)	Protection	Ambient temperature range TA	Package
NEX13120PC-Q100	12 Channel, 40V, 100mA/CH, Linear LED Driver	12	3.8-36V(Vs)	100mA/CH	ASIL-B capable	+-5%	UART	2Mbps	600mV@100mA	LED Open/ short/single short	-40C to 125C	HTSSOP-24
NEX13120FPC-Q100	12 Channel, 40V, 100mA/CH, Linear LED Driver	12	3.8-36V(Vs)	100mA/CH	ASIL-B compliant	+-5%	UART	2Mbps	600mV@100mA	LED Open/ short/single short	-40C to 125C	HTSSOP-24

Load Switch

Type number	Description	Features													Package (suffix)			
		Minimum Input Voltage (V)	Maximum Input Voltage (V)	Absolute Maximum Input Voltage (V)	Typical On-resistance (mohm)	Rated Current (A)	Current Limit (A)	Enable	Over Current Protection	Over temperature protection	Inrush current control	Reverse Voltage Blocking	AEC-Q100 Qualified	Thermal Fault Response	Package Suffix	Package Type	Package Size (mm)	Package Code
NPS4053	5.5 V, 55 mΩ load switch with precision adjustable current limit	2.5	5.5	6	55	2	0.11 - 2.5	Active High	Y	Y	Y	Y		Auto-Retry	GV	TSOP6	2.9 x 1.5	SOT457
NPS4053-Q100	5.5 V, 55 mΩ, Automotive, load switch with precision adjustable current limit	2.5	5.5	6	55	2	0.11 - 2.5	Active High	Y	Y	Y	Y	Y	Auto-Retry	GV	TSOP6	2.9 x 1.5	SOT457
NPS4053	5.5 V, 55 mΩ load switch with precision adjustable current limit	2.5	5.5	6	55	2	0.11 - 2.5	Active High	Y	Y	Y	Y		Auto-Retry	GH	HWSON6	2 x 2	SOT8044-1
NPS4053-Q100	5.5 V, 55 mΩ, Automotive, load switch with precision adjustable current limit	2.5	5.5	6	55	2	0.11 - 2.5	Active High	Y	Y	Y	Y	Y	Auto-Retry	GH	HWSON6	2 x 2	SOT8044-1
NPS4069	5.5 V, 55 mΩ load switch with current limitation	2.5	5.5	6	55	1.5	1.83	Active High	Y	Y	Y	Y		Auto-Retry	GV	TSOP5	2.9 x 1.5	SOT753
NPS4001	5.5 V, 55 mΩ load switch with current limitation	2.5	5.5	6	55	2	2.37	Active High	Y	Y	Y	Y		Auto-Retry	GV	TSOP5	2.9 x 1.5	SOT753
NPS1000	0.5 V to 1.0 V, 1.5 A peak, 11 mΩ, load switch	0.5	1	1.2	11	0.6	NA	Active High		Y	Y			Latch-off	UP	WLCSP8	1.42 x 0.72	SOT8068-1
NPS1001	0.5 V to 1.8 V, 1.5 A peak, 11 mΩ, load switch	0.5	1.8	2	11	0.6	NA	Active High		Y	Y			Latch-off	UP	WLCSP8	1.42 x 0.72	SOT8068-1
NPS3005	0.5 V to 5.5V, 15mΩ, load switch with Adjustable Soft Start and quick output discharge	0.5	5.5	6	15	6	NA	Active High		Y	Y			Auto-Retry	GP	HWSON-8	2 x 2	SOT8067-1
NPS3005-Q100	0.5 V to 5.5V, 15mΩ, Automotive, load switch with Adjustable Soft Start and quick output discharge	0.5	5.5	6	15	6	NA	Active High		Y	Y		Y	Auto-Retry	GP	HWSON-8	2 x 2	SOT8067-1

eFuses

Type number	Description	Features												Package (suffix)			
		Minimum Input Voltage (V)	Maximum Input Voltage (V)	Absolute Maximum Input Voltage (V)	Typical On-resistance (mohm)	Minimum Current Limit (A)	Maximum Current Limit (A)	Over Voltage Protection	Over voltage protection type	Clamp voltage (V)	Over Current Protection	Over temperature protection	Inrush current control	Thermal Fault Response	Package Suffix	Package Type	Package Size (mm)	Package Code
NPS3102A	12 V, 2 A to 13.5 A, 17 mΩ eFuse	9	18	21	17	2	13.5	Fixed	Clamp	15	Y	Y	Y	Latch-Off	GB	DFN3030-10	3 x 3	SOT8037-1
NPS3102B	12 V, 2 A to 13.5 A, 17 mΩ eFuse	9	18	21	17	2	13.5	Fixed	Clamp	15	Y	Y	Y	Auto-Retry	GB	DFN3030-10	3 x 3	SOT8037-1
NPS2122A	12 V, 2 A to 5.5A, 40 mΩ eFuse	9	18	21	40	2	5.5	Fixed	Clamp	15	Y	Y	Y	Latch-Off	GB	DFN3030-10	3 x 3	SOT8037-1
NPS2122B	12 V, 2 A to 5.5A, 40 mΩ eFuse	9	18	21	40	2	5.5	Fixed	Clamp	15	Y	Y	Y	Auto-Retry	GB	DFN3030-10	3 x 3	SOT8037-1

Ideal Diodes

Type number	Description	Features													Package (suffix)			
		Minimum Input Voltage (V)	Maximum Input Voltage (V)	Typical Foward Voltage Drop (mV)	Shutdown current (µA)	Quiescent current (µA)	Internal FET	Rated Forward Current (A)	Reverse Current Blocking	Input Polarity Protection	Forward Voltage Blocking	Inrush Current Control	Short circuit Protection	Over temperature Protection	AEC-Q100 Qualified	Package (suffix)	Package Type	Package Code
NID5100	1.2 V to 5.5 V, 1.5 A input polarity protected, low quiescent current ideal diode	1.2	5.5	31	0.17	0.24	Y	1.5	Y	Y						GW	TSSOP6	SOT363-2
NID5100-Q100	1.2 V to 5.5 V, Automotive, 1.5 A input polarity protected, low quiescent current ideal diode	1.2	5.5	31	0.17	0.24	Y	1.5	Y	Y					Y	GW	TSSOP6	SOT363-2
NID1100	1.5 V to 5.5 V, 1 A forward voltage blocking ideal diode	1.2	5.5	36	0.1	0.56	Y	1	Y		Y	Y	Y	Y		GV	TSOP5	SOT753
NID1101	1.5 V to 5.5 V, 1 A forward voltage blocking ideal diode	1.5	5.5	36	0.1	0.56	Y	1	Y		Y	Y	Y	Y		UP	WLCSP4	SOT8113
NID6000-Q100	Automotive reverse battery protection ideal diode controller	3.2	65	20	1	60	N	NA	Y	Y					Y	GV	TSOP6	SOT457

Low Iq buck converter

Type number	Description	Features						Package (suffix)
		V_{in} range (V)	V_{out} range (V)	I_{out}(max) (A)	Iq	F_{sw} (MHz)	Package	Package Size (L x W x H)mm
NEX30606UA	1.8 V to 5.0V, 600 mA, 220 nA quiescent current, step-down converter	1.8-5	0.7 - 3.3	0.6	220nA	1.5	CSP-6	1.09 mm x 0.74 mm x 0.35mm

Wide Vin buck converter

Type number	Description	Features									Package
		Vin range (V)	Vout range (V)	Iout (max) (A)	Operation Mode	Spread Spectrum (SS)	Iq	Is	Fsw (MHz)	Enable Pin	Package	Size(L x W x H)mm
NEX40400ADAZ	4.5 V to 40 V, 600 mA, synchronous step-down converter	4.5-40	2.5-24	0.6	PFM	Off	60uA	0.3uA	2.1	Y	TSOP6	2.9 mm x 1.6mm x 0.85mm
NEX40400BDAZ	4.5 V to 40 V, 600 mA, synchronous step-down converter	4.5-40	2.5-24	0.6	FPWM	Off	60uA	0.3uA	2.1	Y	TSOP6	2.9 mm x 1.6mm x 0.85mm
NEX40400CDAZ	4.5 V to 40 V, 600 mA, synchronous step-down converter	4.5-40	2.5-24	0.6	FPWM	On	60uA	0.3uA	2.1	Y	TSOP6	2.9 mm x 1.6mm x 0.85mm
NEX40400DDAZ	4.5 V to 40 V, 600 mA, synchronous step-down converter	4.5-40	2.5-24	0.6	PFM	Off	60uA	0.3uA	1.05	Y	TSOP6	2.9 mm x 1.6mm x 0.85mm
NEX40400EDAZ	4.5 V to 40 V, 600 mA, synchronous step-down converter	4.5-40	2.5-24	0.6	FPWM	Off	60uA	0.3uA	1.05	Y	TSOP6	2.9 mm x 1.6mm x 0.85mm
NEX40400FDAZ	4.5 V to 40 V, 600 mA, synchronous step-down converter	4.5-40	2.5-24	0.6	FPWM	On	60uA	0.3uA	1.05	Y	TSOP6	2.9 mm x 1.6mm x 0.85mm

Half bridge gate driver

Types in **bold** represent new products

Type number	Description	Features									Package (suffix)
		Power supply range / VDD	Bootstrap supply voltage (max.)	Driving capability Source/ Sink	Input signal Logic level	Switching frequence (max.)	Rise/ Fall time (1000pF load)	Propagation Delay	Turn ON/ OFF delay matching	Ambient temperature range TA	
NGD4300D	120V, 4A peak, high performance half bridge gate driver	8-17V	120V	5A/4A	TTL/CMOS	1MHz	4ns/3.5ns	13ns	1ns/1ns	-40 °C to 125 °C	SO-8
NGD4300GC	120V, 4A peak, high performance half bridge gate driver	8-17V	120V	5A/4A	TTL/CMOS	1MHz	4ns/3.5ns	13ns	1ns/1ns	-40 °C to 125 °C	HWSON-8
NGD4300DD	120V, 4A peak, high performance half bridge gate driver	8-17V	120V	5A/4A	TTL/CMOS	1MHz	4ns/3.5ns	13ns	1ns/1ns	-40 °C to 125 °C	HSO-8
NGD4300DD-Q100	120V, 4A peak, auto-motive high performance half bridge gate driver	8-17V	120V	5A/4A	TTL/CMOS	1MHz	4ns/3.5ns	13ns	1ns/1ns	-40 °C to 125 °C	HSO-8

PWM controller

Type number	Mode	Max F_{sw} (kHz)	GATE DRIVE High Level (V)	V_{CC} range (V)	Jitter	Standby Power (mW)	Line com-pensa-tion	Package	Protection
NEX80601DA	QR/DCM/PFM/BM	130	11.5	10-83	Yes	<75	Yes, by OPP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80611DA	QR/DCM/PFM/BM	130	5.8	10-83	Yes	<75	Yes, by OPP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80602DA	QR/DCM/PFM/BM	170	11.5	10-83	Yes	<75	Yes, by OPP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80605DA	QR/DCM/PFM/BM	130	11.5	10-83	Yes	<75	Yes, by OCP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80801DA	CCM/QR/PFM/BM	65	11.5	10-83	Yes	<75	Yes, by OPP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80805DA	CCM/QR/PFM/BM	65	11.5	10-83	Yes	<75	Yes, by OCP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80806DA	CCM/QR/PFM/BM	65	11.5	10-83	Yes	<75	Yes, by OCP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80808DA	CCM/QR/PFM/BM	65	11.5	10-83	Yes	<75	Yes, by OPP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP
NEX80809DA	CCM/QR/PFM/BM	85	11.5	10-83	Yes	<75	Yes, by OPP	TSOT23-6	Line BNI/BNO, V_{out} OV/UV, VCC OV/UV, SCP, SR short, CS open/short, Int/Ext OTP

