

Selection guide 2019.

Discretes, Logic and MOSFETs



nexperia

EFFICIENCY WINS.

Introduction

Welcome to the 2019 edition of the Nexperia Selection Guide. Here we present all our Discrete, Logic and MOSFET devices in one single document to give you a complete overview of our portfolio. We hope that makes it even easier for you to find the right 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 90 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 five 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

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_{DSon} devices from < 20 V to > 200 V
- › True power packages with solid wireless-clip for smart efficiency

Logic

- › Comprehensive portfolio operating from 0.7 V to 15.0 V
- › Unrivalled package innovation and lowest power logic 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 it's 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
- › ISO/TS 16949 for automotive sites
- › ISO14001
- › OHSAS18001



Design for excellence

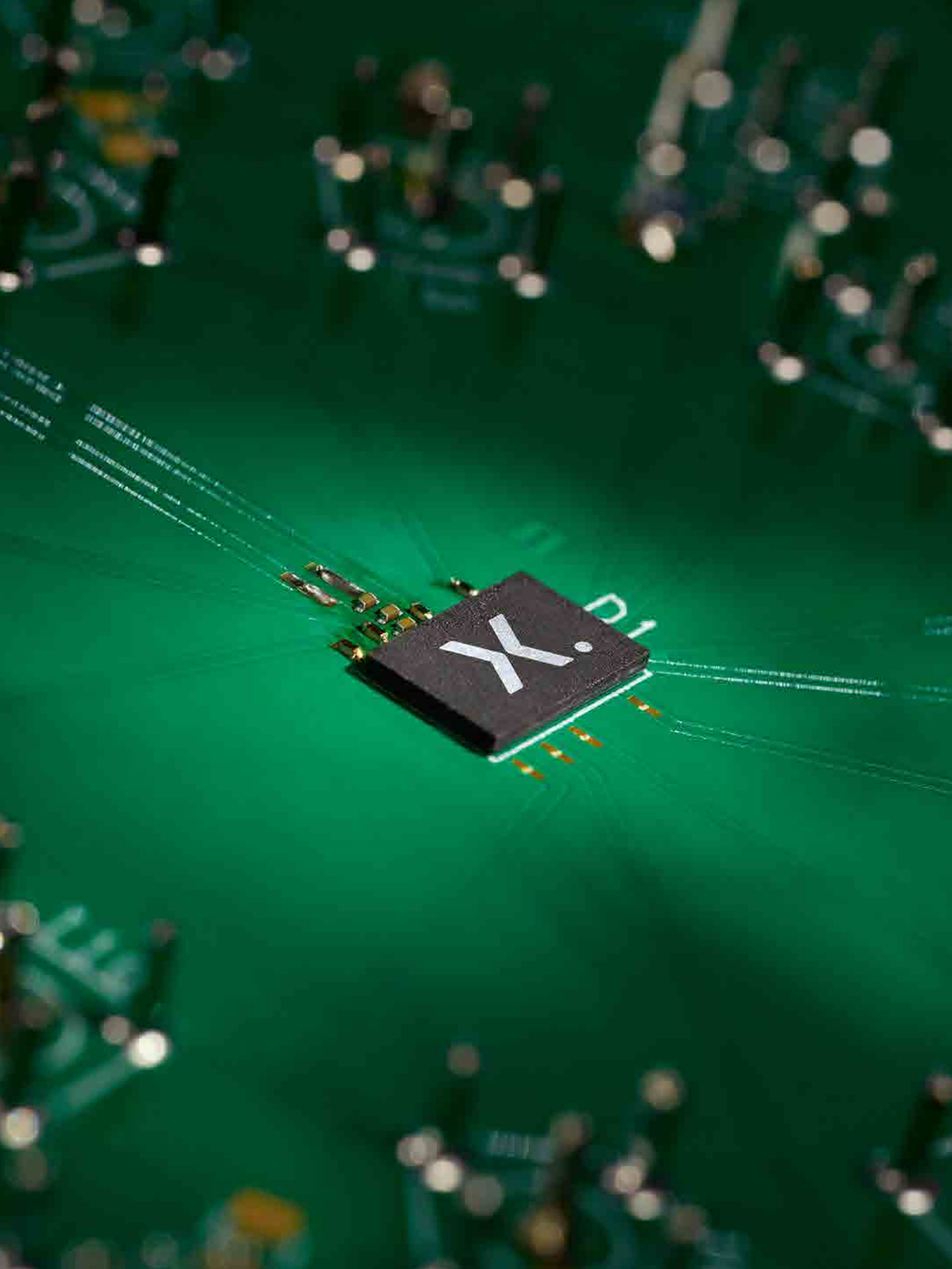
Nexperia's Design for Excellence (DfX) program ensures that each new development builds on past learning and that best practices are always employed. The result is continual product improvement.



Zero defect

Zero defect is our goal. To ensure continuous improvement failure analysis and the determination to find root causes is performed at all stages of development and production by adoption of quality-analysis tools and methods (e.g. Six-Sigma, Safe-Launch).

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 2019

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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	Device	Description	Page
General purpose bipolar transistors	PMBTA06	500 mA NPN transistor in a SOT23 plastic package	14
	PMSTA06	500 mA NPN general-purpose transistor in a SOT323 plastic package	14
	PMBT2222AM	40V, 600 mA NPN switching transistor in an ultra small DFN1006-3 (SOT883) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT2907AM	60V, 600 mA PNP switching transistor in an ultra small DFN1006-3 (SOT883) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT2222AMB	40V, 600 mA NPN switching transistor in an ultra small DFN1006B-3 (SOT883B) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT2907AMB	60V, 600 mA PNP switching transistor in an ultra small DFN1006B-3 (SOT883B) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT3904QA	40V, 200 mA NPN switching transistor in an ultra small DFN1010D-3 (SOT1215) leadless Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	16
	PMBT2222AQA	40V, 600 mA NPN switching transistor in an ultra small DFN1010D-3 (SOT1215) leadless Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	16
	PMBT2907AQA	60V, 600 mA PNP switching transistor in an ultra small DFN1010D-3 (SOT1215) leadless Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	16
	PMBT3904RA	40V, 200 mA Double NPN switching transistor in an ultra small DFN1412-6 (SOT1268) leadless Surface-Mounted Device (SMD) plastic package.	16
	BC807-16H	175 deg C capable PNP transistor in SOT23 with 500 mA and 45V	17
	BC807-25H	175 deg C capable PNP transistor in SOT23 with 500 mA and 45V	17
	BC807-40H	175 deg C capable PNP transistor in SOT23 with 500 mA and 45V	17

Diodes

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Switching Diodes	BAS521B	High-voltage switching diode, in an ultra small SOD523 (SC-72) flat lead Surface-Mounted Device (SMD) plastic package.	39
	BAV21QA	200V dual common cathode high-voltage switching diode in a leadless ultra small DFN1010D-3 (SOT1215) package with solderable side pads	39
	BAV23QA	Dual common cathode high-voltage switching diode, encapsulated in a leadless ultra small DFN1010D-3 (SOT1215) Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	39
Recovery rectifiers	PNE20020EP	200V, 2 A hyperfast Recovery rectifiers in a small and flat lead CFP5 package.	41
	PNE20030EP	200V, 3 A hyperfast Recovery rectifiers in a small and flat lead CFP5 package.	41
	PNE20010ER	200V, 1 A hyperfast Recovery rectifiers in a small and flat lead SOD123W package.	41
	PNE20020ER	200V, 2 A hyperfast Recovery rectifiers in a small and flat lead SOD123W package.	41
Schottky rectifiers	PMEG3001EEF	30V, 0.1 A low VF Schottky Rectifier in DFN0603-2	45
	PMEG3002EEF	30V, 0.2 A low VF Schottky Rectifier in DFN0603-2	45
	PMEG3005EEF	30V, 0.5 A low VF Schottky Rectifier in DFN0603-2	45
	PMEG60T10ELP	60V, 1 A Trench Schottky Rectifier in CFP5	46
	PMEG60T20ELP	60V, 2 A Trench Schottky Rectifier in CFP5	46
	PMEG60T30ELP	60V, 3 A Trench Schottky Rectifier in CFP5	46
	PMEG60T50ELP	60V, 5 A Trench Schottky Rectifier in CFP5	46
	PMEG60T10ELR	60V, 1 A Trench Schottky Rectifier in CFP3	46
PMEG60T30ELR	60V, 3 A Trench Schottky Rectifier in CFP3	46	

ESD protection, TVS, filtering and signal conditioning

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Low capacitance ESD protection for high-speed interfaces	PESD2V0Y1BSF	Low peak voltage 2V single-line bidirectional ESD protection	52
	PESD2V5Y1BSF	Low peak voltage 2.5V single-line bidirectional ESD protection	52, 55
	PESD3V3Y1BSF	Low peak voltage 3.3V single-line bidirectional ESD protection	52, 55
	PESD3V3Z1BCSF	High-surge rating 3.3V single-line bidirectional ESD protection	52, 55
	PESD3V3W1BCSF	High-surge rating 3.3V single-line bidirectional ESD protection	52, 55, 56
	PESD4V0Y1BSF	Low peak voltage 4V single-line bidirectional ESD protection	52
	PESD4V0Z1BSF	high surge robustness low capacitance ESD protection for USB3.2	52, 56
	PESD4V0Z1BCSF	High-surge rating 4V single-line bidirectional ESD protection	52, 56
	PESD4V0W1BCSF	High-surge rating 4V single-line bidirectional ESD protection	52, 56
	PESD5V0R1BSF	Ultra low capacitance 5V bidirectional ESD protection	52, 55, 56
	PESD7V0H1BSF	Ultra low capacitance 7V bidirectional ESD protection	52, 56
	PESD7V0C1BSF	Ultra low capacitance 7V bidirectional ESD protection	52, 56
	PESD3V3X4UHM	4-fold unidirectional ESD protection array in DFN1308-6 package for SD card protection	54
	PESD1USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF1USB3B/C	55
	PESD2USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF2USB3B/C	55
	PESD3USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF3USB3B/C	55
	PESD6V5C1USF	Ultra low capacitance 6V unidirectional ESD protection	56
	General ESD protection devices	PESD8V0S1ULD	Unidirectional 8V ESD protection
PESD16VV1BSF		Extremely symmetrical 16V bidirectional ESD protection	58
PESD18VV1BBSF		Very symmetrical 18V bidirectional ESD protection	58
PESD3V3V1BL		Low capacitance 3.3V bidirectional ESD protection	58
PESD3V3S1BL		Low capacitance 3.3V bidirectional ESD protection	58
PTVS3V3D1BAL		Ultra compact 3.3V Transient Voltage Suppressor	58
PTV5V5D1BL		High-robustness ultra-compact 5V Transient Voltage Suppressor	58
PESD3V3T1BLD		Single line bidirectional ESD protection in DFN1006-2 package for low-speed interfaces	58
PESD3V3L4BHM		4-fold bidirectional ESD protection array in DFN1308-6 package for SIM card protection	60
Application-specific ESD solutions	PESD1USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF1USB3B/C	61
	PESD2USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF2USB3B/C	61
	PESD3USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF3USB3B/C	61
	PESD4V0Z1BSF	high surge robustness low capacitance ESD protection for USB3.2	61
	PESD4V0Z1BCSF	High-surge rating 4V single-line bidirectional ESD protection	61
	PESD4V0W1BCSF	High-surge rating 4V single-line bidirectional ESD protection	61
	PTVS3V3D1BAL	Ultra compact 3.3V Transient Voltage Suppressor	61, 63
	PTV5V5D1BL	High-robustness ultra-compact 5.5V Transient Voltage Suppressor	61, 63
EMI solutions with integrated protection	PESD1USB3B	ESD protection for differential data lines (1 line pair)	65
	PESD2USB3B	ESD protection for differential data lines for (2 line pairs)	65
	PESD3USB3B	ESD protection for differential data lines for (3 line pairs)	65
	PESD3V3X4UHM	4-fold unidirectional ESD protection array in DFN1308-6 package for SD card protection	66
Transient voltage surge suppressor (TVS)	PTVS3V3D1BAL	Ultra compact 3.3V Transient Voltage Suppressor	67
	PTV5V5D1BL	High-robustness ultra-compact 5.5V Transient Voltage Suppressor	67

MOSFETs

Category	Device	Description	Page
Automotive MOSFETs	BUK9J0R9-40H	N-channel 40V, 0.9mΩ logic level Q101 qualified MOSFET in LFPAK56E	75
	BUK7J1R0-40H	N-channel 40V, 1mΩ standard level Q101 qualified MOSFET in LFPAK56E	75
	BUK9Y1R3-40H	N-channel 40V, 1.3mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK7Y1R4-40H	N-channel 40V, 1.4mΩ standard level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y1R6-40H	N-channel 40V, 1.6mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y1R9-40H	N-channel 40V, 1.9mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y2R4-40H	N-channel 40V, 2.4mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y2R8-40H	N-channel 40V, 2.8mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK7Y3R5-40H	N-channel 40V, 3.5mΩ standard level Q101 qualified MOSFET in LFPAK56	75
	BUK6Y12-30P	30V, 12mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y20-30P	30V, 20mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y15-40P	40V, 15mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y25-40P	40V, 25mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y32-60P	60V, 32mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y57-60P	60V, 57mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	PMN25ENEA	Single N-channel MOSFET transistor; 30V; 25 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN20ENA	Single N-channel MOSFET transistor; 40V; 20 mΩ in SOT457 package; auto qualified; 175°C	83
	PMN40ENA	Single N-channel MOSFET transistor; 60V; 40 mΩ in SOT457 package; auto qualified; 175°C	83
	PMN55ENEA	Single N-channel MOSFET transistor; 60V; 55 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN120ENEA	Single N-channel MOSFET transistor; 60V; 120 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN230ENEA	Single N-channel MOSFET transistor; 20V; 230 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN280ENEA	Single N-channel MOSFET transistor; 100V; 280 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMV30ENEA	Single N-channel MOSFET; 40V; 30 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D120-40E	Single N-channel MOSFET; 40V; 120 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D56-60E	Single N-channel MOSFET; 60V; 56 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D88-60E	Single N-channel MOSFET; 60V; 88 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D125-60E	Single N-channel MOSFET; 60V; 125 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D210-60E	Single N-channel MOSFET; 60V; 210 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D98-80E	Single N-channel MOSFET; 80V; 98 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D230-80E	Single N-channel MOSFET; 80V; 230 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D335-100E	Single N-channel MOSFET; 100V; 335 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D120-60P	60V, P-channel Trench MOSFET in DFN2020MD-6 (SOT1220) with side-wettable flanks	83
Power MOSFETs	PSMN0R9-30ULD	N-channel 30V, 0.87 mΩ, 300 A logic level MOSFET in SOT1023A enhanced package for UL2595, using NextPowerS3 Schottky-Plus Technology	87
	PSMN1R6-30MLH	N-channel 30V, 1.9 mΩ, 160 A logic level MOSFET in LFPAK33 using NextPowerS3 technology	88
	PSMN1R0-40ULD	N-channel 40V, 1.1 mΩ, 280 A logic level MOSFET in SOT1023A enhanced package for UL2595, using NextPower-S3 Schottky-Plus technology	89
	PSMN3R7-100BSE	N-channel 100V, 3.95 mΩ, standard level MOSFET in D2PAK	91
	PSMP012-30YE	Single P-channel MOSFET; 30V; 12 mΩ in LFPAK56	92
	PSMP020-30YE	Single P-channel MOSFET; 30V; 20 mΩ in LFPAK56	92
	PSMP015-40YE	Single P-channel MOSFET; 40V; 15 mΩ in LFPAK56	92
	PSMP025-40YE	Single P-channel MOSFET; 40V; 25 mΩ in LFPAK56	92
	PSMP032-60YE	Single P-channel MOSFET; 60V; 32 mΩ in LFPAK56	92
	PSMP057-60YE	Single P-channel MOSFET; 60V; 57 mΩ in LFPAK56	92

MOSFETs

Category	Device	Description	Page
Small-signal MOSFETs	PMH600UNE	Single N-channel MOSFET transistor; 20V; 600 mΩ; 1 kV ESD protected in DFN0606	94
	PMH550UNE	Single N-channel MOSFET transistor; 30V; 550 mΩ; 2 kV ESD protected in DFN0606	94
	NX7002BKH	Single N-channel ESD protected MOSFET; 60V; 3 Ohm; 2 kV ESD protected in DFN0606	94
	PMH950UPE	Single P-channel MOSFET transistor; 20V; 950 mΩ; 1 kV ESD protected in DFN0606	94
	PMH1200UPE	Single P-channel MOSFET transistor; 30V; 1200 mΩ; 2 kV ESD protected in DFN0606	94
	PMPB25ENE	Single N-channel MOSFET; 30V; 24 mΩ in SOT1220; ESD protected; 175°C	96
	PMPB50ENE	Single N-channel MOSFET; 30V; 46 mΩ in SOT1220; ESD protected	96
	PMPB100ENE	Single N-channel MOSFET; 30V; 79 mΩ in SOT1220; ESD protected	96
	PMPB14XP	Single P-channel MOSFET; 12V; 14 mΩ in SOT1220;	96
	PMPB30XPE	Single P-channel MOSFET; 20V; 28 mΩ in SOT1220; ESD protected	96
	PMPB24EP	Single P-channel MOSFET; 30V; 24 mΩ in SOT1220;	96
	PMN28UNE	Single N-channel MOSFET transistor; 20V; 28 mΩ in SOT457 package; ESD protected	99
	PMN25ENE	Single N-channel MOSFET transistor; 30V; 25 mΩ in SOT457 package; ESD protected	99
	PMN55ENE	Single N-channel MOSFET transistor; 60V; 55 mΩ in SOT457 package; ESD protected	99
	PMN120ENE	Single N-channel MOSFET transistor; 60V; 120 mΩ in SOT457 package; ESD protected	99
	PMN230ENE	Single N-channel MOSFET transistor; 20V; 230 mΩ in SOT457 package; ESD protected	99
	PMN30XPE	Single P-channel MOSFET transistor; 60V; 30 mΩ in SOT457 package; ESD protected	101
	PMN50EPE	Single P-channel MOSFET transistor; 30V; 50 mΩ in SOT457 package; ESD protected	101

Logic

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Logic voltage translators (including translating Gates, Buffers, Inverters)	74AUP1T04	Single supply translating inverter	132, 142
	74AUP1T14	Single supply translating inverter; Schmitt-Trigger	132, 142
	74AUP1T17	Single supply translating buffer; Schmitt-Trigger	132, 142
	74AUP1T50	Single supply translating buffer; Schmitt-Trigger	132, 142
	74AVC1T1004	1-to-4 fan out translating buffer	133, 143
	74AVC4T3144	4-bit dual-supply buffer/level translator (3-state)	133, 143
	74LV1T04	Single supply translating inverter	135, 143
	74LV1T34	Single supply translating buffer	135, 144
	74LV1T125	Single supply translating buffer (3-state)	135, 144
	74LV1T126	Single supply translating buffer (3-state)	135, 144
	74AVC4T774	4-bit dual supply translating transceiver (3-state)	141, 143
	74AUP1T00	2-input single supply translating NAND gate	142, 159
	74AUP1T02	2-input single supply translating NOR gate	142, 160
	74AUP1T08	2-input single supply translating AND gate	142, 156
	74AUP1T32	2-input single supply translating OR gate	142, 161
	74AUP1T86	2-input single supply translating X-OR gate	142, 158
	74AUP1T87	2-input single supply translating X-NOR gate	142, 158
	74AVC1T8128	Single dual-supply translating 2-input NOR with enable	143
	74AVC1T8832	Single dual-supply translating 2-input OR with strobe	143
	74LV1T00	2-input single supply translating NAND gate	143, 159
	74LV1T02	2-input single supply translating NOR gate	143, 160
	74LV1T08	2-input single supply translating AND gate	144, 156
	74LV1T32	2-input single supply translating OR gate	144, 161
	74LV1T86	2-input single supply translating X-OR gate	144, 158
	74LV1T87	2-input single supply translating X-NOR gate	144, 158








Bipolar transistors

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
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Transistors single NPN


Types in **bold** represent new products

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
									
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	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (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	BC848W			
		350	900	100		PMST5088			
32	100	110 - 420	220 - 800	100	BCW31 / 32 / 33				
		180 - 380	310 - 630	250	BCW60B / C / D				
45	100	110 - 420	220 - 800	100	BC847 / A / B / C	BC847W / AW / BW / CW	BC847AQA / BQA / CQA	BC847AM / BM / CM	BC847AMB / BMB / CMB
		120 - 380	220 - 630	100	BCX70G / H / J / K				
		110 - 200	220 - 450	100	BCW71 / 72				
		500	1250	100	PMBT6429	PMST6429			
50	100	210 - 290	340 - 460	100 - 150	2PD601ART 2PD601ARL 2PD601ASL	2PD601ARW / SW			
		250	650	100	PMBT6428	PMST6428			
60	100	110 - 200	220 - 450	100	BCV71 / 72				
65	100	110 - 200	220 - 450	100	BC846 / A / B	BC846W / AW / BW		BC846BM	BC846BMB
50	150	120 - 200	240 - 400	80	NXP3875Y / G				
		120 - 270	270 - 560	100		2PC4081Q / R / S		2PC4617QM / RM	2PC4617QMB / RMB
	200	210	340	100	2PD601BRL				
		290	460	100	2PD601BSL				
45	500	100 - 250	250 - 600	100	BC817 / -16 / -25 / -40	BC817W / -16W / -25W / -40W	BC817-25QA/-40QA		
		100	600	100	BCX19				
50	500	85 - 170	170 - 340	140 - 180	2PD602AQL 2PD602ARL 2PD602ASL	2PD1820AR / S			
60	500	50	-	100		PMSTA05			
80	500	100	-	50	PMBTA06	PMSTA06			
45	800	100-250	250-600	100	BCW66F/G/H				





Transistors single PNP

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
									
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	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
30	100	125 - 220	500 - 800	100	BC858B	BC858W			
32	100	120 - 215	260 - 500	100	BCW29 / 30				
		180 - 380	310 - 630	100	BCW61B / C / D				
45	100	210 - 290	340 - 460	70 - 80	2PB709ART 2PB709ARL 2PB709ASL	2PB709ARW / SW			
		180 - 380	310 - 630	100	BCX71H / J / K				
		120 - 215	260 - 500	100	BCW69 / 70				
		125 - 420	250 - 800	100	BC857 / A / B / C	BC857W / AW / BW / CW	BC857AQA / BQA / CQA	BC857AM / BM / CM	BC857AMB / BMB / CMB
60	100	120	260	150	BCW89				
65	100	125 - 200	250 - 475	100	BC856 / A / B	BC856W / AW / BW		BC856BM	BC856BMB
100	100	30	-	50	BSS63				
50	150	120 - 270	270 - 560	100		2PA1576Q / R / S		2PA1774QM / RM / SM	2PA1774QMB / RMB / SMB
		210	340	100	2PB709BRL				
	200	290	460	100	2PB709BSL				
25	500	100	600	80	BCX18				
45	500	100 - 250	250 - 600	80	BC807 / -16 / -25 / -40	BC807W / -16W / -25W / -40W	BC807-25QA/-40QA		
		100	600	80	BCX17				
50	500	85 - 170	170 - 340	100 - 140	2PB710ARL 2PB710ASL	2PB1219AQ / R / S			
60	500	100	-	50		PMSTA55			
80	500	100	-	50	PMBTA56	PMSTA56			
45	800	100-250	250-600	80	BCW68F/G/H				

High performance transistors (superior power dissipation)

Package							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

Transistors double

Package						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		
	45	100	200	450	100	BC847DS	BC847BS	BC847RA	BC847QAS
	65	100	110	-	100			BC846S	
			200	450	100	BC846DS	BC846BS		
	50	150	120	560	100		PUMX2		
45	500	160	400	80	80	BC817DS		BC817RA	
PNP	40	100	120	450	100	PIMT1	PUMT1		
	45	100	200	450	100		BC857BS	BC857RA	BC857QAS
	65	100	110	-	100			BC856S	
			200	450	100		BC856BS		
45	500	160	400	80	80	BC807DS		BC807RA	
NPN / PNP	40	100	120	450	100		PUMZ1		
	45	100	200	450	100		BC847BPN	BC847RAPN	BC847QAPN
	50	100	120	560	100	PIMZ2	PUMZ2		
	65	100	200	450	100		BC846BPN		
45	500	160	160	100 / 800		BC817DPN		BC817RAPN	

General purpose bipolar transistors

Switching transistors single

Types in **bold** represent new products

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT23	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	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 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)							1700	1300	250	200	250	250	750
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	180	1200			PMBS3904	PMSS3904			
	15	600	40	120	500	20			PMBT2369	PMST2369			
	40	200	100	300	300	250			MMBT3904				
	30	600	100	300	250	250			PMBT3904	PMST3904	PMBT3904M	PMBT3904MB	PMBT3904QA
	40	600	100	300	250	250	PZT4401	PXT4401	PMBT4401	PMST4401			
	40	600	100	300	300	250			MMBT2222A				
	40	600	100	300	300	250	PZT2222A	PXT2222A	PMBT2222A	PMST2222A	PMBT2222AM	PMBT2222AMB	PMBT2222AQA
PNP	40	800	100	300	300	250			BSR14				
	40	100	100	300	150	700			PMBS3906	PMSS3906			
	40	200	100	300	250	300			MMBT3906				
	40	600	100	300	200	350	PZT4403	PXT4403	PMBT4403	PMST4403	PMBT3906M	PMBT3906MB	
	40	600	100	300	200	365			PMBT2907				
	40	600	100	300	200	300				PMST2907A			
	40	600	100	300	200	365	PZT2907A	PXT2907A	PMBT2907A		PMBT2907AM	PMBT2907AMB	PMBT2907AQA

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		PMBT3904RA
	40	600	100	300	250	250	PMBT4401YS		
					300	250	PMBT2222AYS		
PNP	40	200	100	300	250	300	PMBT3906YS		
	40	600	100	300	200	350	PMBT4403YS		
	60	600	100	300	200	365	PMBT2907AYS		
NPN / PNP	40	200	100	300	300 / 250	250 / 300	PMBT3946YPN		
					300 / 200	250 / 365		NMB2227A	

Medium power transistors high performance (175 °C capable)

Package							SOT223 (SC-73)
Size (mm)							6.5 x 3.5 x 1.65
P _{tot} (mW)							1700
Polarity	V _{CEO} (V)	V _{EBO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	80	7	1	63	250	100	BCP56H
					160	100	BCP56-10H
				100	250	100	BCP56-16H
PNP	80	7	1	63	250	100	BCP53H
					100	100	BCP53-10H
				100	250	100	BCP53-16H

NPN High performance transistors (175°C capable & superior power dissipation)

Package							SOT23	
Size (mm)							2.9 x 1.3 x 1.0	
P _{tot} (mW)							950	
Polarity	V _{CEO} (V)	V _{EBO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)		
NPN	45	7	0.5	100	250	100	BC817K-16H	
					160	400	100	BC817K-25H
					250	600	100	BC817K-40H