SR controller

Type number	Description	Features							
		Operating Mode	BV_{dss} (V)	Maximum Frequency (kHz)	V_{CC} Reg (V)	DRV Sink Current (A)	Minimum Turn-on Time (us)	Turn-off Propagation (ns)	Package
NEX81801DA	Adaptive Synchronous Rectiifer (SR) Controller	CCM/QR/DCM	120	400	6~9	4	1.0~2.0	10	TSOT23-6
NEX81802DA	Adaptive Synchronous Rectiifer (SR) Controller	CCM/QR/DCM	120	800	6~9	4	0.5~1.5	10	TSOT23-6

Automotive low Iq LDO

Type number	Description	Features											
		Input voltage range	Output voltage	Output current	Iq (typ.)	Shut-down current (typ.)	Dropout voltage (typ.)	PSRR (dB) Vr=0.5 Vpp, fr=100Hz	Enable (Y/N)	PG (Y/N)	Output cap. (min)	Protection	Ambient temperature range TA	Package
NEX90530APA-Q100	300mA, 40V low Iq (5uA) low-dropout regulator with PG	3-40V (45V transient)	3.3V	300mA	5.3uA	300nA	560mV@ 300mA	60	Y	Y	1uF	OTP/OCP	-40C to 125C	HTSSOP
NEX90530BPA-Q100	300mA, 40V low Iq (5uA) low-dropout regulator with PG	3-40V (45V transient)	5V	300mA	5.3uA	300nA	450mV@ 300mA	60	Y	Y	1uF	OTP/OCP	-40C to 125C	HTSSOP
NEX90230APA-Q100	300mA, 40V low Iq (5uA) low-dropout regulator	3-40V (45V transient)	3.3V	300mA	5.3uA	300nA	560mV@ 300mA	60	Y	N	1uF	OTP/OCP	-40C to 125C	HTSSOP
NEX90230BPA-Q100	300mA, 40V low Iq (5uA) low-dropout regulator	3-40V (45V transient)	5V	300mA	5.3uA	300nA	450mV@ 300mA	60	Y	N	1uF	OTP/OCP	-40C to 125C	HTSSOP
NEX90515APA-Q100	150mA, 40V low Iq (5uA) low-dropout regulator with PG	3-40V (45V transient)	3.3V	150mA	5.3uA	300nA	290mV@ 150mA	60	Y	Y	1uF	OTP/OCP	-40C to 125C	HTSSOP
NEX90515BPA-Q100	150mA, 40V low Iq (5uA) low-dropout regulator with PG	3-40V (45V transient)	5V	150mA	5.3uA	300nA	230mV@ 150mA	60	Y	Y	1uF	OTP/OCP	-40C to 125C	HTSSOP

Automotive 40V tracking LDO

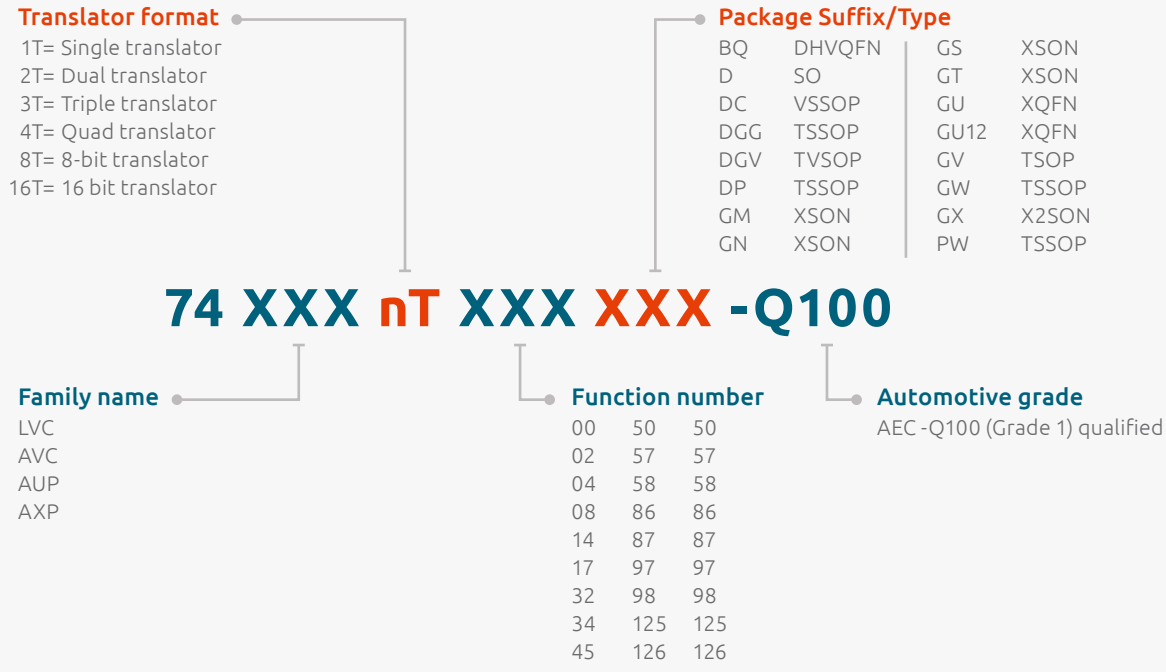
Types in **bold** represent new products

Type number	Description	Features													
		Input voltage range	Output voltage	Output current	Iq (typ.)	Shut-down current (typ.)	Dropout voltage (typ.)	PSRR (dB) Vr=0.5 Vpp, fr=100Hz	Enable (Y/N)	PG (Y/N)	Output cap. (min)	Protection	Active discharge	Ambient temperature range TA	Package
NEX-91207DF-Q100	70mA, 40V tracking LDO	3-40V(-42 V to +45 V transient)	2-40V	70mA	40uA	0.75uA	215mV@70mA	90	Y	N	1uF	OTP/OCP/Reverse polarity/Reverse current	Y	-40C to 125C	SOT23-5
NEX-91207DE-Q100	70mA, 40V tracking LDO	4-40V(-42 V to +45 V transient)	2-40V	70mA	40uA	0.75uA	215mV@70mA	90	Y	N	1uF	OTP/OCP/Reverse polarity/Reverse current	Y	-40C to 125C	SOT23-5S

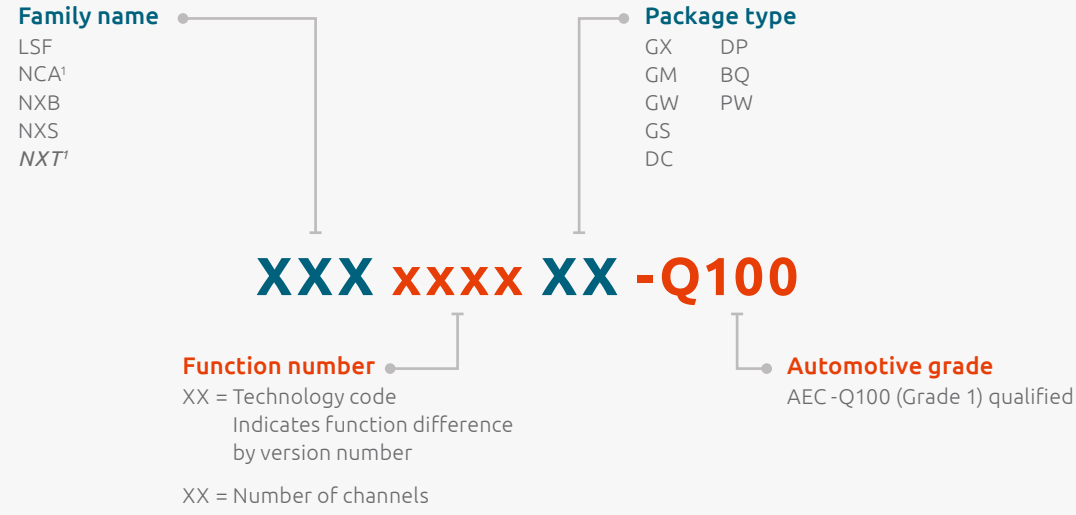
USB PD Controller

Type number	Description	Features														
		Vin range (V)	Power Level	FPDO range	PPS	EPR	AVS	Function	Power Role	External power path control	VCONN Power	BC1.2	QC2.0/3.0	UFCS	Memory	Package	Package Size(L x W x H)mm
NEX5204100BYY	Single-Port USB PD Controller for Source Application	3.15V to 23V	100W	5V-20V	Y	N	N	Type-C	Pro-vider	NFET	Y	Y	Y	Y	MTP	QFN-24	4mm x 4mm x 0.85mm
NEX5204100BVY	Single-Port USB PD Controller for Source Application	3.15V to 23V	100W	5V-20V	Y	N	N	Type-C	Pro-vider	NFET	Y	Y	Y	Y	MTP	QFN-16	4mm x 4mm x 0.85mm
NEX5208000BYY	Single-Port USB PD Controller for Source Application	3.15V to 29V	140W	5V-28V	Y	Y	Y	Type-C	Pro-vider	NFET	Y	Y	Y	Y	MTP	QFN-24	4mm x 4mm x 0.85mm
NEX5208000BVY	Single-Port USB PD Controller for Source Application	3.15V to 29V	140W	5V-28V	Y	Y	Y	Type-C	Pro-vider	NFET	Y	Y	Y	Y	MTP	QFN-16	4mm x 4mm x 0.85mm