PNP High performance transistors (175°C capable & superior power dissipation)

Types in **bold** represent new products

Package							SOT23	
Size (mm)							2.9 x 1.3 x 1.0	
P _{tot} (mW)							675	
Polarity	V _{CEO} (V)	V _{EBO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)		
NPN	45	7	0.5	100	250	80	BC807-16H	
					160	400	80	BC807-25H
					250	600	80	BC807-40H

General purpose bipolar transistors

Medium power transistors

Package						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 (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)				
NPN	20	2	85 - 160	375	40	BCP68 / -25	BC868 / -25	BC68PA / BC68-25PA	BC68PAS / BC68-25PAS
	45	1	63 - 100	160 - 250	100	BCP54 / -10 / -16	BCX54 / -10 / -16	BC54PA / BC54-10PA / BC54-16PA	BC54PAS / BC54-10PAS / BC54-16PAS
	60	1	63 - 100	160 - 250	100	BCP55 / -10 / -16	BCX55 / -10 / -16	BC55PA / BC55-10PA / BC55-16PA	BC55PAS / BC55-10PAS / BC55-16PAS
			100	300	100	BSP41	BSR41		
80	1	63 - 100	160 - 250	100	BCP56 / -10 / -16	BCX56 / -10 / -16	BC56PA / BC56-10PA / BC56-16PA	BC56PAS / BC56-10PAS / BC56-16PAS	
		40 - 100	120 - 300	100	BSP43	BSR43			
PNP	20	2	85 - 160	250 - 375	40	BCP69 / -16 / -25	BC869 / -16 / -25	BC69PA / BC69-16PA / BC69-25PA	BC69PAS / BC69-16PAS / BC69-25PAS
	45	1	63 - 100	160 - 250	115 ¹⁾ - 145 ¹⁾	BCP51 / -10 / -16	BCX51 / -10 / -16	BC51PA / BC51-10PA / BC51-16PA	BC51PAS / BC51-10PAS / BC51-16PAS
	60	1	63 - 100	160 - 250	100	BCP52 / -10 / -16	BCX52 / -10 / -16	BC52PA / BC52-10PA / BC52-16PA	BC52PAS / BC52-10PAS / BC52-16PAS
			40 - 100	120 - 300	100	BSP31	BSR30 / 31		
80	1	63 - 100	160 - 250	115 ¹⁾ - 145 ¹⁾	BCP53 / -10 / -16	BCX53 / -10 / -16	BC53PA / BC53-10PA / BC53-16PA	BC53PAS / BC53-10PAS / BC53-16PAS	
		40 - 100	120 - 300	100	BSP32 / 33	BSR33			



¹⁾ Typical value

High voltage transistors



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	PMST5550
	160	300	80	250	100				PMBT5551 / BSR19A	PMST5551
	250	100	50		60	BF722	BF622		BF822	
	300	100	50		60	BF720	BF620		BF820	BF820W
			40		50	PZTA42	PXTA42		PMBTA42	PMSTA42
	350	100	40		70	BSP19	BST39			
400	300	50	200	20	PZTA44			PMBTA44		
PNP	100	100	30		50				BSS63	
	250	100	50		60	BF723				
			50		60		BF623		BF823	
	300	100	50		60		BF621		BF821	
40				50	PZTA92	PXTA92		PMBTA92	PMSTA92	
2 x NPN	300	100	40		50			PMBTA42DS		

For high-voltage transistors with increased performance please refer to our high-voltage low V_{CEsat} (BISS) transistor portfolio on page 23.


LED driver

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
Vs supply voltage [V]		LED drive current [mA] @ Vs=10V	
18		10	NCR401T
		20	NCR402T
40		10	NCR401U
		20	NCR402U
		50	NCR405U

LED driver NPN

Package		SOT457	SOT223
			
Size (mm)		2.9 x 1.5 x 1.0	6.5 x 3.5 x 1.65
P _{tot} (mW)		750	1250
Vs supply voltage [V]		Max Output Current I _{Out} [mA]	
16		250	NCR320U
			NCR321U
40		150	NCR420U
			NCR421U
16		250	NCR320Z
			NCR321Z
40		150	NCR420Z
			NCR421Z

Constant current source

SOT353 (SC-88A)					
Package					
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					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	
			20000		PZTA14	PXTA14	PMBTA14	
	45	1000	2000	200			BCV29	BCV27
			2000		BSP50	BST50		
	60	500	10000	220			BCV49	BCV47
			2000		BSP51	BST51		
80	1000	2000	200			BST52		
		2000		BSP52	BST52			
PNP	30	500	20000	125			PMBTA64	
			20000	220			BCV28	BCV26
	45	1000	2000	200			BST60	
			2000		BSP60	BST60		
	60	500	10000	220			BCV48	BCV46
			2000		BSP61	BST61		
80	1000	2000	200			BST62		
		2000		BSP62	BST62			









Schmitt triggers

Package							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							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							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	100	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	100	63	250	0.95	n.a.		BCM53DS		
	100	3000	150	-	0.9	n.a.			PHPT610035PK	
Configuration										

¹⁾ I_{C1} / I_{E2}


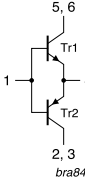

Matched pair transistors - part 2

Package							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	1.1 x 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										
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}

General purpose bipolar transistors






MOSFET driver

V_{CE0} (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

						SOT23	SOT323 (SC-70)
Package							
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_{CE0} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T typ (MHz)		
NPN	15	100	40	-	500	BF570	
	20	25		85	>275	BF520	BF520W
		30	65	225	260	BF519	
	40	25	67	220	380	BF840	
PNP	30	25	25	50	250	BF824	BF824W
	40		50	-	>325	BF550	







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

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 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	300/530	0.5	2	18		PBSS301NX			
	5.8	11.6	300/530	0.5	2	18	PBSS301NZ				
	6	7	280/440	0.5	2	20				PBSS4612PA	
20	3	5	220/390	0.5	2	40		PBSS4320X			
	4	15	300/450	0.5	2	30			PBSS301ND		
	5	10	300/450	0.5	2	35		PBSS4520X			
	5.3	10.6	300/570	0.5	2	20		PBSS302NX			
	5.8	10.2	300/570	0.5	2	20	PBSS302NZ				
	6	7	280/440	0.5	2	20				PBSS4620PA	
	7	15	300/550	0.5	2	12		PBSS4021NX			
	8	20	300/550	0.5	2	9	PBSS4021NZ				
30	3	5	300/490	0.5	2	45		PBSS4330X			
	3	5	300/465	0.5	2	40				PBSS4330PA	PBSS4330PAS
	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			
	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		
		10	300/500	0.5	2	21		PBSS4540X			
	5	10	300/500	0.5	2	25	PBSS4540Z				
50	2	5	300/-	0.5	2	90 ²⁾		PBSS4250X			
	3	5	200/280	0.5	2	65			PBSS4350D		
			300/460	0.5	2	50		PBSS4350X			
			200/280	0.5	2	60 ¹⁾	PBSS4350Z				
60	1	2	170/-	0.5	10	200 ²⁾		PBSS4160X			
	3	6	200/360	0.5	5	45					PBSS4360PAS
			200/-	0.5	5	45	PBSS4360Z	PBSS4360X			
			345/570	0.5	2	40			PBSS303ND		
	4.7	9.4	300/520	0.5	2	25		PBSS304NX			
	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					
80	3	6	240/360	0.5	2	40			PBSS304ND		
	4	10	250/400	0.5	2	25		PBSS4480X			
	4.6	9.2	300/470	0.5	2	25		PBSS305NX			
	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				
	3	4	170/275	0.5	2	45			PBSS305ND		
	4.5	9	200/330	0.5	2	27		PBSS306NX			
	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






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

Types in **bold** represent new products

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	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 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)							480	350	430	250	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	-			PBSS2515M	PBSS2515MB		
20	1	3	350/470	0.1	2	110 ²⁾	PBSS4120T					
	2	5	220/330	0.1	2	45	PBSS4320T					
	4.3	8	300/550	0.5	2	21	PBSS4021NT					
30	1	1.5	230/380	0.5	2	90					PBSS4130QA	
		3	300/450	0.5	2	120 ²⁾	PBSS4130T					
	2	3	300/450	0.5	2	70	PBSS4230T					
			230/380	0.5	2	75					PBSS4230QA	
2.6	5	300/500	0.5	2	80	PBSS4032NT ³⁾						
40	0.5	1	200/550	0.01	2	200 ²⁾			PBSS2540M	PBSS2540MB		
			300/440	0.5	5	130		PBSS4140U				
			300/510	0.5	5	120	PMMT491A					
	2	3	300/420	0.5	5	130	PBSS4140T					
			350/470	0.1	2	70		PBSS4240Y				
300/450	0.5	2	70	PBSS4240T								
50	2	5	300/495	0.5	2	60	PBSS4350T					
60	1	1.5	150/240	0.5	2	90					PBSS4160QA	
			200/420	0.5	5	120		PBSS4160U				
		200/350	0.5	5	110	PBSS4160T						
	2	3	150/240	0.5	2	75					PBSS4260QA	
	3.8	8	300/500	0.5	2	29	PBSS4041NT					
100	1	3	150/400	0.25	10	80			PBSS8110Y			
			150/300	0.25	10	70	PBSS8110T					







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

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

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 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			
	5.7	11.4	250/400	0.5	2	20	PBSS301PZ				
	6	7	220/335	0.5	2	20			PBSS5612PA		
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		
	5	10	300/430	0.5	2	45			PBSS5520X		
	5.1	10.2	250/370	0.5	2	25			PBSS302PX		
	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		
30	2.7	5	200/350	0.5	2	87				PBSS4032PD ³⁾	
			200/380	0.5	2	50		PBSS5330X			
			200/320	0.5	2	45				PBSS5330PA	PBSS5330PAS
	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		
	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					
	4	15	200/310	0.5	2	46			PBSS5240X		
			250/370	0.5	2	33			PBSS302PD		
	5	10	250/350	0.5	2	40 ¹⁾	PBSS5540Z				
50	2	5	200/-	0.5	2	90 ²⁾					
	3	5	200/300	0.5	2	70				PBSS5350D	
			200/375	0.5	2	70			PBSS5350X		
			200/300	0.5	2	70	PBSS5350Z				
60	3	6	130/220	0.5	5	55					PBSS5360PAS
			130/-	0.5	5	55	PBSS5360Z	PBSS5360X			
			180/265	0.5	2	55			PBSS303PD		
	4.2	8.4	200/295	0.5	2	35			PBSS304PX		
	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					
80	3	5	155/225	0.5	2	55				PBSS304PD	
			180/265	0.5	2	40				PBSS5580PA	
	4	10	200/300	0.5	2	35			PBSS5480X		
			200/280	0.5	2	36			PBSS305PX		
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				
	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		
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

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

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	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 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)							480	350	430	250	250	750
V _{CE0} (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				PBSS3515M	PBSS3515MB	
20	1	2	300/450	0.1	2	125 ²⁾	PBSS5120T					
	2	3	225/-	0.5	2	80 ²⁾	PBSS5220T					
		5	220/420	0.5	2	50	PBSS5320T					
	3.5	8	250/400	0.5	2	35	PBSS4021PT					
30	1	1.5	180/295	0.5	2	85						PBSS5130QA
			260/350	0.5	2	110	PBSS5130T					
	2	3	300/450	0.1	2	70	PBSS5230T					
			180/295	0.5	2	70						PBSS5230QA
2.4	5	200/320	0.5	2	95	PBSS4032PT ³⁾						
40	0.5	1	200/380	0.01	2	220				PBSS3540M	PBSS3540MB	
		1	2	300/520	0.1	5	130		PBSS5140U			
				300/800	0.1	5	130	PMMT591A				
		300/510	0.1	5	130	PBSS5140T						
	2	3	300/-	0.1	2	110 ²⁾			PBSS5240Y			
300/450			0.1	2	70	PBSS5240T						
50	2	3	200/-	0.5	2	90 ²⁾	PBSS5250T					
							PBSS5250TH					
	2	3	200/-	0.5	2	90 ²⁾	PBSS5350TH					
5		200/360	0.5	2	55	PBSS5350T						
60	1	1.5	120/185	0.5	2	125						PBSS5160QA
			150/250	0.5	5	135		PBSS5160U				
		150/250	0.5	5	120	PBSS5160T						
	1.7	2.5	120/185	0.5	2	105					PBSS5260QA	
	2.7	8	200/300	0.5	2	49	PBSS4041PT					
100	1	3	150/-	0.25	5	93			PBSS9110Y			
			150/350	0.5	5	95	PBSS9110T					





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

Low V_{CEsat} (BISS) transistors double

Package										SOT96 (SO8)	SOT457 (SC-74)	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)	
														