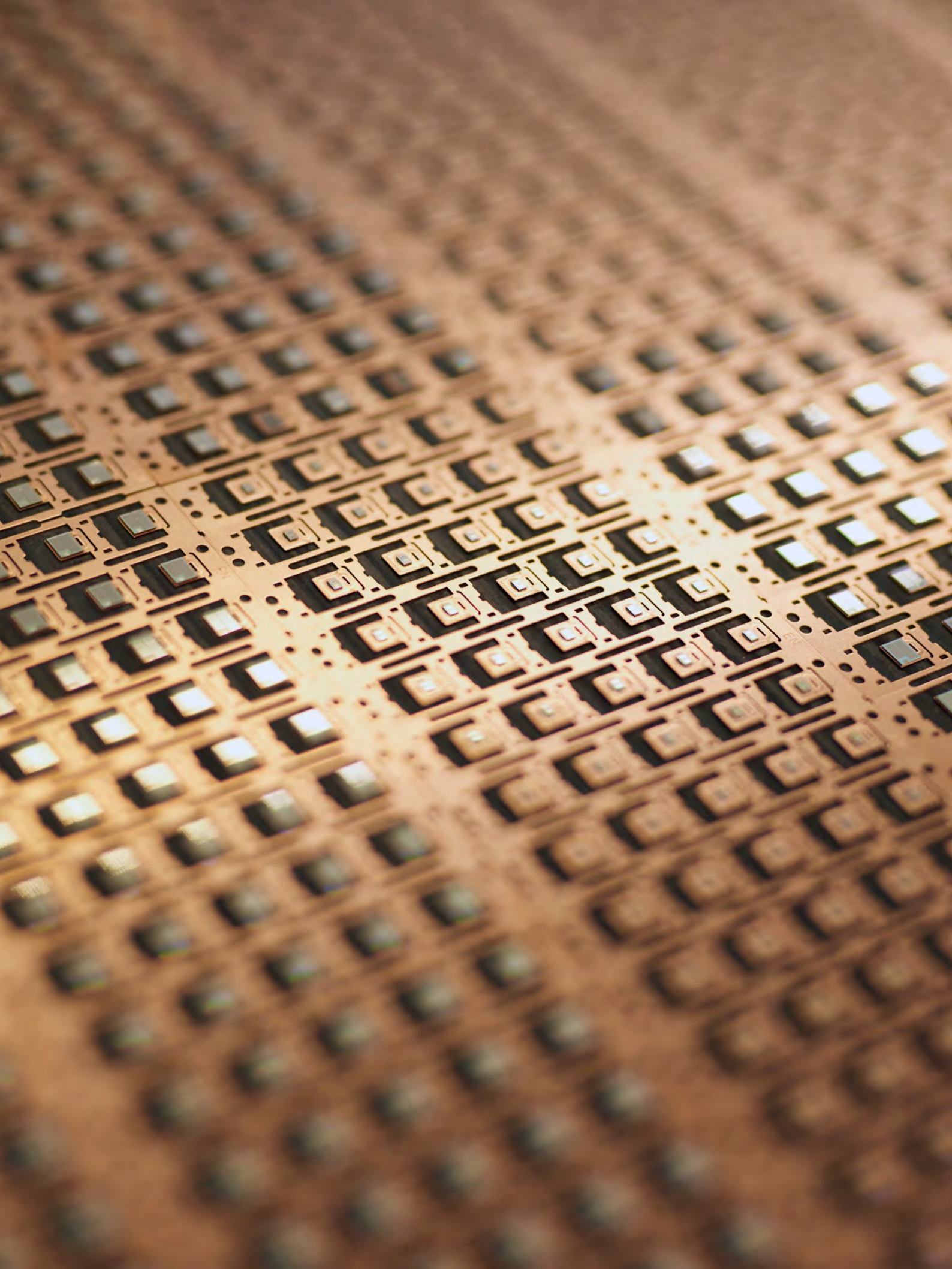
Translator IC's nomenclature



Translator IC's nomenclature



[1]function Number is referenced to competition



Packages 9

Package details and packing methods SMD

Pins/Terminals	Package	Package body size (l x w x h) (mm)	Package dimensions inc. leads (lxw) (mm)	Package area (mm²)	Lead pitch (mm)	Package	800	1000	1500	2000	2500	3000	4000	4500	5000	8000	9000	10000	15000	20000	30000	50000
2	DFN0603-2 (SOD972E)	0.33 x 0.63 x 0.25	0.33 x 0.63	0.21	0.4														317			
	DSN0603D-2 (SOD962D)	0.6 x 0.3 x 0.3	0.6 x 0.3	0.18	0.4												315					
	DSN0603-2 (SOD962-2)	0.6 x 0.3 x 0.3	0.6 x 0.3	0.18	0.4												315					
	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3	0.6 x 0.3	0.18	0.4												315					
	DFN1006-2 (SOD882P-1)	1.02 x 0.62 x 0.45	1.02 x 0.62	0.632	0.6													515				
	SC-79 (SOD523)	1.2 x 0.8 x 0.6	1.6 x 0.8	1.28	1.4							115				315		135		335		
	CFP2-HP (SOD323HP)	1.3 x 2.2 x 0.68	2.65 x 1.3	3.45	1.6									115								
	DSN1608-2 (SOD964)	1.6 x 0.8 x 0.29	1.6 x 0.8	1.28	0.6													315				
	DFN1608D-2 (SOD1608)	1.6 x 0.8 x 0.37	1.6 x 0.8	1.28	0.9											315						
	DFN1610-2 (SOD1610-1)	1.6 x 1 x 0.55	1.6 x 1	1.6	1.1							515										
	SC-90 (SOD323F)	1.7 x 1.25 x 0.7	2.5 x 1.25	3.125	2.2							115						135				301
	SOD323	1.7 x 1.25 x 0.95	2.5 x 1.25	0.3125	1.3							115						135			145	
	DSN1006-2 (SOD993)	1 x 0.6 x 0.27	1 x 0.6	0.6	0.6													315				
	DSN1006-2 (SOD993B)	1 x 0.6 x 0.27	1 x 0.6	0.6	0.6													315				
	DSN1006U-2 (SOD995)	1 x 0.6 x 0.27	1 x 0.6	0.6	0.3													315				
	DFN1006D-2 (SOD882D)	1 x 0.6 x 0.4	1 x 0.6	0.6	0.6													315				
	DFN1006-2 (SOD882-S1)	1 x 0.6 x 0.4	1 x 0.6	0.6	0.6													515				
	DFN1006BD-2 (SOD882BD)	1 x 0.6 x 0.47	1 x 0.6	0.6	0.6													315				
	DFN1006 (SOD882-2)	1 x 0.6 x 0.47	1 x 0.6	0.6	0.6													315				
	DFN1006-2 (SOD882)	1 x 0.6 x 0.48	1.0 x 0.6	0.6	0.6													303 315				
	SOD123	2.675 x 1.6 x 1.15	3.6 x 1.6	5.76	3.3							115						118				
	SOD123F	2.6 x 1.6 x 1.1	3.5 x 1.6	5.6	2.8							115										
	CFP3 (SOD123W)	2.6 x 1.7 x 1	3.5 x 1.7	5.95	2.8							115										
	CFP3-HP (SOD123HP)	2.8 x 1.8 x 0.9	2.8 x 1.8	5.04	3.2																	
	LLDS; MiniMelf (SOD80C)	3.5 x 1.5	3.5 x 1.53	5.36							115							135				
	CFP5 (SOD128)	3.8 x 2.5 x 1	4.7 x 2.6	12.22	4							115										
	DPAK R2P (SOT8017)	6.16 x 6.54 x 2.29	9.98 x 6.54	65.27	4.6						118											
	D2PAK R2P (SOT8018)	8.8 x 10.35 x 4.46	15.18 x 10.35	157.11	5.1		118															
3	DFN0606-3 (SOT8001)	0.62 x 0.62 x 0.37	0.62 x 0.62	0.384	0.3													125				
	DFN0603-3 (SOT8013)	0.63 x 0.33 x 0.25	0.63 x 0.33	0.208	0.2														317			
	DSN1010-3 (SOT8007)	0.96 x 0.96 x 0.24	0.96 x 0.96	0.922	0.5										315							
	D2PAK (SOT404)	11 x 10 x 4.3	15.3 x 10	153	2.5		118															
	D2PAK (SOT404A)	11 x 10 x 4.3	15.3 x 10	153	2.5		118															
	DFN1010D-3 (SOT1215)	1.1 x 1 x 0.37	1.1 x 1	1.1	0.8										147							

Package details and packing methods SMD

Pins/Terminals	Package	Package body size (l x w x h) (mm)	Package dimensions inc. leads (lxw) (mm)	Package area (mm²)	Lead pitch (mm)	Package	800	1000	1500	2000	2500	3000	4000	4500	5000	8000	9000	10000	15000	20000	30000	50000
3	DFN1110D-3 (SOT8015)	1.1 x 1 x 0.48	1.1 x 1	1.1	0.6										147							
	DFN1412D-3 (SOT8009)	1.4 x 1.2 x 0.48	1.4 x 1.2	1.68	0.8										147							
	SOT663	1.6 x 1.2 x 0.55	1.6 x 1.6	2.56	1								115									
	DSN1006-3 (SOT8026)	1 x 0.6 x 0.2	1 x 0.6	0.6	0.3													326				
	DFN1006B-3 (SOT883B)	1 x 0.6 x 0.37	1 x 0.6	0.6	0.3													315				
	DFN1006-3 (SOT883-3)	1 x 0.6 x 0.46	1 x 0.6	0.6	0.3													305				
	DFN1006-3 (SOT883-2)	1 x 0.6 x 0.47	1 x 0.6	0.6	0.3													315				
	DFN1006-3 (SOT883)	1 x 0.6 x 0.48	1 x 0.6	0.6	0.3													305 315				
	SOT23	2.9 x 1.3 x 1	2.9 x 2.3	6.67	1.9							215						235			185	300
	SC-70 (SOT323)	2 x 1.25 x 0.95	2 x 2.1	4.2	1.3							115						135				300
	HUSON3 (SOT1061-3)	2 x 2 x 0.55	2 x 2	4	1.3							328										
	DFN2020-3 (SOT1061)	2 x 2 x 0.65	2 x 2	4	1.3							115 147						135				
	DFN2020D-3 (SOT1061D)	2 x 2 x 0.65	2 x 2	4	1.3							115										
	FCLGA3 (SOT8073-1)	3.2 x 2.2 x 0.774	3.2 x 2.2	7.04	1.2						328											
	SOT89	4.5 x 2.5 x 1.5	4.5 x 4	18	1.5			115 146 147					135									
	CFP15 (SOT1289)	5.8 x 4.3 x 0.78	6.5 x 4.3	27.95	2.1				146						139							
	CFP15B (SOT1289B)	5.8 x 4.3 x 0.95	6.8 x 4.3	29.24	2.1										139							
	DPAK (SOT428C)	6.1 x 6.6 x 2.3	10 x 6.6	66	2.3						118											
4	X2SON4 (SOT1269-2)	0.6 x 0.6 x 0.32	0.6 x 0.6	0.36	0.4													147				
	SOT143B	2.9 x 1.3 x 1	2.9 x 2.3	6.67	1.9							215						235				
	LFPAK56E; Power-SO8 (SOT1023)	4.58 x 5.13 x 1.03	5 x 6	30	1.3				115													
	LFPAK56-UL2595 (SOT1023A)	4.6 x 5.1 x 1	5 x 6	30	1.3				115													
	LFPAK56; Power-SO8 (SOT669)	4.9 x 4.45 x 1	5 x 6	30	1.3				13 115													
	SC-73 (SOT223)	6.5 x 3.5 x 1.65	6.5 x 7	45.5	4.6			115					135									
	LFPAK88 (SOT1235)	8 x 8 x 1.6	8 x 8	64	2					118												
5	XSON5 (SOT8065-1)	1.1 x 0.85 x 0.5	1.1 x 0.85	0.935	0.6													315				
	X2SON5 (SOT1226-3)	0.8 x 0.8 x 0.32	0.8 x 0.8	0.64	0.5													125				
	X2SON5 (SOT1226)	0.8 x 0.8 x 0.35	0.8 x 0.8	0.64	0.5													125				
	SOT665	1.6 x 1.2 x 0.55	1.6 x 1.6	2.56	1											115						
	TSSOP5 (SOT353)	2.1 x 1.25 x 0.95	2 x 2.1	4.2	1.3										115			135				
	TSOP5 (SOT753)	2.9 x 1.5 x 1	2.9 x 2.75	7.975	0.9										125							
	TSOT5 (SOT8098-1)	2.9 x 1.6 x 1.1	2.9 x 2.8	8.12	0.9																	
	TSSOP5 (SOT353-1)	2 x 1.25 x 0.95	2 x 2.1	4.2	0.6										125							
	DFN5060-5 (SOT8075-1)	5 x 6 x 0.9	5 x 6	30	1.3									332								

Package details and packing methods SMD

Pins/Terminals	Package	Package body size (l x w x h) (mm)	Package dimensions inc. leads (lxw) (mm)	Package area (mm²)	Lead pitch (mm)	Package	800	1000	1500	2000	2500	3000	4000	4500	5000	8000	9000	10000	15000	20000	30000	50000
6	XSON6 (SOT1115)	0.9 x 1 x 0.35	0.9 x 1	0.9	0.6										125 132							
	X2SON6 (SOT1255-2)	1.0 x 0.8 x 0.32	1 x 0.8	0.8	0.4													147				
	X2SON6 (SOT1255)	1.0 x 0.8 x 0.32	1 x 0.8	0.8	0.4													147				
	DFN1010B-6 (SOT1216)	1.1 x 1.0 x 0.37	1.1 x 1	1.1	0.3										147							
	DFN1308-6 (SOT8006)	1.3 x 0.8 x 0.38	1.3 x 0.8	1.04	0.4													315				
	DFN1308-6 (SOT8006B)	1.3 x 0.8 x 0.38	1.3 x 0.8	1.04	0.4													315				
	XSON6 (SOT886)	1.45 x 1 x 0.5	1 x 1.45	1.45	0.5										115 125 132							
	DFN1412-6 (SOT1268)	1.4 x 1.2 x 0.47	1.4 x 1.2	1.68	0.5										147							
	DFN1412-6 (SOT1268-1)	1.4 x 1.2 x 0.47	1.4 x 1.2	1.68	0.5										147							
	SOT666	1.6 x 1.2 x 0.55	1.6 x 1.6	2.56	0.5								115 125			315						
	XSON6 (SOT1202)	1 x 1 x 0.35	1 x 1	1	0.3										125 132							
	TSSOP6 (SOT363)	2.1 x 1.25 x 0.95	2 x 2.1	4.2	0.6							115 125						135 165				
	TSOP6 (SOT457)	2.9 x 1.5 x 1	2.9 x 2.75	7.975	0.9							115 125						135 165				
	TSSOP6 (SOT8061-1)	2.9 x 1.6 x 1.1	2.9 x 2.8	8.12	0.9							342										
	TSSOP6 (SOT363-2)	2 x 1.25 x 0.95	2 x 2.1	4.2	0.6							125										
	DFN2020MD-6 (SOT1220)	2 x 2 x 0.65	2 x 2	4	0.6							115 125 184										
	DFN2020D-6 (SOT1118D)	2 x 2 x 0.65	2 x 2	4	0.6							115										
	DFN2020M-6 (SOT1220-2)	2 x 2 x 0.65	2 x 2	4	0.6							115 184										
	DFN2020-6 (SOT1118)	2 x 2 x 0.65	2 x 2	4	0.6							115 184										
	HWSON6 (SOT8044-1)	2 x 2 x 0.75	2 x 2	4	0.6							147										
7	XSON7 (SOT1358-1)	1.1 x 2.1 x 0.5	1.1 x 2.1	2.31	0.5								471									
	VQFN7 (SOT8091-1)	6 x 4 x 0.95	6 x 4	24	0.5						332											
	TO-263-7 (SOT8070-1)	9.3 x 9.88 x 4.5	10.08 x 15.88	160.07	1.3		118															
8	XSON8 (SOT1116)	1.2 x 1 x 0.35	1.2 x 1	1.2	0.3										115							
	X2SON8 (SOT1233-2)	1.35 x 0.8 x 0.32	1.35 x 0.8	1.08	0.5													115				
	XSON8 (SOT1203)	1.35 x 1 x 0.35	1.35 x 1	1.35	0.3										115							
	DFN1714-8 (SOT1166-1)	1.7 x 1.35 x 0.55	1.7 x 1.35	2.295	0.4								132									
	XSON8 (SOT833-1)	1 x 1.95 x 0.5	1 x 1.95	1.95	0.5										115							
	LFPAK33 (SOT1210)	2.7 x 3.4 x 0.9	3.3 x 3.3	10.89	0.6				115													
	VSSOP8 (SOT765-1)	2 x 2.3 x 1	2 x 3.1	6.2	0.5							125										
	TSSOP8 (SOT505-2)	3.0 x 3.0 x 1.1	3 x 4	12	0.6							125										
	MLPAK33 (SOT8002-3)	3.3 x 3.3 x 0.8	3.3 x 3.3	10.89	0.6							118										

Package details and packing methods SMD

Pins/Terminals	Package	Package body size (l x w x h) (mm)	Package dimensions inc. leads (lxw) (mm)	Package area (mm²)	Lead pitch (mm)	Package	800	1000	1500	2000	2500	3000	4000	4500	5000	8000	9000	10000	15000	20000	30000	50000
8	MLPAK33 (SOT8002-1)	3.3 x 3.3 x 0.8	3.3 x 3.3	10.89	0.6							118										
	MLPAK33 (SOT8002-2)	3.3 x 3.3 x 0.8	3.3 x 3.3	10.89	0.6							118										
	TSSOP8 (SOT530-1)	3 x 4.4 x 1.1	3 x 6.4	19.2	0.6						118											
	LFPAK56D; Dual LFPAK (SOT1205)	4.7 x 5.3 x 1.05	5 x 6	30	1.3				115													
	DFN8080-8 (SOT8074-1)	8 x 8 x 0.9	8 x 8	64	2						332											
10	DFN2510A-10 (SOT1176-2)	1.0 x 2.5 x 0.5	1 x 2.5	2.5	0.5									115 471								
	XQFN10 (SOT1160-1)	1.4 x 1.8 x 0.5	1.4 x 1.8	2.52	0.4								115									
	DFN2510A-10 (SOT1176-1)	2.5 x 1 x 0.5	2.5 x 1	2.5	0.5									115 471								
	DFN2510-10 (SOT1165-1)	2.5 x 1 x 0.5	2.5 x 1	2.5	0.5									115								
10	DFN2510D-10 (SOT1165D)	2.5 x 1 x 0.75	2.5 x 1	2.5	0.5								115					118				
	DFN2510D-10 (SOT1176D)	2.5 x 1 x 0.75	2.5 x 1	2.5	0.5								115					118				
	TSSOP10 (SOT552-1)	3 x 3 x 1.1	3 x 4.9	14.7	0.5						118											
12	XQFN12 (SOT1174-1)	2 x 1.7 x 0.5	2 x 1.7	3.4	0.4								115									
13	CCPAK1212 (SOT8000)	12 x 12 x 2.5	12 x 12	144	2			139														
	CCPAK1212i (SOT8005)	12 x 9.4 x 2.5	12 x 12	144	2			139														
14	DHXQFN14 (SOT8014-1)	2 x 2 x 0.48	2 x 2	4	0.4							147										
	DHVQFN14 (SOT762-1)	3 x 2.5 x 1	2.5 x 3	7.5	0.5							115										
	TSSOP14 (SOT402-1)	5 x 4.4 x 1.1	5 x 6.4	32	0.6						118											
	SO14 (SOT108-1)	8.65 x 3.9 x 1.75	8.65 x 6	51.9	1.3						13 118 139 623 653											
16	XQFN16 (SOT1161-1)	2.6 x 1.8 x 0.5	1.8 x 2.6	4.68	0.4								115									
	DHXQFN16 (SOT8016-1)	2 x 2.4 x 0.48	2 x 2.4	4.8	0.4							115										
	DFN3314-16 (SOT1168-1)	3.3 x 1.35 x 0.55	3.3 x 1.35	4.455	0.4									132								
	DHVQFN16 (SOT763-1)	3.5 x 2.5 x 1	3.5 x 2.5	8.75	0.5							115										
	HWQFN16 (SOT8076-1)	3 x 3 x 0.75	3 x 3	9	0.5										118							
	SSOP16 (SOT519-1)	4.9 x 3.9 x 1.73	4.9 x 6	29.4	0.6						118											
	TSSOP16 (SOT403-1)	5 x 4.4 x 1.1	5 x 6.4	32	0.6						118											
	SO16 (SOT109-1)	9.9 x 3.9 x 1.75	9.9 x 6	59.4	1.3						13 118 139 653											
20	SO20 (SOT163-1)	12.8 x 7.5 x 2.65	12.8 x 10.33	132.22	1.3					118 623 653												
	DHXQFN20 (SOT8020-1)	2 x 3.2 x 0.48	3.2 x 2	6.4	0.4							115										
	DHVQFN20 (SOT764-1)	4.5 x 2.5 x 1	4.5 x 2.5	11.25	0.5							115										

Package details and packing methods SMD

Pins/Terminals	Package	Package body size (l x w x h) (mm)	Package dimensions inc. leads (lxw) (mm)	Package area (mm^2)	Lead pitch (mm)	Package	800	1000	1500	2000	2500	3000	4000	4500	5000	8000	9000	10000	15000	20000	30000	50000
20	TSSOP20 (SOT360-1)	6.5 x 4.4 x 1.1	6.5 x 6.4	41.6	0.6						118											
24	DHXQFN24 (SOT8024-1)	2 x 4 x 0.48	2 x 4	8	0.4							115										
	HWQFN24 (SOT8041-1)	4 x 4 x 0.75	4 x 4	16	0.5							128										
	DHVQFN24 (SOT815-1)	5.5 x 3.5 x 1	5.5 x 3.5	19.25	0.5							118										
	TSSOP24 (SOT355-1)	7.8 x 4.4 x 1.1	7.8 x 6.4	49.92	0.6						118											
48	TSSOP48 (SOT362-1)	12.8 x 6.1 x 1.2	12.5 x 8.1	101.25	0.5					118												
	TVSOP48 (SOT480-1)	9.7 x 4.4 x 1.1	9.7 x 6.4	62.08	0.4						118											
56	TSSOP56 (SOT364-1)	14 x 6.1 x 1.2	14 x 8.1	113.4	0.5					118 518												

WLCSP package details

Basic type	Package size (l x w x h) (mm)	# of balls	Pitch (mm)	Package	Package name	ID	Category
IP4369CX4	0.76 x 0.76 x 0.47	4	0.4		WLCSP4	OL-IP4369CX4	ESD
PMCM4401UPE	0.78 x 0.78 x 0.345	4	0.4		WLCSP4	OL-PMCM4401UPE	MOSFETs
PMCM4401VNE	0.78 x 0.78 x 0.345	4	0.4		WLCSP4	OL-PMCM4401VNE	MOSFETs
PMCM4401VPE	0.78 x 0.78 x 0.345	4	0.4		WLCSP4	OL-PMCM4401VPE	MOSFETs
PCMF1HDMI2BA-C	0.77 x 1.17 x 0.61	5	0.4		WLCSP5	OL-PMCF1HDMI-2BA-C	ESD
IP3319CX6	0.95 x 1.34 x 0.57	6	0.4		WLCSP6	OL-IP3319CX6	ESD
PMCM6501VNE	1.5 x 1 x 0.35	6	0.5		WLCSP6	OL-PMCM6501VNE	MOSFETs
PMCM6501VPE	1.5 x 1 x 0.35	6	0.5		WLCSP6	OL-PMCM6501VPE	MOSFETs
NXB0102UN	0.75 x 1.55 x 0.60	8	0.4		WLCSP8	SOT8023-1	Logic
NXS0102UN	0.75 x 1.55 x 0.60	8	0.4		WLCSP8	SOT8023-1	Logic
NXT4556UP	1.06 x 1.06 x 0.43	9	0.3		WLCSP9	SOT8027-1	Logic
PCMF2HDMI2BA-C	1.57 x 1.17 x 0.61	10	0.4		WLCSP10	OL-PCMF2HDMI-2BA-C	ESD
NXS0104UM	1.36 x 1.86 x 0.60	12	0.5		WLCSP12	SOT8019-1	Logic
PCMF3HDMI2BA-C	2.37 x 1.17 x 0.61	15	0.4		WLCSP15	OL-PCMF3HDMI-2BA-C	ESD
NXS0506UP	1.455 x 1.455 x 0.43	16	0.3		WLCSP16	SOT8025-1	Logic

Packing details glass diodes, single ended and through hole packages

Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing
2	ALF2 (SOD27)	4.25 x 1.85			SOD27_113 (10000)
					SOD27_133 (10000)
					SOD27_143 (5000)
	DO-41 (SOD66)	4.8 x 2.6			SOD66_113 (5000)
					SOD66_133 (5000)
	DO-34 (SOD68)	3.04 x 1.6			SOD68_113 (10000)
					SOD68_133 (10000)
					SOD68_143 (5000)
	TO-247 (SOT429)	20.45 x 15.6 x 4.95	5.4		SOT429_127 (300)
	DFN3314-16 (SOT1168-1)	15.3 x 10 x 4.4	5.1		SOT8021_127 (1000)
	TO-220-2 (SOT8021)	15.3 x 10 x 4.4	5.1		SOT8021_127 (1000)
3	TO-247-3L (SOT429-2)	20.95 x 15.94 x 5.02	5.4		SOT429-2_127 (450)
	TO-247-3L (SOT429-3)	20.95 x 15.94 x 5.02	5.4		SOT429-3_127 (300)
4	TO-247-4 (SOT8071-1)	23.45 x 15.94 x 5.02	2.5		SOT8071-1_127 (450)