Size (mm)										4.9 x 3.9 x 1.75	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)										2000 ²⁾	750	1300	1300	
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	2 x NPN	200	0.01	2	170 ¹⁾	250	0.5	0.05					
		2 x PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05					
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05					
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05					
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05				PBSS4220PANS	
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05				PBSS5220PAPS	
	7.5	NPN / NPN	300	0.5	2	15	150	4	0.2	PBSS4021SN				
	6.3	PNP / PNP	250	0.5	2	24	225	4	0.2	PBSS4021SP				
	7.5 / 6.3	NPN / PNP	300 / 250	0.5	2	15 / 24	150 / 225	4	0.2	PBSS4021SPN				
30	1	NPN / NPN	210	0.5	2	75	100	0.5	0.05				PBSS4130PAN	
		PNP / PNP	170	0.5	2	85	140	0.5	0.05				PBSS5130PAP	
		NPN / PNP	210 / 170	0.5	2	75 / 85	100 / 140	0.5	0.05				PBSS4130PANP	
	2	NPN / NPN	230	0.5	2	60	80	0.5	0.05				PBSS4230PAN	
		PNP / PNP	210	0.5	2	75	110	0.5	0.05				PBSS5230PAP	
		NPN / PNP	230 / 210	0.5	2	60 / 75	80 / 100	0.5	0.05				PBSS4230PANP	
	5.7	NPN / NPN	300	0.5	2	57	250	4	0.4	PBSS4032SN ³⁾				
	4.8	PNP / PNP	200	0.5	2	70	390	4	0.4	PBSS4032SP ³⁾				
5.7 / 4.8	NPN / PNP	300 / 200	0.5	2	57 / 70	250 / 390	4	0.4	PBSS4032SPN ³⁾					
40	1	NPN / PNP	300 / 250	0.5	5	130 / 150	500	1	0.1				PBSS4140DPN	
	2	NPN / PNP	300 / 250	0.5	5	80 / 100	400 / 530	2	0.2				PBSS4240DPN	
50	2.7	2 x NPN	300	0.5	2	50	340	2.7	0.27	PBSS4350SS				
		2 x PNP	200	0.5	2	60	370	2.7	0.27	PBSS5350SS				
		NPN / PNP	300 / 200	0.5	2	50 / 60	340 / 370	2.7	0.27	PBSS4350SPN				
60	1	2 x NPN	200	0.5	5	115	250	1	0.1				PBSS4160DS	
		2 x PNP	150	0.5	5	120	330	1	0.1				PBSS5160DS	
		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	PBSS4160PANS
		PNP / PNP	120	0.5	2	125	180	0.5	0.05				PBSS5160PAP	PBSS5160PAPS
		NPN / PNP	150 / 120	0.5	2	90 / 125	120 / 180	0.5	0.05				PBSS4160PANP	PBSS4160PANPS
	2	NPN / NPN	210	0.5	2	70	90	0.5	0.05				PBSS4260PAN	PBSS4260PANS
		PNP / PNP	140	0.5	2	100	140	0.5	0.05				PBSS5260PAP	PBSS5260PAPS
		NPN / PNP	210 / 140	0.5	2	70 / 100	90 / 140	0.5	0.05				PBSS4260PANP	PBSS4260PANPS
	6.7	NPN / NPN	300	0.5	2	20	190	4	0.2	PBSS4041SN				
	5.9	PNP / PNP	200	0.5	2	35	330	4	0.2	PBSS4041SP				
	6.7 / 5.9	NPN / PNP	300 / 200	0.5	2	20 / 35	190 / 330	4	0.2	PBSS4041SPN				
120	1	NPN / NPN	240	0.1	2	90	120	0.5	0.05				PBSS4112PAN	
		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	

¹⁾ I_c/I_b=20 ²⁾ Device mounted on a ceramic PCB, Al₂O₃, standard footprint ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors load switches

Package				SOT457 (SC-74)	SOT363 (SC-88)
					
Size (mm)				2.9 x 1.5 x 1.0	
P _{tot} (mW)				750 ¹⁾	600 ¹⁾
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		
			4.7		
			10		
			22		
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
			10		PBLS4003Y
			22		PBLS4004Y
			47		PBLS4005Y
	1	170	2.2		PBLS4001D
			4.7		PBLS4002D
			10		PBLS4003D
			22		PBLS4004D
			47		PBLS4005D
60	1	180	2.2		PBLS6001D
			4.7		PBLS6002D
			10		PBLS6003D
			22		PBLS6004D
			47		PBLS6005D
	1.5	100	2.2	PBLS6021D	
			4.7	PBLS6022D	
			10	PBLS6023D	
			22	PBLS6024D	

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} (BISS) high voltage transistors

Types in **bold** represent new products

Package				SOT223 (SC-73)	SOT89 (SC-62)	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]				
NPN	150	0.5	100	PBHV8515QA			
			70	PBHV8115TLH			
			PBHV8115X				
		2	100	PBHV8115Z			
				PBHV8215Z			
		180	1	100	PBHV8118T		
	400	0.5	100	PBHV8540Z	PBHV8540X	PBHV8540T	
			100	PBHV8140Z			
	500	0.15	50	PMBTA45			
	600	0.1	70	PBHV2160Z			
			70	PBHV8560Z			
	PNP	140	4	100	PBHV9414Z		
0.5			100	PBHV9515QA			
			70	PBHV9115TLH			
150		1	100	PBHV9115T			
					PBHV9115X		
			2	100	PBHV9115Z		
400		0.25	100	PBHV9215Z			
					PBHV9040X	PBHV9040T	
500		0.5	100	PBHV9040Z			
					PBHV9540Z	PBHV9540X	
600		0.15	100	PBHV9050Z			
					PBHV9050T		
600	0.1	70	PBHV3160Z				
			70	PBHV9560Z			

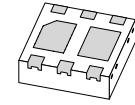
Low V_{CEsat} (BISS) RETs

Package					SOT23	
Size (mm)					2.9 x 1.3 x 1.0	
P_{tot} (mW)					250	
V_{CEO} (V)	I_C (mA)		R1 (k Ω)	R2 (k Ω)	NPN	PNP
40	600	R1 = R2	1	1	PBRN113ET	PBRP113ET
			2.2	2.2	PBRN123ET	PBRP123ET
		R1 \neq R2	1	10	PBRN113ZT	PBRP113ZT
			2.2	10	PBRN123YT	PBRP123YT

Low V_{CEsat} (BISS) transistors

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

Package											DFN2020-6 (SOT1118)
Size (mm)											2.0 x 2.0 x 0.62
P_{tot} (mW)											1300
V_{CE0} (V)	I_C (A)	h_{FE} min	h_{FE} max	@ I_C (mA)	@ V_{CE} (V)	R_{CEsat} typ (m Ω)	V_{DS} (V)	V_{GS} (V)	I_D (A)	R_{Dson} typ (m Ω)	
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} (BISS) power transistors single

Package						LPAK56 (SOT669)		
Size (mm)						5 x 6 x 1.1		
P_{tot} (mW)						1250		
V_{CE0} (V)	I_C (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	Polarity			
40	6	200 / 400	0.5	2	NPN	PHPT60406NY		
			0.5	2	PNP	PHPT60406PY		
	10	200 / 400	0.5	2	NPN	PHPT60410NY		
			0.5	2	PNP	PHPT60410PY		
	15	200 / 400	0.5	2	NPN	PHPT60415NY		
			0.5	2	PNP	PHPT60415PY		
60	3	200 / 400	0.5	2	NPN	PHPT60603NY		
			0.5	2	PNP	PHPT60603PY		
	6	200 / 400	0.5	2	NPN	PHPT60606NY		
			0.5	2	PNP	PHPT60606PY		
	10	200 / 400	0.5	2	NPN	PHPT60610NY		
			0.5	2	PNP	PHPT60610PY		
100	2	150 / 250	0.5	10	NPN	PHPT61002NYC		
			0.5	10	PNP	PHPT61002PYC		
			0.5	10	NPN	PHPT61002NYCLH		
			0.5	10	PNP	PHPT61002PYCLH		
	3	150 / 250	0.5	10	NPN	PHPT61003NY		
			0.5	10	PNP	PHPT61003PY		
	6	150 / 250	150 / 220	0.5	10	NPN	PHPT61006NY	
				0.5	10	PNP	PHPT61006PY	
		10	150 / 250	150 / 220	0.5	10	NPN	PHPT61010NY
					0.5	10	PNP	PHPT61010PY



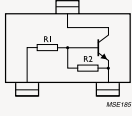
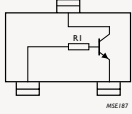


Low V_{CEsat} (BISS) power transistors double




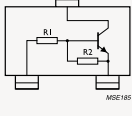
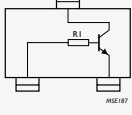
Package											LPAK56D (SOT1205)	
Size (mm)											5 x 6 x 1.1	
P_{tot} (mW)											1250	
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)	Polarity	h_{FE1}/h_{FE2}	
100	3	6	150	0.5	10	50	300	3	0.2	2XNPN	-	PHPT610030NK
						70	400	3	0.2	2XPNP	-	PHPT610030PK
						50 / 70	300 / 400	3	0.2	NPN/PNP	-	PHPT610030NPK
						50	300	3	0.2	2XNPN	0.95	PHPT610035NK
						70	400	3	0.2	2XPNP	0.9	PHPT610035PK



RETs 100 mA single - part 1




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	
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP
50	100		1	1		PDTA113ET		PDTA113EU
			2.2	2.2	PDTC123ET	PDTA123ET	PDTC123EU	PDTA123EU
			4.7	4.7	PDTC143ET	PDTA143ET	PDTC143EU	PDTA143EU
			10	10	PDTC114ET	PDTA114ET	PDTC114EU	PDTA114EU
			22	22	PDTC124ET	PDTA124ET	PDTC124EU	PDTA124EU
			47	47	PDTC144ET	PDTA144ET	PDTC144EU	PDTA144EU
			100	100	PDTC115ET	PDTA115ET	PDTC115EU	PDTA115EU
			1	10		PDTA113ZT		PDTA113ZU
			2.2	10	PDTC123YT	PDTA123YT	PDTC123YU	PDTA123YU
			2.2	47	PDTC123JT	PDTA123JT	PDTC123JU	PDTA123JU
			4.7	10	PDTC143XT	PDTA143XT	PDTC143XU	PDTA143XU
			4.7	47	PDTC143ZT	PDTA143ZT	PDTC143ZU	PDTA143ZU
			10	47	PDTC114YT	PDTA114YT	PDTC114YU	PDTA114YU
			22	47	PDTC124XT	PDTA124XT	PDTC124XU	PDTA124XU
		47	10	PDTC144VT	PDTA144VT	PDTC144VU	PDTA144VU	
		47	22	PDTC144WT	PDTA144WT	PDTC144WU	PDTA144WU	
			2.2	-	PDTC123TT	PDTA123TT	PDTC123TU	PDTA123TU
			4.7	-	PDTC143TT	PDTA143TT	PDTC143TU	PDTA143TU
			10	-	PDTC114TT	PDTA114TT	PDTC114TU	PDTA114TU
			22	-	PDTC124TT	PDTA124TT	PDTC124TU	PDTA124TU
			47	-	PDTC144TT	PDTA144TT	PDTC144TU	PDTA144TU
			100	-	PDTC115TT	PDTA115TT	PDTC115TU	PDTA115TU

RETs 100 mA single - part 2





Package					DFN1006-3 (SOT883)		DFN1006B-3 (SOT883B)		SOT1215	
										
Size (mm)					1.0 x 0.6 x 0.48		1.0 x 0.6 x 0.37		1.1 x 1.0 x 0.37	
P _{tot} (mW)					250		250		750	
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP	NPN	PNP
50	100		1	1		PDTA113EM		PDTA113EMB		
			2.2	2.2	PDTC123EM	PDTA123EM	PDTC123EMB	PDTA123EMB		
			4.7	4.7	PDTC143EM	PDTA143EM	PDTC143EMB	PDTA143EMB	PDTC143EQA	PDTA143EQA
			10	10	PDTC114EM	PDTA114EM	PDTC114EMB	PDTA114EMB	PDTC114EQA	PDTA114EQA
			22	22	PDTC124EM	PDTA124EM	PDTC124EMB	PDTA124EMB	PDTC124EQA	PDTA124EQA
			47	47	PDTC144EM	PDTA144EM	PDTC144EMB	PDTA144EMB	PDTC144EQA	PDTA144EQA
			100	100	PDTC115EM	PDTA115EM	PDTC115EMB	PDTA115EMB		
			1	10		PDTA113ZM		PDTA113ZMB		
			2.2	10	PDTC123YM	PDTA123YM	PDTC123YMB	PDTA123YMB		
			2.2	47	PDTC123JM	PDTA123JM	PDTC123JMB	PDTA123JMB	PDTC123JQA	PDTA123JQA
			4.7	10	PDTC143XM	PDTA143XM	PDTC143XMB	PDTA143XMB	PDTC143XQA	PDTA143XQA
			4.7	47	PDTC143ZM	PDTA143ZM	PDTC143ZMB	PDTA143ZMB	PDTC143ZQA	PDTA143ZQA
			10	47	PDTC114YM	PDTA114YM	PDTC114YMB	PDTA114YMB	PDTC114YQA	PDTA114YQA
			22	47	PDTC124XM	PDTA124XM	PDTC124XMB	PDTA124XMB		
		47	10	PDTC144VM	PDTA144VM	PDTC144VMB	PDTA144VMB			
		47	22	PDTC144WM	PDTA144WM	PDTC144WMB	PDTA144WMB			
			2.2	-	PDTC123TM	PDTA123TM	PDTC123TMB	PDTA123TMB		
			4.7	-	PDTC143TM	PDTA143TM	PDTC143TMB	PDTA143TMB		
			10	-	PDTC114TM	PDTA114TM	PDTC114TMB	PDTA114TMB		
			22	-	PDTC124TM	PDTA124TM	PDTC124TMB	PDTA124TMB		
			47	-	PDTC144TM	PDTA144TM	PDTC144TMB	PDTA144TMB		
			100	-	PDTC115TM	PDTA115TM	PDTC115TMB	PDTA115TMB		

Resistor equipped transistors (RETs)