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
6 Lead DFN	ON Semi	DFN2020-6 (SOT1118)	6
CL2	Toshiba	DSN0402-2 (SOD992)	2
CLP0603	Vishay	DSN0603-2 (SOD962)	2
CMAK/ CMPAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CMPAK/ CMAK	Renesas	SOT323	3
CP4	Toshiba	SOT143B	4
CS6	Toshiba	DFN1010-6 (SOT891)	6
CST3	Toshiba	DFN1006-3 (SOT883)	3
CST3	Toshiba	DFN1006B-3 (SOT883B)	3
CTS2 (fSC)	Toshiba	DFN1006-2 (SOD882)	2
CTS2 (fSC)	Toshiba	DFN1006D-2 (SOD882D)	2
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ON Semi	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK	Infineon	LFPAK88 (SOT1235)	4
D2PAK	ON Semi	LFPAK88 (SOT1235)	4
D2PAK	ST	LFPAK88 (SOT1235)	4
D2PAK	Vishay	LFPAK88 (SOT1235)	4
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK	ST	D2PAK R2P (SOT8018)	2
D2PAK	Ween	D2PAK R2P (SOT8018)	2
D2PAK (TO263-2)	Infineon	D2PAK R2P (SOT8018)	2
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK 3	ON Semi	LFPAK88 (SOT1235)	4
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK-3	ON Semi	D2PAK (SOT404)	3
D2PAK-7	Infineon	LFPAK88 (SOT1235)	4
D2PAK-7	ON Semi	LFPAK88 (SOT1235)	4
D2PAK-7	Vishay	LFPAK88 (SOT1235)	4
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK+	Toshiba	LFPAK88 (SOT1235)	4
DFN-5	ON Semi	LFPAK56 (SOT669)	4
DFN-8	ON Semi	LFPAK56D (SOT1205)	8
DFN1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1006H4-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1411*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
DFN2	ST	DSN0603-2 (SOD962)	2
DPAK	ST	DPAK RP2 (SOT8017)	2

Type	Competitor	Nexperia	Pins/ Leads
DPAK	Ween	DPAK RP2 (SOT8017)	2
DPAK (TO252-2)	Infineon	DPAK RP2 (SOT8017)	2
DSN2, 0.4 x 0.2	ON Semi	DSN0402-2 (SOD992)	2
DSN2, 0.6 x 0.3	ON Semi	DSN0603-2 (SOD962)	2
DSN2, 1.0 x 0.6	ON Semi	DSN1006-2 (SOD993)	2
DSN2, 1.0 x 0.6	ON Semi	DFN1006D-2 (SOD882D)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
EMD2	Rohm	SOD523	2
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
ESC/TESC	Toshiba	SOD523	2
ESM	Toshiba	DFN1006-3 (SOT883)	3
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
GMD2	Rohm	DSN0603-2 (SOD962)	2
H2PAK-2	ST	D2PAK (SOT404)	3
HSMT8	Rohm	LFPAK33 (SOT1210)	8
HSON-8	Renesas	LFPAK56 (SOT669)	4
HSON-8 Dual	Renesas	LFPAK56D (SOT1205)	8
HSOP8 (Dual)	Rohm	LFPAK56D (SOT1205)	8
HSOP8 (Single)	Rohm	LFPAK56 (SOT669)	4
HSOP8 (Single)	Rohm	LFPAK56E (SOT1023)	4
HUML2020L8 (Dual)	Rohm	DFN2020-6 (SOT1118)	6
HUML2020L8 (Single)	Rohm	DFN2020MD-6 (SOT1220)	6
I2PAK	ON Semi	I2PAK (SOT226)	3
I2PAK	ST	I2PAK (SOT226)	3
KMD2	Rohm	DFN1608D-2 (SOD1608)	2
LDPAK(S)-(1)	Renesas	D2PAK (SOT404)	3
LFPAK	Renesas	LFPAK56 (SOT669)	5
LFPAK 5x6	ST	LFPAK56 (SOT669)	4
LFPAK4	ON Semi	LFPAK56 (SOT669)	4
LFPAK56, HSON-8	Renesas	LFPAK56E (SOT1023)	4
LFPAK8	ON Semi	LFPAK56E (SOT1023)	4
LG A 1.0 x 0.6mm	Texas Instruments	DFN1006B-3 (SOT883B)	3
LLD	Renesas	SOD80C	2
LLDS	Rohm	SOD80C	2
LLP1006-2L	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2L	Vishay	DFN1006D-2 (SOD882D)	2
LLP1006-2M	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2M	Vishay	DFN1006D-2 (SOD882D)	2
LLP75-7L	Vishay	DFN1616-6 (SOT1189)	6
LPDS/LPTS	Rohm	D2PAK (SOT404)	3
LPTS	Rohm	D2PAK (SOT404)	3

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
LPTS/LPDS	Rohm	D2PAK (SOT404)	3
M-Flat	Toshiba	SOD128	2
Micro 3	Int. Rectifier	SOT23	3
Micro 6	Int. Rectifier	SOT457	6
MICRO FOOT 0.8 x 0.8	Vishay	WLCSP4	4
MiCRO FOOT 0.8 x 0.8*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1.5 x 1.0	Vishay	WLCSP6	6
MiCRO FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
MICRO FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6
MicroFET	FaIRchild	DFN2020MD-6 (SOT1220)	6
MicroFET 1.6 x 1.6*	FaIRchild	DFN2020MD-6 (SOT1220)	6
MicroSMA	Taiwan Semiconductor	CFP2-HP (SOD323HP)	2
MicroSMP	Vishay	CFP2-HP (SOD323HP)	2
MiniMelf	Diodes Inc.	SOD80C	2
MiniMelf	ST	SOD80C	2
MiniMelf	Vishay	SOD80C	2
MP-25(K)	Renesas	TO-220 (SOT78)	3
MP-25SK	Renesas	I2PAK (SOT226)	3
MP-25ZT	Renesas	D2PAK (SOT404)	3
MP6	Renesas	DSN0603-2 (SOD962)	2
MPAK	Renesas	SOT23	3
MPAK-4R	Renesas	SOT143B	4
MPT3	Rohm	SOT89	3
PG-TD SON-8	Infineon	LFPAK56 (SOT669)	5
PG-TD- SON-8	Infineon	LFPAK56E (SOT1023)	4
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO220-3	Infineon	TO-220 (SOT78)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power FLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
Power FLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8
Power FLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
Power- Di5060-8	Diodes Inc	LFPAK56E (SOT1023)	4

Type	Competitor	Nexperia	Pins/ Leads
Power- FLAT (6x5)	ST	LFPAK56E (SOT1023)	4
Power88 (DFNW-8)	ON Semi	LFPAK88 (SOT1235)	4
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDI323	Diodes Inc.	CFP2-HP (SOD323HP)	2
PowerDi5	Diodes Inc.	CFP15/B (SOT1289/B)	3
PowerDI5	Diodes Inc.	CFP15B (SOT1289B)	3
PowerFLAT (6 x 5)	ST	LFPAK56 (SOT669)	5
PowerFLAT (6 x 5)	ST	LFPAK56D (SOT1205)	5
PowerPAK 1212-8	Vishay	LFPAK33 (SOT1210)	8
PowerPAK 8x8L	Vishay	LFPAK88 (SOT1235)	4
PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPak SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPak SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPAK SO-8	Vishay	LFPAK56 (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8(L)	Vishay	LFPAK56E (SOT1023)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8
PW-Mini	Toshiba	SOT89	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
S08	Vishay	SOT96	8
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC-74 TSOP-6	ON Semi	SOT457	6
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC-88	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC2	Toshiba	DSN0603-2 (SOD962)	2
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC70-3	AOS	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	AOS	SOT363	6
SC70-6	FaIRchild	SOT363	6

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
SC70-6	Vishay	SOT363	6
SC70-6L	Semtech	SOT363	6
SC74 TSOP6	Infineon	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC88/SC 7 0-6/ SOT 363 6 LEAD	ON Semi	SOT363	6
SC89-3	FaIRchild	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Vishay	DFN1006-3 (SOT883)	3
SGP0603P2X3	Semtech	DFN0603-2 (SOD972E)	2
SL2	Toshiba	DFN0603-2 (SOD972E)	2
SlimSMAW	Vishay	CFP5 (SOD128)	2
SLP0402P2X3	Semtech	DSN0402-2 (SOD992)	2
SLP1006P2	Semtech	DFN1006-2 (SOD882)	2
SLP1006P2T	Semtech	DFN1006D-2 (SOD882D)	2
SLP1006P3	Semtech	DFN1006-3 (SOT883)	3
SLP1006P3T	Semtech	DFN1006B-3 (SOT883B)	3
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1610P4	Semtech	DFN2510A-10 (SOT1176)	10
SLP1713P8	Semtech	DFN1714-8 (SOT1166)	8
SLP1713P8	Semtech	DFN1714U-8 (SOT983)	8
SLP2513P12	Semtech	DFN2514-12 (SOT1167)	12
SLP3313P16	Semtech	DFN3314-16 (SOT1168)	16
SM6 VS-6	Toshiba	SOT457	6
SMA flat	ST	SOD128	2
SMAFS	Diodes Inc.	CFP5 (SOD128)	2
SMD TO-263	Renesas	D2PAK (SOT404)	3
SMD0402	Rohm	DSN0402-2 (SOD992)	2
SMD6/SMT6	Rohm	SOT457	6
SMD6/SMZ6	Rohm	SOT457	6
SMF	Vishay	CFP3 (SOD123W)	2
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC	Vishay	CFP15B (SOT1289B)	3
SMPc	Taiwan Semiconductor	CFP15B (SOT1289B)	3
SMPC TO-277A	Vishay	CFP15/B (SOT1289/B)	3
SMPC4.0	Taiwan Semiconductor	CFP15B (SOT1289B)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6

Type	Competitor	Nexperia	Pins/ Leads
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPAK56 (SOT669)	5
SO-8 FL, DFN-5	ON Semi	LFPAK56E (SOT1023)	4
SO-8FL Dual	ON Semi	LFPAK56D (SOT1205)	8
SO-8FL Dual	ON Semi	LFPAK56 (SOT669)	4
SOD-123	ST	SOD123F	2
SOD-123-FL	ON Semi	SOD123W	2
SOD-123FL	ON Semi	CFP3 (SOD123W)	2
SOD-123FL	Rohm	CFP3 (SOD123W)	2
SOD-123W	Taiwan Semiconductor	CFP3 (SOD123W)	2
SOD-128	Rohm	CFP5 (SOD128)	2
SOD-128	Taiwan Semiconductor	CFP5 (SOD128)	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ON Semi	SOD323	2
SOD-323	ST	SOD323	2
SOD-323EP	ON Semi	CFP2-HP (SOD323HP)	2
SOD-323HE	Rohm	CFP2-HP (SOD323HP)	2
SOD-523	ON Semi	SOD523	2
SOD-523	ST	SOD523	2
SOD123F	Diodes Inc.	CFP3 (SOD123W)	2
SOD323	Infineon	SOD323	2
SOD323	Semtech	SOD323	2
SOD323	Vishay	SOD323	2
SOD523	Diodes Inc.	SOD523	2
SOD523	Semtech	SOD523	2
SOD523	Vishay	SOD523	2
SOD882	ST	DFN1006-2 (SOD882)	2
SOD882T	ST	DFN1006D-2 (SOD882D)	2
SOD923-2*	ON Semi	DFN1006-2 (SOD882)	2
SOIC-8 NB	ON Semi	SOT96	8
SON 2x2	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SON 3 x 3*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SOP / DSOP Advance	Toshiba	LFPAK56E (SOT1023)	4
SOP / DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP-8	Renesas	SOT96	8
SOP8	Rohm	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT-143	Diodes Inc.	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	Infineon	SOT223	4
SOT-223	ON Semi	SOT223	4