RETs 100 mA double


Package					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 _{CE0} (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	PUMD20	PUMB20	
			4.7	4.7								PUMH15	PUMD15	PUMB15	
			10	10	PQMH11	PQMD3	PQMB11	PRMH11	PRMD3	PRMB11	PUMH11	PUMD3	PUMB11		
			22	22		PQMD2			PRMD2		PUMH1	PUMD2	PUMB1		
			47	47	PQMH2	PQMD12		PRMH2	PRMD12		PUMH2	PUMD12	PUMB2		
			100	100							PUMH24	PUMD24	PUMB24		
		R1 ≠ R2	2.2	47	PQMH10	PQMD10			PRMH10	PRMD10			PUMH10	PUMD10	PUMB10
			4.7	10									PUMH18	PUMD18	PUMB18
			4.7	47	PQMH13	PQMD13			PRMH13	PRMD13			PUMH13	PUMD13	PUMB13
			10	47	PQMH9				PRMH9				PUMH9	PUMD9	PUMB9
			22	47		PQMD16				PRMD16			PUMH16	PUMD16	PUMB16
			47	22									PUMH17	PUMD17	PUMB17
		Only R1	47 / 2.2	47 / 47										PUMD48	
			2.2	-									PUMH30	PUMD30	PUMB30
			4.7	-									PUMH7	PUMD6	PUMB3
			10	-									PUMH4	PUMD4	PUMB4
			22	-									PUMH19	PUMD19	PUMB19
		47	-									PUMH14	PUMD14	PUMB14	

RETs 500 mA single / double

Package					SOT457 (SC-74)		SOT23		SOT323 (SC-70)		SOT1215	
												
Size (mm)					2.9 x 1.5 x 1.0		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)					750		250		200		750	
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	NPN	PNP	NPN	PNP	NPN	PNP
50	500	R1 = R2	1	1			PDTD113ET	PDTB113ET	PDTD113EU	PDTB113EU	PDTD113EQA	PDTB113EQA
			2.2	2.2			PDTD123ET	PDTB123ET	PDTD123EU	PDTB123EU	PDTD123EQA	PDTB123EQA
			4.7	4.7			PDTD143ET	PDTB143ET	PDTD143EU	PDTB143EU	PDTD143EQA	PDTB143EQA
			10	10			PDTD114ET	PDTB114ET	PDTD114EU	PDTB114EU	PDTD114EQA	PDTB114EQA
		R1 ≠ R2	1	10	PIMN31	PIMC31	PDTD113ZT	PDTB113ZT	PDTD113ZU	PDTB113ZU	PDTD113ZQA	PDTB113ZQA
			2.2	10			PDTD123YT	PDTB123YT	PDTD123YU	PDTB123YU	PDTD123YQA	PDTB123YQA
			4.7	10			PDTD143XT	PDTB143XT	PDTD143XU	PDTB143XU	PDTD143XQA	PDTB143XQA
		Only R1	2.2	-					PDTD123TT	PDTB123TT		

3-terminal adjustable shunt regulators

Types in **bold red** are in development

Type name	Pinning configuration	Tamb(C°)	Vref		Package	Size(mm)	Ptot(mW)	VKA(V)	IK(mA)
TLVH431NCDBZR	Normal pinning	0 to 70	1.5%	1.24	 SOT23	2.9 x 1.3 x 1.0	480	20	80
TLVH431NIDBZR	Normal pinning	-40 to 85							
TLVH431NQDBZR	Normal pinning	-40 to 125							
TLVH431NMQDBZR	Mirrored pinning	-40 to 125							
TLVH431NACDBZR	Normal pinning	0 to 70	1%	2.495					
TLVH431NAIDBZR	Normal pinning	-40 to 85							
TLVH431NAQDBZR	Normal pinning	-40 to 125							
TLVH431NAMQDBZR	Mirrored pinning	-40 to 125							
TL431CDBZR	Normal pinning	0 to 70	2%	2.495					
TL431IDBZR	Normal pinning	-40 to 85							
TL431QDBZR	Normal pinning	-40 to 125							
TL431FDT	Normal pinning								
TL431MFD	Mirrored pinning	-40 to 125							
TL431ACDBZR	Normal pinning	0 to 70	1%	2.495					
TL431AIDBZR	Normal pinning	-40 to 85							
TL431AQDBZR	Normal pinning	-40 to 125							
TL431AFDT	Normal pinning								
TL431AMFD	Mirrored pinning								
TL431BCDBZR	Normal pinning	0 to 70	0.5%	2.495					
TL431BIDBZR	Normal pinning	-40 to 85							
TL431BQDBZR	Normal pinning	-40 to 125							
TL431BFDT	Normal pinning								
TL431BMFD	Mirrored pinning	-40 to 125							



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General purpose Zener diodes

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration	Series	Package	Size (mm)	P_{tot} (mW)		
500	-	3.3~24	C	Europe	Single		1N47xxA series	SOD66 (DO-41)		4.8 x 2.6 x 0.81	1000
	60	3.6~75					BZV85 series				
250	-	2.1~36	About 2%	Special	Single		NZX series	SOD27 (DO-35)		4.25 x 1.85 x 0.56	400
	40	2.4~75	B, C	Europe			BZX79 series				
400	40	2.4~75	C	Europe	Single		BZV90 series	SOT223 (SC-73)		6.5 x 3.5 x 1.65	1500
250	40	2.4~75	C	Europe	Single		BZV49 series	SOT89 (SC-62)		4.5 x 2.5 x 1.5	1000
250	40	2.4~75	B, C	Europe	Single		BZV55 series	SOD80C (MiniMelf)		3.5 x 1.5 x 1.5	400
200	40	2.4~75	B, C	Europe	Dual c.a.		BZB84 series	SOT23		2.9 x 1.3 x 1.0	250
			A, B, C		Single		BZX84 series				
250	30	5~6.8	0.2 V	Ave	Single		PLVA600A series				
250	40	2.4~75	B, C	Europe	Single		BZT52 series	SOD123		2.7 x 1.6 x 1.2	550
200		2.4~36	B	Japan			PDZ-GW series				
250	-	3.0~30	About 2.5%	Special	Single		NZH series	SOD123F		2.6 x 1.6 x 1.1	830
	40	2.4~75	B, C	Europe			BZT52H series				
200	40	10	B2	Japan	Dual isolated		PZU10DB2 series	SOT353 (SC-88A)		2.0 x 1.25 x 0.95	300
200	40	2.4~15	C	Europe	Dual c.a.		BZB784 series	SOT323 (SC-70)		2.0 x 1.25 x 0.95	350
200	40	2.4~75	B, C	Europe	Single		BZX84W series				
200	30	100	C	Europe	Back-to-back		BZB100A	SOD323 (SC-76)		1.7 x 1.25 x 0.95	300
	40	2.4~36	B2	Japan	Single		PDZ-B series				
250	40	2.4~75	B, C	Europe	Single		BZX384 series	SOD323F (SC-90)		1.7 x 1.25 x 0.7	550
200	40	2.4~36	B, B1, B2, B3	Japan	Single		PZUxBA series				
200	60	100	C	Europe	Single		BZX100A	SOD323F (SC-90)		1.7 x 1.25 x 0.7	550
200	40	2.4~36	B, B1, B2, B3	Japan	Single		PZUxB series				
250	40	2.4~75	B, C	Europe	Single		BZX84J series	SOD523 (SC-79)		1.2 x 0.8 x 0.6	300
200	40	2.4~75	B, C	Europe	Single		BZX884 series	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250
		2.4~36	B, B2	Japan			PZUxBL series				
250	40	2.4~30	B	Europe	Single		TDZxJ series	SOD323F		1.7 x 1.25 x 0.7	500

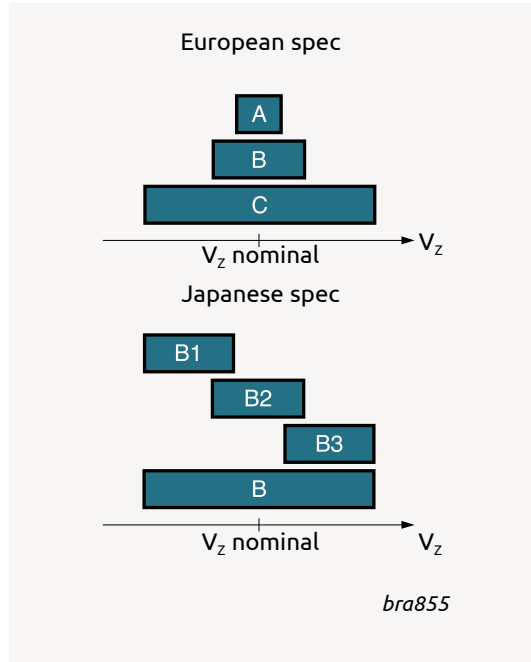
Notes:

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

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

Zener diodes specifications

Differences in Zener specifications



Japanese spec (PZU, PDZ)

y =	B-series	B1-series	B2-series	B3-series
	± 5%	± 2%	± 2%	± 2%
	V_z (V)	V_z (V)	V_z (V)	V_z (V)
PZU2.4y	2.3 - 2.6	-	-	-
PZU2.7y	2.5 - 2.9	2.5 - 2.75	2.65 - 2.9	-
PZU3.0y	2.8 - 3.2	2.8 - 3.05	2.95 - 3.2	-
PZU3.3y	3.1 - 3.5	3.1 - 3.35	3.25 - 3.5	-
PZU3.6y	3.4 - 3.8	3.4 - 3.65	3.55 - 3.8	-
PZU3.9y	3.7 - 4.1	3.7 - 3.97	3.87 - 4.1	-
PZU4.3y	4.01 - 4.48	4.01 - 4.21	4.15 - 4.34	4.28 - 4.48
PZU4.7y	4.42 - 4.9	4.42 - 4.61	4.55 - 4.75	4.69 - 4.9
PZU5.1y	4.84 - 5.37	4.84 - 5.04	4.98 - 5.2	5.14 - 5.37
PZU5.6y	5.31 - 5.92	5.31 - 5.55	5.49 - 5.73	5.67 - 5.92
PZU6.2y	5.86 - 6.53	5.86 - 6.12	6.06 - 6.33	6.26 - 6.53
PZU6.8y	6.47 - 7.14	6.47 - 6.73	6.65 - 6.93	6.86 - 7.14
PZU7.5y	7.06 - 7.84	7.06 - 7.36	7.28 - 7.6	7.52 - 7.84
PZU8.2y	7.76 - 8.64	7.76 - 8.1	8.02 - 8.36	8.28 - 8.64
PZU9.1y	8.56 - 9.55	8.56 - 8.93	8.85 - 9.23	9.15 - 9.55
PZU10y	9.45 - 10.55	9.45 - 9.87	9.77 - 10.21	10.11 - 10.55
PZU11y	10.44 - 11.56	10.44 - 10.88	10.76 - 11.22	11.1 - 11.56
PZU12y	11.42 - 12.6	11.42 - 11.9	11.74 - 12.24	12.08 - 12.6
PZU13y	12.47 - 13.96	12.47 - 13.03	12.91 - 13.49	13.37 - 13.96
PZU14y	-	-	13.7 - 14.3	-
PZU15y	13.84 - 15.52	13.84 - 14.46	14.34 - 14.98	14.85 - 15.52
PZU16y	15.37 - 17.09	15.37 - 16.01	15.85 - 16.51	16.35 - 17.09
PZU18y	16.94 - 19.03	16.94 - 17.7	17.56 - 18.35	18.21 - 19.03
PZU20y	18.86 - 21.08	18.86 - 19.7	19.52 - 20.39	20.21 - 21.08
PZU22y	20.88 - 23.17	20.88 - 21.77	21.54 - 22.47	22.23 - 23.17
PZU24y	22.93 - 25.57	22.93 - 23.96	23.72 - 24.78	24.54 - 25.57
PZU27y	25.1 - 28.9	-	-	-
PZU30y	28 - 32	-	-	-
PZU33y	31 - 35	-	-	-
PZU36y	34 - 38	-	-	-

Diodes

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





















y =	C-series	B-series	A-series
	±5%	±2%	±1%
	V_z (V)	V_z (V)	V_z (V)
BZX84-y2V4	2.2 - 2.6	2.35 - 2.45	2.37 - 2.43
BZX84-y2V7	2.5 - 2.9	2.65 - 2.75	2.67 - 2.73
BZX84-y3V0	2.8 - 3.2	2.94 - 3.06	2.97 - 3.03
BZX84-y3V3	3.1 - 3.5	3.23 - 3.37	3.26 - 3.34
BZX84-y3V6	3.4 - 3.8	3.53 - 3.67	3.56 - 3.64
BZX84-y3V9	3.7 - 4.1	3.82 - 3.98	3.86 - 3.94
BZX84-y4V3	4 - 4.6	4.21 - 4.39	4.25 - 4.35
BZX84-y4V7	4.4 - 5	4.61 - 4.79	4.65 - 4.75
BZX84-y5V1	4.8 - 5.4	5 - 5.2	5.04 - 5.16
BZX84-y5V6	5.2 - 6	5.49 - 5.71	5.54 - 5.66
BZX84-y6V2	5.8 - 6.6	6.08 - 6.32	6.13 - 6.27
BZX84-y6V8	6.4 - 7.2	6.66 - 6.94	6.73 - 6.87
BZX84-y7V5	7 - 7.9	7.35 - 7.65	7.42 - 7.58
BZX84-y8V2	7.7 - 8.7	8.04 - 8.36	8.11 - 8.29
BZX84-y9V1	8.5 - 9.6	8.92 - 9.28	9 - 9.2
BZX84-y10	9.4 - 10.6	9.8 - 10.2	9.9 - 10.1
BZX84-y11	10.4 - 11.6	10.8 - 11.2	10.8 - 11.11
BZX84-y12	11.4 - 12.7	11.8 - 12.2	11.88 - 12.12
BZX84-y13	12.4 - 14.1	12.7 - 13.3	12.87 - 13.13
BZX84-y15	13.8 - 15.6	14.7 - 15.3	14.85 - 15.15
BZX84-y16	15.3 - 17.1	15.7 - 16.3	15.84 - 16.16
BZX84-y18	16.8 - 19.1	17.6 - 18.4	17.82 - 18.18
BZX84-y20	18.8 - 21.2	19.6 - 20.4	19.8 - 20.2
BZX84-y22	20.8 - 23.3	21.6 - 22.4	21.78 - 22.22
BZX84-y24	22.8 - 25.6	23.5 - 24.5	23.76 - 24.24
BZX84-y27	25.1 - 28.9	26.5 - 27.5	26.73 - 27.27
BZX84-y30	28 - 32	29.4 - 30.6	29.70 - 30.30
BZX84-y33	31 - 35	32.3 - 33.7	32.67 - 33.33
BZX84-y36	34 - 38	35.3 - 36.7	35.64 - 36.36
BZX84-y39	37 - 41	38.2 - 39.8	38.61 - 39.39
BZX84-y43	40 - 46	42.1 - 43.9	42.57 - 43.43
BZX84-y47	44 - 50	46.1 - 47.9	-
BZX84-y51	48 - 54	50 - 52	50.49 - 51.51
BZX84-y56	52 - 60	54.9 - 57.1	-
BZX84-y62	58 - 66	60.8 - 63.2	-
BZX84-y68	64 - 72	66.6 - 69.4	-
BZX84-y75	70 - 79	73.5 - 76.5	74.25 - 75.75

NZX-series in SOD27





















	V_z (V)		V_z (V)		V_z (V)
NZX2V1A	2.0 - 2.2	NZX6V2D	6.1 - 6.4	NZX14C	13.8 - 14.3
NZX2V4A	2.3 - 2.5	NZX6V2E	6.3 - 6.6	NZX15A	14.1 - 14.7
NZX2V4B	2.4 - 2.6	NZX6V8A	6.4 - 6.7	NZX15B	14.5 - 15.1
NZX2V7A	2.5 - 2.7	NZX6V8B	6.6 - 6.9	NZX15C	14.9 - 15.5
NZX2V7B	2.6 - 2.8	NZX6V8C	6.7 - 7	NZX15X	14.35 - 15.09
NZX2V7C	2.7 - 2.9	NZX6V8D	6.9 - 7.2	NZX16A	15.3 - 15.9
NZX3V0A	2.8 - 3	NZX7V5A	7 - 7.3	NZX16B	15.7 - 16.5
NZX3V0B	2.9 - 3.1	NZX7V5B	7.2 - 7.6	NZX16C	16.3 - 17.1
NZX3V0C	3 - 3.2	NZX7V5C	7.3 - 7.7	NZX18A	16.9 - 17.7
NZX3V3A	3.1 - 3.3	NZX7V5D	7.5 - 7.9	NZX18B	17.5 - 18.3
NZX3V3B	3.2 - 3.4	NZX7V5X	7.07 - 7.45	NZX18C	18.1 - 19
NZX3V3C	3.3 - 3.5	NZX8V2A	7.7 - 8.1	NZX20A	18.8 - 19.7
NZX3V6A	3.4 - 3.6	NZX8V2B	7.9 - 8.3	NZX20B	19.5 - 20.4
NZX3V6B	3.5 - 3.7	NZX8V2C	8.1 - 8.5	NZX20C	20.2 - 21.2
NZX3V6C	3.6 - 3.8	NZX8V2D	8.3 - 8.7	NZX22A	20.9 - 21.9
NZX3V9A	3.7 - 3.9	NZX9V1A	8.5 - 8.9	NZX22B	21.6 - 22.6
NZX3V9B	3.8 - 4	NZX9V1B	8.7 - 9.1	NZX22C	22.3 - 23.3
NZX3V9C	3.9 - 4.1	NZX9V1C	8.9 - 9.3	NZX24A	22.9 - 24
NZX4V3A	4 - 4.2	NZX9V1D	9.1 - 9.5	NZX24B	23.6 - 24.7
NZX4V3B	4.1 - 4.3	NZX9V1E	9.3 - 9.7	NZX24C	24.3 - 25.5
NZX4V3C	4.2 - 4.4	NZX10A	9.5 - 9.9	NZX24X	22.61 - 23.77
NZX4V3D	4.3 - 4.5	NZX10B	9.7 - 10.1	NZX27A	25.2 - 26.6
NZX4V7A	4.4 - 4.6	NZX10C	9.9 - 10.3	NZX27B	26.2 - 27.6
NZX4V7B	4.5 - 4.7	NZX10D	10.2 - 10.6	NZX27C	27.2 - 28.6
NZX4V7C	4.6 - 4.8	NZX11A	10.4 - 10.8	NZX27X	26.99 - 28.39
NZX4V7D	4.7 - 4.9	NZX11B	10.7 - 11.1	NZX30A	28.2 - 29.6
NZX5V1A	4.8 - 5	NZX11C	10.9 - 11.3	NZX30B	29.2 - 30.6
NZX5V1B	4.9 - 5.1	NZX11D	11.1 - 11.6	NZX30C	30.2 - 31.6
NZX5V1C	5 - 5.2	NZX12A	11.4 - 11.9	NZX30X	29.02 - 30.51
NZX5V1D	5.1 - 5.3	NZX12B	11.6 - 12.1	NZX33A	31.2 - 32.6
NZX5V6A	5.2 - 5.5	NZX12C	11.9 - 12.4	NZX33B	32.2 - 33.6
NZX5V6B	5.3 - 5.6	NZX12D	12.2 - 12.7	NZX33C	33.2 - 34.5
NZX5V6C	5.4 - 5.7	NZX12X	11.44 - 12.03	NZX36A	34.2 - 35.7
NZX5V6D	5.5 - 5.8	NZX13A	12.4 - 12.9	NZX36B	35.3 - 36.8
NZX5V6E	5.6 - 5.9	NZX13B	12.6 - 13.1	NZX36C	36.4 - 38
NZX6V2A	5.7 - 6	NZX13C	12.9 - 13.4	NZX36X	35.36 - 37.19
NZX6V2B	5.8 - 6.1	NZX14A	13.2 - 13.7		
NZX6V2C	6 - 6.3	NZX14B	13.5 - 14		

Switching diodes

General purpose, high speed switching diodes <= 90V

V_R max (V)	V_F max (V) @ I_F (mA)	I_R max (nA)	t_{tr} max (ns) @ V_R (V)	Package	SOD80C (MiniMelf)	SOT23	SOT143B	SOT323 (SC-70)	SOT363 (SC-88)	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	1.4 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							
								BAV74							
70	1	50	1000	70	4			BAL99							
															
75	1	50	1000	75	4										
							BAS32L								
80	1	50	500	80	4										
															
															
90	1	50	500	80	4			BAW56				BAW56QA	BAW56M		
												BAW56S	BAW56SRA		
												BAW756S			

General purpose, high speed switching diodes 100V

V_R max (V)	V_F max (V) @ I_F (mA)	I_R max (nA)	t_{tr} max (ns) @ V_R (V)	Package	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	DFN1412-6 (SOT1268)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-2 (SOD882)	DFN1006-3 (SOT883)	DFN1006D-2 (SOD882D)					
																						
					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	1.4 x 1.2 x 0.5	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 0.37				
P_{tot} (mW)	250	380	375	200	300	300	300	300	480	250	325	250	250	250	250	250						
100	1	50	500	80	4			BAS16GW	BAS16H									BAS16LD				
							BAS16			BAS16W								BAS16QA				
											BAS16VY											
							BAV70			BAV70W									BAV70QA		BAV70M	
											BAV70S					BAV70SRA						
							BAV99			BAV99W									BAV99QA			
											BAV99S											

General purpose, switching diodes >= 100V







Types in **bold** represent new products

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)						
						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						
						P_{tot} (mW)	400	250	250	250	380	375	200	255	300	300	300	250	250	250	325					
100	1	100	100	100	50				BAS19																	
150	1	100	100	150	50		BAV102																			
									BAS20																	
200	1	100	100	200	50		BAV103				BAS21GW	BAS21H					BAS321	BAS321J	BAS521B	BAS21LL (LD)	BAV21QA					
									BAS21			BAS21W														
										BAV23																
															BAS21PG											
										BAS23A					BAS21AW											
										BAS23C																BAV23QA
										BAS23S					BAS21SW											
										BA-S21AVD																
										BAS21VD																
						300	1.1	100	150	250	50												BAS21J	BAS521		
			BAS101																							
			BAS101S																							
												BAS101														
																				BAS101S						


















Diodes

Switching diodes

Controlled avalanche switching diodes

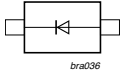


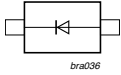
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_{ij} max (pF)	t_{rr} max (ns)	Package	SOT23	SOT143B	
											
									Size (mm)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
									P_{tot} (mW)	250	250
60	1	200	100	9	600	2.5	6			BAS56	
90	1	200	100	10	600	35	50		BAS29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

Low leakage current switching diodes

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	t_{rr} max (μ s)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006-2 (SOD882)					
																					
						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				
						P_{tot} (mW)	400	300	250	380	375	250	250	250	305	250	250				
75	1	10	5	3					BAS116GW	BAS116H		BAS416	BAS716				BAS116L				
								BAS116						BAS116QA							
								BAV199				BAV199W									
								BAW156													
								BAV170										BAV170QA	BAV170M		
125	1	100	1	1.5 typ		BAS45AL	BAS45A														

Recovery rectifiers - Automotive qualified

Types in **bold** represent new products

V_R max (V)	V_F max (V)	I_F (A)	I_R max (μ A)	V_R (V)	t_{rr} max (ns)	Package 	CFP5 (SOD128)	CFP3 (SOD123W)
								
							Size (mm)	Size (mm)
							P_{tot} (mW) @ 1cm ²	
200	0.93	1	0.2	200	25		3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
	0.98	2	0.2	200	25		PNE20010ER	PNE20020ER
	0.95	2	0.2	200	25		PNE20020EP	
	0.98	3	0.2	200	30		PNE20030EP	
400	1.1	1	1	400	1800		PNS40010ER	

Diodes

Nomenclature recovery rectifiers automotive grade types

PNE 200 10 E R

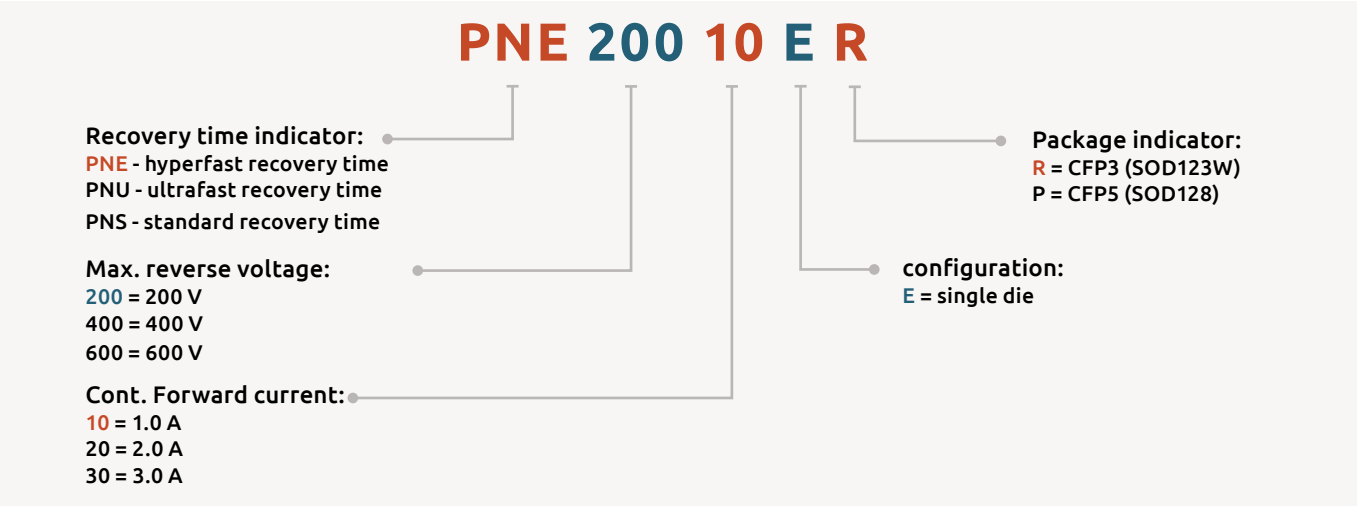
Recovery time indicator:
PNE - hyperfast recovery time
 PNU - ultrafast recovery time
 PNS - standard recovery time

Max. reverse voltage:
 200 = 200 V
 400 = 400 V
 600 = 600 V

Cont. Forward current:
10 = 1.0 A
 20 = 2.0 A
 30 = 3.0 A






Package indicator:
R = CFP3 (SOD123W)
P = CFP5 (SOD128)