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
SOT-223	ST	SOT223	4
SOT-23	Diodes Inc.	SOT23	3
SOT-23	ON Semi	SOT23	3
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	SOT323	3
SOT-363	Diodes Inc.	SOT363	6
SOT-89	ON Semi	SOT89	3
SOT063*	ON Semi	DFN1010B-6 (SOT1216)	6
SOT223	Diodes Inc.	SOT223	4
SOT223	FaIRchild	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Vishay	SOT223	4
SOT23	AOS	SOT23	3
SOT23	Diodes Inc.	SOT23	3
SOT23	Infineon	SOT23	3
SOT23	ON Semi	SOT23	3
SOT23	Semtech	SOT23	3
SOT23	ST	SOT23	3
SOT23	Vishay	SOT23	3
SOT23-3	AOS	SOT23	3
SOT23-3	Diodes Inc.	SOT23	3
SOT23-3	ON Semi	SOT23	3
SOT23-5	AOS	SOT457	6
SOT23-5	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	ST	SOT457	6
SOT23-6L	Semtech	SOT457	6
SOT23F	Diodes Inc.	SOT23	3
SOT23F	Toshiba	SOT23	3
SOT26	Diodes Inc.	SOT457	6
SOT323	Diodes Inc.	SOT323	3
SOT323	FaIRchild	SOT323	3
SOT323	Infineon	SOT323	3
SOT353	Diodes Inc.	SOT353	5
SOT353	Diodes Inc.	SOT363	6
SOT353	Vishay	SOT353	5
SOT363	Diodes Inc.	SOT363	6
SOT363	Infineon	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3
SOT523F	FaIRchild	DFN1006-3 (SOT883)	3
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Diodes Inc.	SOT89	3

Type	Competitor	Nexperia	Pins/ Leads
SOT89	Infineon	SOT89	3
SOT89-3L	Diodes Inc.	SOT89	3
SOT963	ON Semi	DFN1010-6 (SOT891)	6
SOT963*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
SRP-F	Renesas	SOD123W	2
SS CSP2	Toshiba	DFN1006-3 (SOT883)	3
SSD3/SST3	Rohm	SOT23	3
SSM	Toshiba	DFN1006-3 (SOT883)	3
SSOT3	FaIRchild	SOT23	3
SSOT6	FaIRchild	SOT457	6
SSOT6 FLMP	FaIRchild	SOT457	6
SST3	Rohm	SOT23	3
SST3/SSD3	Rohm	SOT23	3
ST01005	STM	DSN0402-2 (SOD992)	2
Stmite flat	ST	SOD123W	2
sTOLL (PG-HSOF-5)	Infineon	LFPAK88 (SOT1235)	4
Sub SMA	Taiwan Semiconductor	CFP3 (SOD123W)	2
T0263	Diodes Inc.	D2PAK(SOT404)	3
T0263-3	Infineon	D2PAK (SOT404)	3
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO-200 real 2pin	Infineon	TO-220-2 (SOT8021)	2
TO-220	ST	TO-220 (SOT78)	3
TO-220	Toshiba	TO-220 (SOT78)	3
TO-220	Vishay	TO-220 (SOT78)	3
TO-220 FP	Onsemi	TO-220-2 (SOT8021)	2
TO-220-2	Cree	TO-220-2 (SOT8021)	2
TO-220-2	Onsemi	TO-220-2 (SOT8021)	2
TO-220-2L	Littelfuse	TO-220-2 (SOT8021)	2
TO-220-2L	Ween	TO-220-2 (SOT8021)	2
TO-220-3	ON Semi	TO-220 (SOT78)	3
TO-220-3L	ON Semi	TO-220 (SOT78)	3
TO-220A	Rohm	TO-220-2 (SOT8021)	2
TO-220AB	Vishay	TO-220 (SOT78)	3
TO-220AB	ST	TO-220-2 (SOT8021)	2
TO-220AC	ST	TO-220-2 (SOT8021)	2
TO-220AC	Rohm	TO-220-2 (SOT8021)	2
TO-220AC2L	Rohm	TO-220-2 (SOT8021)	2
TO-220F-3FS	ON Semi	TO-220 (SOT78)	3
TO-220FM	Rohm	TO-220 (SOT78)	3
TO-220S	Renesas	D2PAK (SOT404)	3
TO-220SM	Toshiba	D2PAK (SOT404)	3

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
TO-247	ST	TO-247-2 (SOT8022)	2
TO-247	Littelfuse	TO-247-2 (SOT8022)	2
TO-247	Rohm	TO-247-2 (SOT8022)	2
TO-247 real 2pin	Infineon	TO-247-2 (SOT8022)	2
TO-247-2	Cree	TO-247-2 (SOT8022)	2
TO-247-2	Onsemi	TO-247-2 (SOT8022)	2
TO-247-2L	Ween	TO-247-2 (SOT8022)	2
TO-252-2	Cree	DPAK RP2 (SOT8017)	2
TO-252-2L	Littelfuse	DPAK RP2 (SOT8017)	2
TO-262	Renesas	I2PAK (SOT226)	3
TO-262	Vishay	I2PAK (SOT226)	3
TO-262-2L	ON Semi	I2PAK (SOT226)	3
TO-262-3L	ON Semi	I2PAK (SOT226)	3
TO-263	Renesas	D2PAK-7 (SOT427)	7
TO-263	Renesas	D2PAK (SOT404)	3
TO-263	Vishay	D2PAK (SOT404)	3
TO-263 3-lead	Vishay	D2PAK (SOT404)	3
TO-263 real 2pin	Infineon	D2PAK R2P (SOT8018)	2
TO-263-2L	ON Semi	D2PAK (SOT404)	3
TO-263-2L	Littelfuse	D2PAK R2P (SOT8018)	2
TO-263AB	Vishay	D2PAK (SOT404)	3
TO-273-2	Cree	D2PAK R2P (SOT8018)	2
TO-277	ON Semi	CFP15B (SOT1289B)	3
TO-277A	Rohm	CFP15B (SOT1289B)	3
TO-LL	ON Semi	LFPAK88 (SOT1235)	4
TO-LL (PG-HSOF-8-1)	Infineon	LFPAK88 (SOT1235)	4
TO220	Infineon	TO-220 (SOT78)	3
TO220-3	Diodes Inc.	TO-220 (SOT78)	3
TO262	Infineon	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	3
TOLG (PG-HSOG-8)	Infineon	LFPAK88 (SOT1235)	4
TSLP-2-1	Infineon	DFN1006-2 (SOD882)	2
TSLP-2-7/-17	Infineon	DFN1006D-2 (SOD882D)	2
TSLP-3-1, -15	Infineon	DFN1006B-3 (SOT883B)	3
TSLP-3-4	Infineon	DFN1006-3 (SOT883)	3
TSLP-9-1	Infineon	DFN2510A-10 (SOT 1176)	10
TSMT5*	Rohm	SOT457	6
TSMT6	Rohm	SOT457	6
TSNP-2-2	Infineon	DFN1608D-2 (SOD 1608)	2
TSON Advance	Toshiba	LFPAK33 (SOT1210)	8
TSOP-6	Renesas	SOT457	6
TSOP-6/ TSOP6	Vishay	SOT457	6
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	SOT457	6

Type	Competitor	Nexperia	Pins/ Leads
TSOP6	Vishay	SOT457	6
TSSLP-2-1	Infineon	DSN0603-2 (SOD962)	2
TSST8*	Rohm	DFN2020MD-6 (SOT1220)	6
TUMT3	Rohm	SOT323	3
TUMT5*	Rohm	DFN2020-6 (SOT1118)	6
TUMT6*	Rohm	DFN2020-6 (SOT1118)	6
Type B 2.0 x 2.0 x 0.6			
U-DFN2020-3	Diodes Inc.	DFN2020-3 (SOT1061)	3
U-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-WLB1510-6	Diodes Inc.	WLCSP6	6
U-WLB1515-9	Diodes Inc.	WLCSP9	9
U-WLB1515-9 (Type B)	Diodes Inc.	WLCSP9	9
U-WLB1515-9 (Type E)	Diodes Inc.	WLCSP9	9
UDFN 1.7 x 1.35, 0.4P	ON Semi	DFN1714U-8 (SOT983)	8
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN10 2.5 x 1, 0.5P	ON Semi	DFN2510A-10 (SOT1176)	10
UDFN12 2.5 x 1.35, 0.4P	ON Semi	DFN2514-12 (SOT1167)	12
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN6B	Toshiba	DFN2020MD-6 (SOT1220)	6
UF6	Toshiba	SOT363	6
UF6/ USV/ US6	Toshiba	SOT363	6
UFP	Renesas	SOD523	2
UMD2	Rohm	SOD323F	2
UMD3/UMT3	Rohm	SOT323	3
UMD5/UMT5	Rohm	SOT353	5
UMD6/ UMT6	Rohm	SOT363	6
UMLP 1.6 x 1.6*	FaIRchild	DFN2020MD-6 (SOT1220)	6
UMT3	Rohm	SOT323	3
UMT3F*	Rohm	SOT323	3
UMT5/ UMD5	Rohm	SOT353	5
UMT6	Rohm	SOT363	6
UMT6/ UMD6	Rohm	SOT363	6
UPAK (SOT89)	Renesas	SOT89	3
URP	Renesas	SOD323	2
US-Flat	Toshiba	SOD323F	2
US6	Toshiba	SOT363	6
US6/ UF6/ USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
USV	Toshiba	SOT363	6
USV/ US6/ UF6/	Toshiba	SOT363	6
VESM*	Toshiba	DFN1010D-3 (SOT1215)	3
VML0806*	Rohm	DFN1006B-3 (SOT883B)	3
VML1006	Rohm	DFN1006-3 (SOT883)	3
VMN2*	Rohm	DFN1006-2 (SOD882)	2
VMN2*	Rohm	DFN1006D-2 (SOD882D)	2
VMN3*	Rohm	DFN1006-3 (SOT883)	3
VMT3*	Rohm	DFN1010D-3 (SOT1215)	3
VMT6*	Rohm	DFN1010B-6 (SOT1216)	6
VS6	Toshiba	SOT457	6
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6
WCSP6C	Toshiba	WLCSP6	6
WDFN-8	ON Semi	LFPAK33 (SOT1210)	8
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WLCSP 1 x 1*	FaIRchild	WLCSP4	3
WLCSP-4*	FaIRchild	WLCSP4	3
WLCSP-4*	ON Semi	WLCSP4	3
WLCSP1.6 x 1.6*	AOS	WLCSP6	6
WLCSP2	ON Semi	DSN0603-2 (SOD962)	2
WLL-2-2	Infineon	DSN0402-2 (SOD992)	2
WLL-2-2	Infineon	DSN0402B-2 (SOD992B)	2
WLP 1.0 x 1.5	Texas Instruments	WLCSP6	6
WLP1.5 x 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
WLPI.O x 1.0*	Texas Instruments	DFN1010D-3 (SOT1215)	3
WLPI.O x 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
X1 -DFN 1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X1-DFN1212-3*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X1-DFN1616-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X1-WLB0808-4	Diodes Inc.	WLCSP4	4
X2-DFN0606-3	Diodes Inc.	DFN0606 (SOT8001)	3
X2-DFN0806-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X2-DFN1006-2	Diodes Inc.	DFN1006D-2 (SOD882D)	2
X2-DFN1006-3	Diodes Inc.	DFN1006B-3 (SOT883B)	3
X2-DFN1010-3	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X2-DFN1310-6*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
X2-DFN2015-3*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-WLB0808-4	Diodes Inc.	WLCSP4	4
X2-WLB0808-4 (Type B)	Diodes Inc.	WLCSP4	4
X3-DFN0603-2	Diodes Inc	DFN0603-2 (SOD972E)	2
X3-DFN0603-2	Diodes Inc.	DSN0603-2 (SOD962)	2