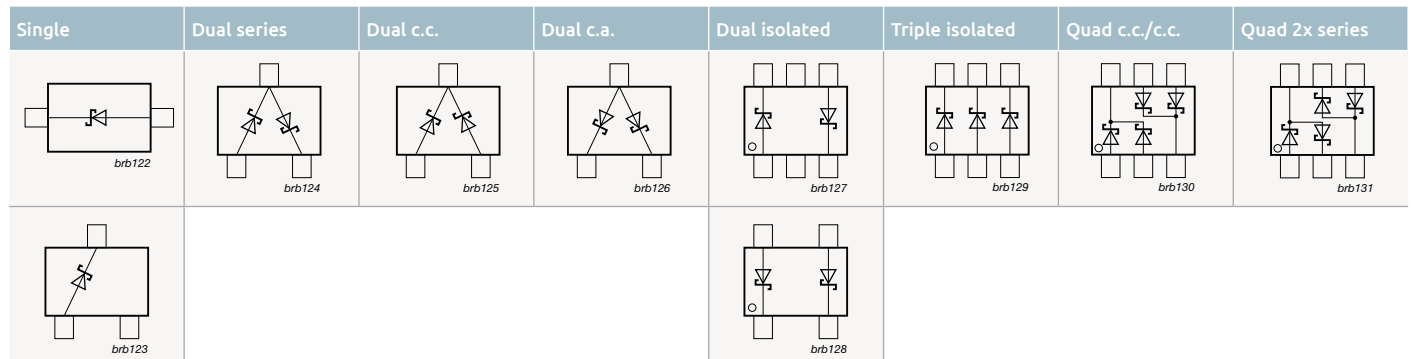
configuration:
E = single die










Schottky diodes and rectifiers







General purpose Schottky diodes <= 250 mA

IF max (mA)	VR max (V)	VF max (mV)	@ IF (mA)	IR max (µA)	@ VR (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			
						Dual series			BAS70-04			
						Dual c.c.			BAS70-05			
						Dual c.a.			BAS70-06			
						Dual isolated				BAS70-07		
						Triple isolated						
						Quad 2x series						
120	40	370	1	0.5	30	Single						
						Dual series			BAS40			
						Dual c.c.			BAS40-04			
						Dual c.a.			BAS40-05			
						Dual c.a.			BAS40-06			
						Dual isolated				BAS40-07		
						Quad c.c./c.c.						
200	30	300	10	30	10	Single						
						Dual series			BAT754			
						Dual c.c.			BAT754S			
						Dual c.c.			BAT754C			
						Dual c.a.			BAT754A			
		Triple isolated										
		400	10	2	2	25	Single	BAS85	BAT85	BAT54		BAT54GW
							Dual series			BAT54S		
							Dual c.c.			BAT54C		
							Dual c.a.			BAT54A		
	Dual isolated									BAT74		
	Triple isolated											
	Quad c.c./c.c.											
	Quad 2x series											
	500	200	200	30	10	10	Single					
							Single					
	40	30	300	10	15	30	Single			BAT721		
							Dual series			BAT721S		
							Dual c.c.			BAT721C		
Dual c.a.									BAT721A			
360		10	0.5	25	25	Single						
						Single						
						Dual series						
420	30	0.5	25	25	Dual c.c.							
					Dual c.c.							
					Dual c.a.							
50	450	10	5	40	40	Single	BAS86	BAT86				
						Single						
250	100	850	250	4	75	Single					BAT46GW	






SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1006-2 (SOD882)/ DFN1006-3 (SOT883)
						
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
375	250	300	385	400	275	250
BAS70H	BAS70W BAS70-04W BAS70-05W BAS70-06W	BAS70-07S BAS70XY		1PS76SB70	1PS79SB70	BAS70L
BAS40H	BAS40W BAS40-04W BAS40-05W BAS40-06W			RB751V40 1PS76SB40	RB751S40 1PS79SB40	RB751CS40 BAS40L
		1PS88SB48 BAS40XY			1PS79SB31	
BAT54H	BAT54W BAT54SW BAT54CW BAT54AW	BAT754L	BAT54J	1PS76SB10	1PS79SB10	BAT54L BAT54CM
		BAT74S				
		BAT54XY			RB521S30 RB520S30	RB521CS30L RB520CS30L
				1PS76SB21		
					1PS79SB30	
	BAT854W BAT854SW BAT854CW BAT854AW					
BAT46WH			BAT46WJ			

Low capacitance Schottky diodes








I_F max (mA)	V_R max (V)	V_F max (mV) @ I_F (mA)	C_j max (pF) @ $V_R = 0$ V	Package	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	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									

¹⁾Diodes have matched capacitance

Medium power low VF Schottky rectifiers single ≥ 200 mA - leadless DSN / DFN packages




I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	DSN0603-2 (SOD962)	DSN0603B-2 (SOD962B)	DSN1006-2 (SOD993)		
									
					0.6 x 0.3 x 0.3	0.6 x 0.3 x 0.2	1.0 x 0.6 x 0.28		
					525	525	1.000		
0.1	30	840	0.0008	Low I_R					
0.2	20	420	0.045	Low V_F	PMEG2002AESF	PMEG2002AESFB			
		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					
		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		
		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					

Types in **bold** represent new products

DSN1006U-2 (SOD995)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	DFN1608D-2 (SOD1608)	DFN1006-2 (SOD882)	DFN1006D-2 (SOD882D)	DFN0603-2 (SOD972E)
						
1.0 x 0.6 x 0.28	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	0.63 x 0.33 x 0.25
1.190	960	960	780	565	660	570
						PMEG3001EEF
				PMEG3002AEL	PMEG3002AELD	PMEG3002EEF
				PMEG4002EL	PMEG4002ELD	
				PMEG6002EL	PMEG6002ELD	
			PMEG2005EPK		PMEG2005BELD	
				PMEG2005AEL	PMEG2005AELD	
				PMEG2005EL	PMEG2005ELD	
				PMEG3005EL	PMEG3005ELD	
						PMEG3005EEF
			PMEG4005EPK			
	PMEG2010EPA	PMEG2010EPAS	PMEG2010EPK		PMEG2010BELD	
PMEG3010AESA						
			PMEG4010EPK			
			PMEG2015EPK			
			PMEG4015EPK			
	PMEG2020EPA	PMEG2020EPAS	PMEG2020EPK			
	PMEG3020EPA	PMEG3020EPAS				
	PMEG4020EPA	PMEG4020EPAS				
			PMEG4020EPK			
	PMEG6020EPA	PMEG6020EPAS				




Medium power low VF Schottky rectifiers single ≥ 200 mA

Types in **bold** represent new products

I_F max (A)	V_F^R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_F max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)
							
				Size (mm)	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
				P_{tot} (mW) @ 1 cm ²	2150	1050	950
				Optimization			
1	20	340	1	Low V_F			PMEG2010ER
		450	0.05	Low I_R			PMEG2010BER
	30	360	1.5	Low V_F		PMEG3010EP	PMEG3010ER
		450	0.05	Low I_R		PMEG3010BEP	PMEG3010BER
	40	490	0.05	Low V_F		PMEG4010EP	PMEG4010ER
				Low V_F		PMEG4010ETP	PMEG4010ETR
	60	460	0.022	Low V_F /Low I_R			PMEG40T10ER ¹⁾
				Low V_F		PMEG6010EP	PMEG6010ER
				Low V_F			PMEG6010ETR
		530	0.06	Low V_F /Low I_R		PMEG60T10ELP¹⁾	
590		0.0008	Low V_F /Low I_R			PMEG60T10ELR¹⁾	
100	600	0.00065	Low V_F /Low I_R			PMEG6010ELR	
	660	0.0003	Low I_R			PMEG6010ELR	
2	30	770	0.00015	Low I_R			PMEG10010ELR
		360	3	Low V_F		PMEG3020EP	
		420	1.5	Low V_F		PMEG3020CEP	PMEG3020ER
		450	0.1	Low I_R		PMEG3020BEP	
	40	520	0.05	Low I_R		PMEG3020DEP	PMEG3020BER
				Low V_F		PMEG4020EP	PMEG4020ER
				Low V_F		PMEG4020ETP	PMEG4020ETR
	60	515	0.022	Low V_F /Low I_R		PMEG40T20EP ¹⁾	PMEG40T20ER ¹⁾
				Low V_F		PMEG6020EP	PMEG6020ER
		530	0.2	Low V_F		PMEG6020ETP	PMEG6020ETR
		620	0.0012	Low V_F /Low I_R		PMEG60T20ELP¹⁾	PMEG60T20ELR ¹⁾
		680	0.0007	Low I_R		PMEG6020AELP	PMEG6020AELR
	100	760	0.0003	Low I_R			PMEG6020ELR
		770	0.0003	Low I_R		PMEG10020AELP	PMEG10020AELR
		830	0.00015	Low I_R			PMEG10020ELR
3	30	360	5	Low V_F		PMEG3030EP	
		450	0.15	Low I_R	PMEG030V030EPD	PMEG3030BEP	
	40	490	0.12	Low V_F	PMEG040V030EPD		
				Low V_F		PMEG4030EP	
				Low V_F		PMEG4030ETP	
		525	0.028	Low V_F /Low I_R		PMEG40T30EP ¹⁾	PMEG40T30ER ¹⁾
	45	540	0.1	Low I_R			PMEG4030ER
		480	0.044	Low V_F /Low I_R	PMEG045T030EPD ¹⁾		
	60	50	0.1	Low V_F	PMEG050V030EPD		
		475	0.4	Low V_F		PMEG6030EVP	
		530	0.2	Low V_F	PMEG060V030EPD	PMEG6030EP	
				Low V_F		PMEG6030ETP	
620		0.0018	Low VF/Low IR		PMEG60T30ELP¹⁾	PMEG60T30ELR¹⁾	
690		0.001	Low I_R		PMEG6030ELP		
100	770	0.00045	Low I_R		PMEG10030ELP		
4.5	60	530	0.4	Low V_F		PMEG6045ETP	
5	30	360	8	Low V_F		PMEG3050EP	
		450	0.25	Low I_R		PMEG3050BEP	
		500	0.15	Low V_F	PMEG030V050EPD		
	40	490	0.3	Low V_F		PMEG4050EP	
				Low V_F		PMEG4050ETP	
		520	0.12	Low V_F	PMEG040V050EPD		
	45	525	0.041	Low V_F /Low I_R			PMEG40T50EP ¹⁾
		490	0.3	Low V_F	PMEG045V050EPD		
		525	0.044	Low V_F /Low I_R	PMEG045T050EPD ¹⁾		
		560	0.4	Low V_F	PMEG060V050EPD		
60	690	0.0018	Low VF/Low IR		PMEG60T50ELP¹⁾		
	840	0.00045	Low I_R		PMEG100V060ELPD		
6	100	850	0.0005	Low I_R	PMEG100V080ELPD		









¹⁾ Trench process

Medium power low VF Schottky rectifiers single ≥ 200 mA
















I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)
							
				Size (mm)	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
				P_{tot} (mW) @ 1 cm ²	2150	1050	950
				Optimization			
10	45	490	0.6	Low V_F	PMEG045V100EPD		
		540	0.5	Low V_F	PMEG45A10EPD		
		545	0.08	Low V_F /Low I_R	PMEG045T100EPD ¹⁾		
	60	0.7	Low V_F	PMEG060V100EPD			
	100	850	0.0008	Low I_R	PMEG100V100ELPD		
15	45	490	1	Low V_F	PMEG045V150EPD		
		550	0.1	Low V_F /Low I_R	PMEG045T150EPD ¹⁾		
		580		Low V_F /Low I_R	PMEG45T15EPD ¹⁾		
		570	0.098	Low V_F /Low I_R	PMEG045T150EIPD ¹⁾		
	50	500	1	Low V_F	PMEG050V150EPD		
		550	0.1	Low I_R	PMEG050T150EPD ¹⁾		

¹⁾ Trench process

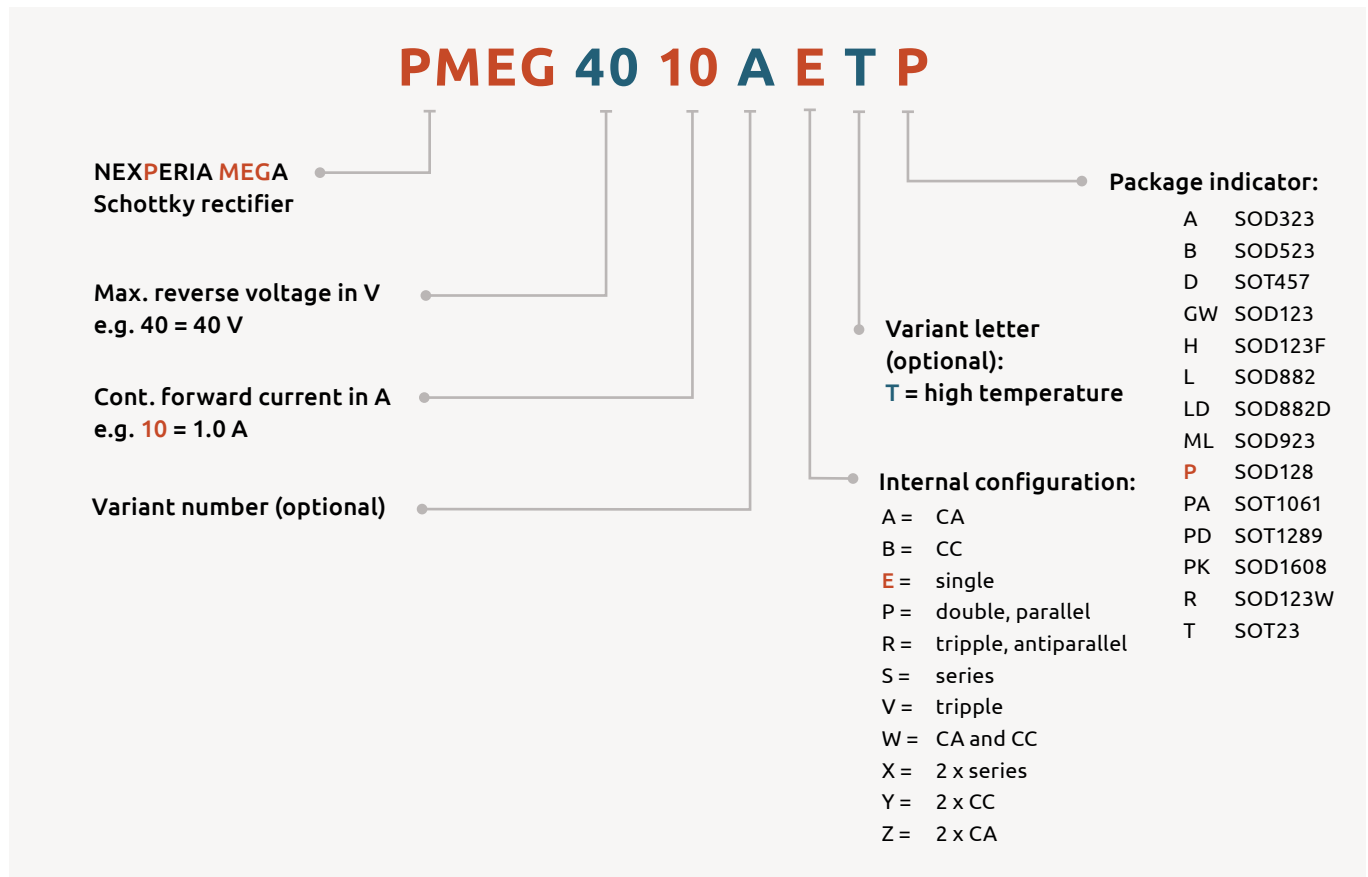
Medium power low VF Schottky rectifiers single ≥ 200 mA - leaded packages