Type	Competitor	Nexperia	Pins/ Leads
X3DFN-2	ON Semi	DSN0603-2 (SOD962)	2
X3DFN2	ON Semi	DFN0603-2 (SOD972E)	2
XDFN3	ON Semi	DFN1006-3 (SOT883)	3
XI-DFN1006-2	Diodes Inc.	DFN1006-2 (SOD882)	2
XLLGA-3	ON Semi	DFN0606 (SOT8001)	3
µ8FL	ON Semi	LFPAK33 (SOT1210)	8
µQFN-10L	ST	DFN2510A-10 (SOT1176)	10
µQFN-2L	ST	DFN1006-2 (SOD882)	2

Types with * show footprint compability only

Package cross reference matrix

Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P_{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
2	DSN0402-2 (SOD992)		0.4 x 0.2 x 0.12			SMD0402	CL2	DSN2 0.4 x 0.2				ST01005		SLP-0402P2X3
	DSN0402B-2 (SOD992B)		0.43 x 0.23 x 0.12											
	DFN0603-2 (SOD972E)		0.63 x 0.33 x 0.25				SL2	X3DFN2			X3-DFN0603-2			SGP-0603P2X3
	DSN1006-2 (SOD993)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DSN1006U-2 (SOD995)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250		(VMN2)	CTS2 (fSC)	(SOD923-2)		TSLP-2-1	XI-DFN1006-2	SOD 882 uQFN-2L	LLP1006-2M LLP1006-2L	SLP1006P2
	DFN1006D-2 (SOD882D)		1.0 x 0.6 x 0.37	250		(VMN2)	CTS2 (fSC)	DSN2 1.0 x 0.6		TSLP-2-7/ -17	X2-DFN1006-2	SOD882T	LLP1006-2L LLP1006-2M	SLP1006P2T
	DFN1608D-2 (SOD1608)		1.6 x 0.8 x 0.37	780		KMD2		DSN2 1.6 x 0.8		TSNP-2-2				SLP1610N2
	DPAK R2P (SOT8017)	TO-252	6.1 x 6.6 x 2.3					DPAK		DPAK		DPAK		
	D2PAK R2P (SOT8018)	TO-263	11 x 10 x 4.3			TO-263AB		D2PAK		D2PAK		D2PAK		
	DSN0603-2 (SOD962)		0.6 x 0.3 x 0.3	525		GMD2	SC2	DSN2, X3DFN-2 WLCSP2	MP6	TSSLP-2-1	X3-DFN0603-2	DFN2	CLP0603	SLP-0603P2X3
	SOD80C	Mini-Melf	3.5 x 1.5 x 1.5	300		LLDS			LLD		MiniMelf	MiniMelf	MiniMelf	
	SOD123F		2.6 x 1.6 x 1.1	830								SOD-123		
	CFP3 (SOD123W)		2.6 x 1.7 x 1.0	950		SOD-123FL		SOD-123FL			SOD123F	SOD-123W Sub SMA	SMF	
	CFP5 (SOD128)		3.8 x 2.5 x 1.0	1050		SOD-128					SMAFS	SOD-128	SlimSMAW	
	SOD323	SC-76	1.7 x 1.25 x 0.95	400			USC	SOD-323	URP	SOD323	SOD-323	SOD-323	SOD323	SOD323
	CFP2-HP (SOD323HP)		2.2 x 1.3 x 0.68			SOD-323HE		SOD-323EP			PowerDI323		MicroSMP	
	SOD323F	SC-90	1.7 x 1.25 x 0.7	830		UMD2	US-Flat							
	SOD523	SC-79	1.2 x 0.8 x 0.6	500		EMD2	ESC/TESC	SOD-523	UFP	SC79	SOD523	SOD-523	SOD523	SOD523
	TO-220-2 (SOT8021)	TO-220	10 x 15.6 x 4.4			TO-220	TO-220	TO-220	TO-220	TO-220		TO-220	TO-220	
	TO-247-2 (SOT8022)	TO-247	15.9 x 20.9 x 5			TO-247	TO-247	TO-247		TO-247		TO-247	TO-247	
3	CFP15B (SOT1289B)		5.8 x 4.3 x 0.95	2150		TO-277A		TO-277			PowerDi5	SMPC SMPC4.0	SMPC	
	DFN1006-3 (SOT883)	SC-101	1.0 x 0.6 x 0.48	250		VML1006	SS CSP2	XDFN3		TSLP-3-4	X1 -DFN 1006-3			SLP1006P3
	DFN1006B-3 (SOT883B)		1.0 x 0.6 x 0.37	250		VML1006	CST3	XDFN3		TSLP-3-1, -15	X2-DFN1006-3			SLP1006P3T
	DFN1010D-3 (SOT1215)		1.1 x 1.0 x 0.37	325		(VMT3)	(VESM)	(SOT723)			X2-DFN1010-3			
	DFN2020-3 (SOT1061)	HUSON3	2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DFN2020D-3 (SOT1061D)		2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	D^2PAK (SOT404)		11.0 x 11.0 x 4.3			LPDS/ LPTS	TO-220SM D^2PAK	D^2PAK D^2PAK 3 TO-263-2L	TO-220S / SMD TO-263 LDPAK(S)-(1) MP-25Z	D^2PAK, PG-T0263-3	T0263 (D^2PAK)	D^2PAK, H^2PAK-2	TO-263 3-lead TO-263AB / D^2PAK TO-263	
	SOT23		2.9 x 1.3 x 1.0	250		SSD3/ SST3	S-Mini TSM	SOT-23	MPAK	SOT23	SOT-23	SOT23	SOT23	SOT23
	SOT89	SC-62	4.5 x 2.5 x 1.5	1300		MPT3	PW-Mini	SOT-89	UPAK (SOT89)	SOT89	SOT89			
	SOT323	SC-70	2.0 x 1.25 x 0.95	200		UMD3/ UMT3 TUMT3	USM	SC-70	CMAK/ CMPAK	SOT323	SOT-323	SOT-323	SC-70 3 leads	SOT-323
	TO-220 (SOT78)		15.6 x 10 x 4.4			TO-220FM	TO-220	TO-220-3L, TO-220F-3FS, TO-220-3	MP-25(K)	PG-TO220-3, TO220	TO220-3	TO-220	TO-220, TO-220AB	
	I^2PAK (SOT226)		11 x 10 x 4.3					I^2PAK, TO-262-2L, TO-262-3L	MP-25SK, TO-262	PG-TO262-3, TO262		I^2PAK	TO-262	

Types in brackets (…) show footprint compatibility only

Package cross reference matrix

Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P_{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
4	LFPAK56 (SOT669)	Power-S08	4.9 x 4.45 x 1.0	395W		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5, LFPAK4	LFPAK56, HSON-8	PG-TD-SON-8	Power-Di5060-8	Power-FLAT (6x5)	PowerPAK SO-8(L)	
	SOT143B		2.9 x 1.3 x 1.0	250			CP4		MPAK-4R	SOT143	SOT-143			SOT-143
	LFPAK56E (SOT1023)		6.2 x 5.3 x 1.1	500W		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5, LFPAK8	LFPAK56, HSON-8	PG-TD-SON-8	Power-Di5060-8	Power-FLAT (6x5)	PowerPAK SO-8(L)	
	SOT223	SC-73	6.5 x 3.5 x 1.65	1700				SOT-223		SOT223	SOT-223		SOT223	
	LFPAK88 (SOT1235)		8 x 8 x 1.6	375W			D²PAK+	TO-LL Power88 D²PAK-3 D²PAK-7		TO-LL sTOLL TOLG D²PAK D²PAK7P		D²PAK H²PAK-2 H²PAK-6	PowerPAK 8x8L D²PAK-3 D²PAK-7	
5	SOT353	SC-88 A	2.0 x 1.25 x 0.95	300		UMD5/ UMT5	USV	SC-88 A	CMPAK-5C0		SOT353		SOT353	SC70-5L
6	DFN1010-6 (SOT891)	XSON6	1.0 x 1.0 x 0.48				CS6	SOT963						
	DFN1010B-6 (SOT1216)		1.1 x 1.0 x 0.37	350		(VMT6)	(FS6)	(SOT063)			(SOT963)			
	DFN1410-6 (SOT886)	XSON6	1.45 x 1.0 x 0.48	250										SLP1510N6
	DFN2020-6 (SOT1118)		2.0 x 2.0 x 0.62	1300		HU-ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020-6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN2020D-6 (SOT1118D)		2.0 x 2.0 x 0.62	1300		HU-ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020-6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN-2020MD-6 (SOT1220)		2.0 x 2.0 x 0.62	1250		HU-ML2020L8 (Single)	UDFN6B	UDFN-6 WDFN6			UDFN2020-6 Type E		PowerPAK SC-70 Thin PowerPAK SC-70	
	SOT363	SC-88	2.0 x 1.25 x 0.95	300		UMD6/ UMT6	US6 UF6 USV	SC-88	CMPAK-6	SOT363	SOT-363		SC70-6	SC70-6L
	SOT457	SC-74	2.9 x 1.5 x 1.0	750		SMD6/ SMT6	SM6 VS-6	SC-74 TSOP-6	TSOP-6	SC74 TSOP6	SOT23-6 SOT26		TSOP6 TSOP-6	SOT23-6L
8	LFPAK33 (SOT1210)		3.3 x 3.3 x 0.85	790		HSMT8	TSON Advance	µ8FL, WDFN-8		PG-TSD-SON-8	Power DI3333-8	Power FLAT 3.3 x 3.3	PowerPAK 1212-8	
	LFPAK56D (SOT1205)		4.9 x 4.45 x 1.0	680		HSOP8 (Dual)		SO-8FL Dual, DFN-8	HSON-8 dual	PG-TDSON-8	Power DI5060-8	Power FLAT 5x6 Dual	PowerPAK SO-8L Dual	
	DFN1714-8 (SOT 1166)	HUSON8	1.7 x 1.35 x 0.52											SLP1713P8
	DFN1714U-8 (SOT983)	HXSON8	1.7 x 1.35 x 0.48					UDFN 1.7 x 1.35, 0.4P						SLP1713P8
10	DFN2510-10 (SOT 1165)	XSON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DF-N2510A-10 (SOT1176)	XSON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2626-10 (SOT 1197)		2.6 x 2.6 x 0.48					UDFN10 2.6 x 2.6, 0.5P						SLP2626P10
12	DFN2512-12 (SOT 1158)	HXSON12	2.5 x 1.2 x 0.48					UDFN12, 2.5 x 1.2, 0.4P						
	DFN2514-12 (SOT 1167)	HUSON12	2.5 x 1.35 x 0.53					UDFN12, 2.5 x 1.35, 0.4P						SLP2513P12
16	DFN3312-16 (SOT 1159)	HXSON16	3.3 x 1.2 x 0.48					UDFN 16, 3.5 x 1.2, 0.4P						
	DFN3314-16 (SOT 1168)	HUSON16	3.3 x 1.35 x 0.53											SLP3313P16

Types in brackets (…) show footprint compatibility only

Competitive cross reference - Analog & logic ICs

This cross reference allows you to match a competitor's part number to a Nexperia part number. Once you have the equivalent part number, check the Nexperia website www.nexperia.com/logic to confirm that the particular configuration is released.

On semiconductor low pin count logic

NL 1 7 SZ 08 DTF

Prefix		Prefix		Gate count		Function	Package	
ON	Nexperia	ON	Nexperia	ON	Nexperia		ON	Nexperia
NL7	74	n	nG	SV	AUP		DFT	GW
				SZ	LVC		DTT	GV
				WZ	LVC		US	DC
				WB	LVC		AMX	GM
							CMX	GS

74 LVC 1G 08 GW

ON semiconductor tiny logic

NC7 S Z 157 P6

Prefix		Gate count		Logic Family		Function	Package	
ON	Nexperia	ON	Nexperia	ON	Nexperia		ON	Nexperia
NC7	74	S	1G	-	HC		P5	GW
		W	2G	B	LVC		M5	GV
		n	3G	P	AUP		P6	GW
				T	HCT		K8	DC
				V	AUP		L6	GM
				Z	LVC		L8	GM

74 LVC 1G 157 GW

On semiconductors logic

MC74 VHC 1GT 08 DTT

Prefix		logic Family		Gate count		Function	Package	
ON	Nexperia	ON	Nexperia	ON	Nexperia		ON	Nexperia
-	-	HC	HC(T)	-	-		N, C	N, P
MC74	74	LCX	LVC	nG	nG		D	D
		LVX	LV	nGT*	nG		DT	PW
		MC1	HEF	* Indicates TTL variant of the family			DFT	GW
		VCX	ALVC				DTT	GV
		VHC	AHC(T)				US	DC
							QZ	DS
							MN	BQ
							AMX	GM
							CMX	GS

74 AHCT 1G 08 GW

Toshiba one gate

TC7 S Z 157 FU

Prefix		Gate count		logic Family		Function	Package	
Tosh	Nexperia	Tosh	Nexperia	Tosh	Nexperia		Tosh	Nexperia
TC7	74	S	1G	-	HC		FK	GV
		W	1,2 or 3G	A	LVC		FU	GW, DP
		P	1 or 2G	G	AUP			
				T	HCT			
				H	AHC			
				ET	AHCT			
				Z	LVC			

74 LVC 1G 157 GW

ON semiconductor standard logic

MM74 LCX 157 MTD

Prefix		logic Family		Function	Package	
ON	Nexperia	ON	Nexperia		ON	Nexperia
MM74	74	ABT	ABT		N	N
74	74	F	F		M, SC	D
		HC(T)	HC(T)		MSA	DB
		LCX	LVC		MEA	DL
		LVX	LV		MTC	PW
		VCX	ALVC		MTD	DGG
		VHC(T)	AHC(T)		BQ	BQ
		LVT	LVT			

74 LVC 157 PW

Toshiba standard logic

TC74 LCX 125 FT

Prefix		logic Family		Function	Package	
Tosh	Nexperia	Tosh	Nexperia		Tosh	Nexperia
-	-	HC(T)	HC(T)		P	N
TC74	74	LCX	LVC		FW	D
		LVX	LV		FN	D
		TC	HEF		FT	PW
		VCX	ALVC		FS	DB
		VHC(T)	VHC(T)			

74 LVC 125 PW

Texas instruments logic

SN74 LVC 1G 08 DCK

Prefix		Logic Family		Gate count		Function	Package	
TI	Nexperia	TI	Nexperia	TI	Nexperia		TI	Nexperia
-	-	ABT	ABT	-	-		E	P
SN74	74	AHC(T)	AHC(T)	nG	nG		M	T
SN54	74	ALVC	ALVC	nT	nT		D	D
		ALVT	ALVT				PW	PW, TT
		AUP	AUP				DB	DB
		AVC	AVC				DL	DL
		CBT	CBT				DGG	DGG
		CBT LV	CBT LV				DGV	DGV
		CD	HEF				GKE	EV
		F	F				ZKE	EC
		HC(T)	HC(T)				DCK	GW
		LV	LV				DBV	GV
		LVC	LVC				DCU	DC
		LVT	LVT				DCT	DP
		TPIC6C	NPIC6C				DRY	GM
							YZP	GM

74 LVC 1G 08 GW

IDT logic

74 FCT 244 PY

Prefix		logic Family		Function	Package	
Tosh	Nexperia	IDT	Nexperia		IDT	Nexperia
TC7	74	ALVC	ALVC		BF	EC
54	74	CBTLV	CBTLV		CD	N
		FCT	ABT		DC, PS	D
		LVC	LVC		DJ, PF	DGV
		QS	CBT		PA	DGG
					PC	DS, DK
					PG	PW
					PV	DL
					PY	DB

74 ABT 244 DB

Diodes Inc. logic

74 LVC 1G 08 FW4

Prefix		logic Family		Gate count		Function	Packages	
Diodes	Nexperia	Diodes	Nexperia	Diodes	Nexperia		Diodes	Nexperia
74	74	AHC(T)	AHC(T)	-	-		T14	PW
		LVC	LVC	nG	nG		S14	D
							SE	GW
							DW	GW
							W5	GV
							FZ4	GM
							FW4	GF

74 LVC 1G 08 GW

Renesas logic

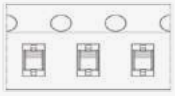
HD74 HC 1G 08 CM

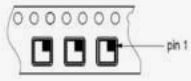
Prefix		logic Family		Gate count		Function	package	
Ren.	Nexperia	Ren.	Nexperia	Ren.	Nexperia		Ren.	Nexperia
HD74	74	ALVC	ALVC	-	-		CM	GW
		BC, LS	ABT	nG	nG		FP	DC
		CBT	CBT				P	N
		HC(T)	HC(T)				T	PW
		LV	LV				US	DC
		LVC	LVC					
		LVT	LVT					

74 HC 1G 08 GW

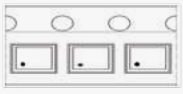
Product orientation (tape and reel pack)

2 pin packages

Orientation in tape	Package	Packing 12NC ending
	DFN1006-2 (SOD882)	315
	DFN1006D-2 (SOD882D)	315
	DFN1608D-2 (SOD1608)	315
	DFN1006BD-2 (SOD882BD)	315
	DSN0603-2 (SOD962)	315
	DFN0603-2 (SOD972E)	317
	DFN0603-3 (SOT8013)	317
	DSN0402-2 (SOD992)	315
	DSN0402B-2 (SOD992B)	315
	DSN1006-2 (SOD993)	315
	DSN1006-2 (SOD993B)	315
	DSN1006U-2 (SOD995)	315
	DSN1608-2 (SOD963&964)	315
	SOD80	115, 135
	SOD123F	115
	CFP3 (SOD123W)	115
	SOD123	115,118
	CFP5 (SOD128)	115
	CFP2-HP (SOD323HP)	115
	SOD323	115, 135
	SOD323F	115
	SOD523	115, 135, 315, 335

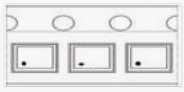
Orientation in tape	Package	Packing 12NC ending
	DPAK (SOT8017)	118
	D²PAK (SOT8018)	118

3 pin packages

Orientation in tape	Package	Packing 12NC ending
	SOT89	146
	DFN1006-3 (SOT883)	315
	DFN1006B-3 (SOT883B)	315
	SOT23	185, 215, 235
	SOT323	115, 135
	SOT416	115, 135
	SOT663	115

Orientation in tape	Package	Packing 12NC ending
	DFN1010D-3 (SOT1215)	147
	DFN2020-3 (SOT1061)	115, 135
	DFN2020D-3 (SOT1061D)	115, 135
	SOT89	115, 135
	D²PAK (SOT404)	118
	SOT89	147
	CFP15 (SOT1289)	139, 146
	CFP15B (SOT1289B)	139
	DSN1006 (SOT8007)	326
	DSN1010-3 (SOT8007)	315
	DFN0606-3 (SOT8001)	125

4 pin packages

	WLCSP4 (0808)	084
	LFPAK56 (SOT669)	115
	LFPAK56E (SOT1023)	115
	LFPAK56-UL2595 (SOT1023A)	115
	LFPAK88 (SOT1235)	118
	SOT143B	215, 235
	SOT223	115, 135
	DFN1010-4 (SOT1194)	115

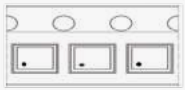
		
		

5 pin packages

	WLCSP5 (1208)	087
	SOT753	125
	X2SON5 (SOT1226)	125
	UMTS (SOT353-1)	125
	SO5 (SOT753)	125

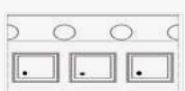
	SOT353	115, 135
	SOT665	115
		

6 pin packages

Orientation in tape	Package	Packing 12NC ending
	DFN1410-6 (SOT886)	115
	DFN2020MD-6 (SOT1220)	184
	LFPAK33 (SOT1210)	115
	LFPAK56D (SOT1205)	115
	WLCSP6 (1510)	023
	XSON6 (SOT1202)	125
	XSON6 (SOT886)	125
	DFN1308-6 (SOT8006)	315
	DFN1308-6 (SOT8006B)	315
	DFN2020M-6 (SOT1220-2)	115
	DFN1010-6 (SOT891)	132
	DFN1010E-6 (SOT1202)	132
	DFN1410-6 (SOT886)	132
	DFN2020MD-6 (SOT1220)	125
	SOT363	125, 165
	SOT457	125, 165
	SC-88 (SOT363)	125
	SC-74 (SOT457)	125

Orientation in tape	Package	Packing 12NC ending
	DFN1412-6 (SOT1268)	147
	DFN2020D-6 (SOT1118D)	115
	DFN2020MD-6 (SOT1220)	115
	SOT363	115, 135
	SOT457	115, 135
	X2SON6 (SOT1255)	147
	DFN0606B-6	147
	SOT666	315
	DFN0606 (SOT8001)	147

multi I/O pin packages

Orientation in tape	Package	Packing 12NC ending
	DFN2110-9 (SOT1178)	115
	DFN2111-7 (SOT1358)	471
	DFN2510A-10 (SOT1176)	115
	DFN2520-9 (SOT1333)	
	DFN2520-9 (SOT1333)	
	DFN2520-9 (SOT1333)	
	DFN2520-9 (SOT1333)	
	DFN5050-32 (SOT617-3)	
	DHXQFN16 (SOT8016-1)	115
	DHXQFN20 (SOT8020-1)	115
	DHXQFN24 (SOT8024-1)	115
	XSON8 (SOT1116)	115
	X2SON8 (SOT1233-2)	115
	XSON8 (SOT1203)	115
	XSON8 (SOT833-1)	115
	TSSOP8 (SOT530-1)	118
	TSSOP10 (SOT552-1)	118
	XQFN10 (SOT1160-1)	115
	XQFN12 (SOT1174-1)	115
	DHVQFN14 (SOT762-1)	115
	TSSOP14 (SOT402-1)	118
	TSSOP16 (SOT403-1)	118
	SO16 (SOT109-1)	118
	TSSOP20 (SOT360-1)	118
	SO20 (SOT163-1)	118
	DHXQFN20 (SOT1045-2)	115
	DHVQFN20 (SOT764-1)	115
	DHVQFN24 (SOT815-1)	118
	TSSOP24 (SOT355-1)	118
	TSSOP48 (SOT362-1)	118
	TSSOP48 (SOT480-1)	118
	TSSOP56 (SOT364-1)	118
	VSSOP8 (SOT765-1)	125
	TSSOP8 (SOT505-2)	125

Orientation in tape	Package	Packing 12NC ending
	DHXQFN14 (SOT8014-1)	147
		

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