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 cm ²	540	420	660	830	400	830	570	500
				Optimization								
0.2	30	480	0.05	Low V_F						PMEG3002EJ		PMEG3002AEB
	40	600	0.01	Low I_r						PMEG4002EJ		PMEG4002EB
	60	600	0.1	Low V_F						PMEG6002EJ		PMEG6002EB
0.5	20	390	0.2	Low V_F		PMEG2005ET	PMEG2005EGW	PMEG2005EH		PMEG2005EJ	PMEG2005AEA	
		480	0.03	Low I_r								PMEG2005EB
	30	430	0.15	Low V_F		PMEG3005ET	PMEG3005EGW	PMEG3005EH		PMEG3005EJ	PMEG3005AEA	
		500	0.5	Low V_F								PMEG3005EB
	40	470	0.1	Low V_F		PMEG4005ET	PMEG4005EGW	PMEG4005EH		PMEG4005EJ	PMEG4005AEA	
		550	1.1	Low V_F		BAT720			1PS70SB20			
640	0.008	Low I_r							PMEG4005EJ	PMEG4005AEA		
0.75	40	740	0.008	Low I_r							BAT165A	
1	20	430	0.2	Low V_F		PMEG2010AET		PMEG2010AEH				
		500	0.2	Low V_F		PMEG2010ET		PMEG2010EH		PMEG2010EJ	PMEG2010BEA	
		550	0.07	Low I_r						PMEG2010AEJ	PMEG2010EA BAT760	
		620	1.5	Low V_F								PMEG2010AEB
	30	450	1	Low V_F	1PS74SB23							
		520	0.1	Low I_r				PMEG3010CEH		PMEG3010CEJ		
		560	0.15	Low V_F		PMEG3010ET	PMEG3010EGW	PMEG3010EH		PMEG3010EJ	PMEG3010BEA	
		680	0.5	Low V_F								PMEG3010EB
	40	570	0.05	Low I_r			PMEG4010CEGW	PMEG4010CEH		PMEG4010CEJ		
		640	0.05	Low V_F		PMEG4010ET	PMEG4010EGW	PMEG4010EH		PMEG4010EJ	PMEG4010BEA	
		840	0.008	Low I_r							PMEG4010CEA	
		60	660	0.05	Low I_r			PMEG6010CEGW	PMEG6010CEH		PMEG6010CEJ	
1.5	20	660	0.2	Low I_r				PMEG2015EH	PMEG2015EJ	PMEG2015EA		
	30	500	1	Low V_F				PMEG3015EH	PMEG3015EJ			
2	10	460	3	Low V_F				PMEG1020EH	PMEG1020EJ	PMEG1020EA		
	20	525	0.2	Low V_F				PMEG2020EH	PMEG2020EJ	PMEG2020AEA		
	30	620	1	Low V_F		PMEG3020EGW	PMEG3020EH		PMEG3020EJ			
3	10	530	3	Low V_F				PMEG1030EH	PMEG1030EJ			

Medium power low VF Schottky rectifiers dual ≥ 200 mA

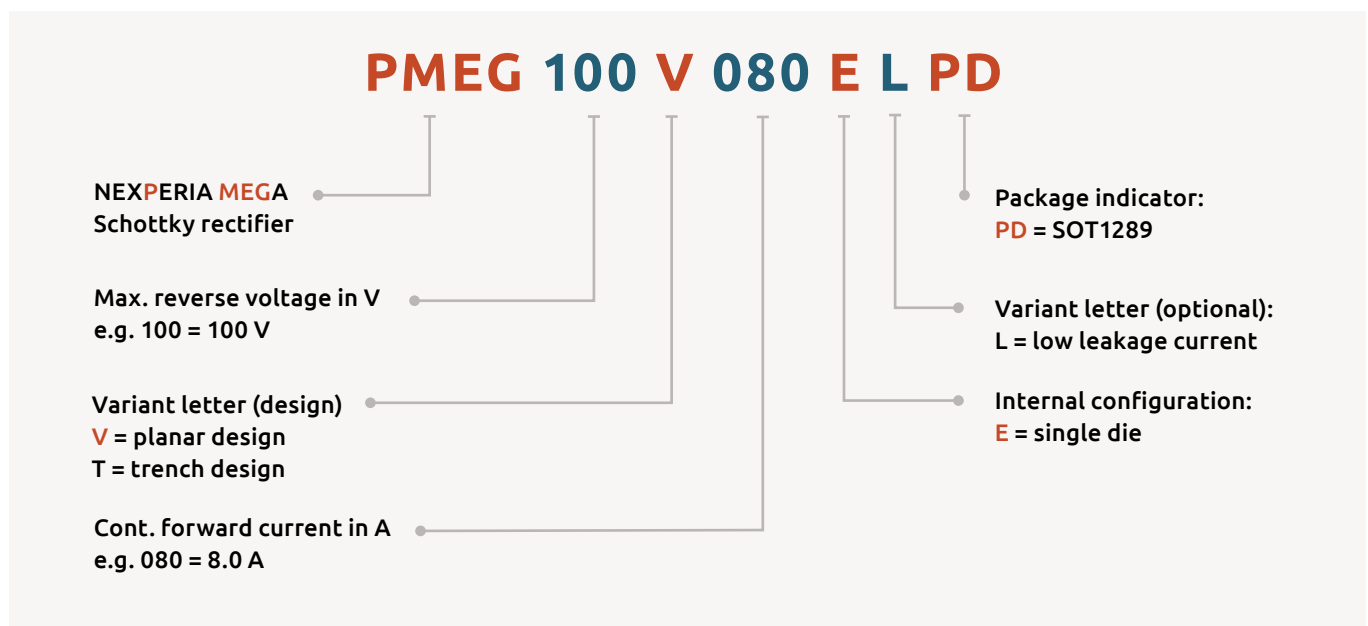
I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Optimization	Package	SOT223 (SC-73)	SOT23	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	
										
						Size (mm)	6.5 x 3.5 x 1.65	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.63
						P_{tot} (mW) @ 1 cm ²	1500	400	1000	1000
0.5	20	390	0.2	Low V_F			PMEG2005CT			
	30	430	0.15	Low V_F		PMEG3005CT				
	40	470	0.1	Low V_F		PMEG4005CT				
1.0	25	450	1.0	Low V_F		BAT120S				
				Low V_F		BAT120C				
				Low V_F		BAT120A				
	40	500	0.05	Low V_F				PMEG4010CPA	PMEG4010CPAS	
				Low V_F				PMEG6010CPA	PMEG6010CPAS	
	60	650	0.35	Low V_F		BAT160S				
				Low V_F		BAT160C				
				Low V_F		BAT160A				
	2.0	20	420	1.0	Low V_F				PMEG2020CPA	PMEG2020CPAS
30		440	2.0	Low V_F				PMEG3020CPA	PMEG3020CPAS	

Nomenclature of automotive grade Schottky rectifier in medium-power packages



Diodes

Nomenclature of automotive grade Schottky rectifier in CFP15 (SOT1289) power package








ESD protection, TVS, filtering and signal conditioning

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Low capacitance ESD protection for high-speed interfaces

Products in **bold red** are under development, types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)		
Unidirectional	Bidirectional										
1	0	5	0.45	0.5	20		PESD5V0C1USF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3		
		6.5	0.45	0.5	20		PESD6V5C1USF				
		5	0.6	0.75	10		PESD5V0F1USF				
		5	0.95	1.15	8		PESD5V0X1ULD	DFN1006D-2 (SOD882D)			
			1.55	1.75	15		PESD5V0X1UALD				
		16	0.83	0.98	8		PESD16VX1UL	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.37	
		5	0.95	1.15	8		PESD5V0X1UB	SOD523 (SC-79)			
			1.55	1.75	15		PESD5V0X1UAB				
		3.3	0.6	1.5	30	PESD3V3U1UT		SOT23	2.9 x 1.3 x 1.0		
		5	0.6	1.5	30	PESD5V0U1UT					
		12	0.6	1.5	30	PESD12VU1UT					
		15	0.6	1.5	30	PESD15VU1UT					
		24	0.6	1.5	23	PESD24VU1UT					
		0	1	5	0.2	0.3	8		PESD5V0F1BSH	DSN0402-2 (SOD992)	0.4 x 0.2 x 0.12
				2.0	0.69	0.82	20		PESD2V0Y1BSF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
2.5	0.25			0.30	15	PESD2V5Y1BSF					
	0.24			0.29	15	PESD3V3Y1BSF					
	0.2			0.25	20	PESD3V3C1BSF					
	0.28			0.35	20	PESD3V3Z1BSF					
	0.45			0.6	30	PESD3V3Z1BCSF					
3.3	0.55			0.65	30	PESD3V3W1BCSF					
	0.24			0.29	15	PESD3V3W1BCSF					
	0.28			0.35	20	PESD4V0Y1BSF					
	0.45			0.6	30	PESD4V0Z1BCSF					
	0.55			0.65	30	PESD4V0W1BCSF					
4.0	0.1			0.15	10	PESD5V0R1BSF					
	0.15			0.19	15	PESD5V0H1BSF					
	0.2			0.25	20	PESD5V0C1BSF					
	0.1			0.15	10	PESD7V0R1BSF					
	0.15			0.19	15	PESD7V0H1BSF					
5	0.2			0.25	20	PESD7V0C1BSF					
	0.1			0.15	10	PESD9V0C1BSF					
	0.15			0.19	15	PESD5V0F1BSF					
	0.2			0.25	20	PESD5V0F1BRSF					
	0.2			0.25	20	PESD3V3X1BCSF					
5.5	0.25			0.3	10	PESD5V0F1BRSF					
						PESD3V3X1BCSF					
						PESD5V0X1BCSF					
						PESD18VF1BSF					
						PESD24VF1BSF					
3.3	-			1.1	20	PESD5V0F1BLD					
						PESD5V0F1BRLD					
						PESD3V3X1BL					
						PESD5V0F1BL					
						PESD5V0X1BCL					
5.0	-			1.1	10	PESD5V0X1BCAL					
						PESD5V0X1BL					
						PESD18VF1BL					
						PESD24VF1BL					
18	0.28	0.45	10								
24	0.25	0.4	10								
5	0.4	0.55	10								
3.3	1.3	1.6	9								
5.5	0.4	0.55	10								
5	0.49	0.6	8								
				0.85	0.95	15					
				0.9	1.3	9					
				0.35	0.5	10					
				0.3	0.45	10					

[1] according to IEC 61000-4-2 (contact discharge)

Low capacitance ESD protection for high-speed interfaces



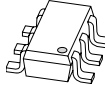
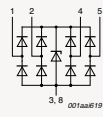

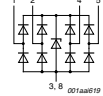
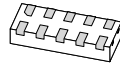
Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	ESD rating max (kV) ^[1]	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional									
2	1	5	0.5	0.65	10	 btb051	PESD5V0X2UMB	DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37	
							PESD5V0X2UM	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48	
			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	1.3	9	 007aaa490	PESD5V0X1BT	SOT23	2.9 x 1.3 x 1.0
	0	80	0.6	0.75	30	 006aaa763	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		
3	0	5.5	1	1.5	8	 24a551	PRTR5V0U2X	SOT143B	2.9 x 1.3 x 1.0	
			1.8	-	12		PRTR5V0U2AX			
			1	1.5	8	 24a552	PRTR5V0U2F	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48	

ESD protection, TVS, filtering and signal conditioning

^[1] according to IEC 61000-4-2 (contact discharge)

Low capacitance ESD protection for high-speed interfaces

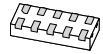

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	$C_{line\ typ}$ (pF)	$C_{line\ max}$ (pF)	ESD rating max (kV) ^[1]	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional								
4	0	3.3	0.75	0.9	25		PESD3V3X4UHM	DFN1308-6 	1.3 x 0.8 x 0.4
							IP4220CZ6	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
		PRTR5V0U4D							
		5.5	0.7	0.85	12		PUSB2X4D	SOT363 (SC-88) 	2.9 x 1.5 x 1.0
							PUSB2X4Y		2.0 x 1.25 x 0.95
		0.6	0.8	8		IP4283CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48	

^[1] according to IEC 61000-4-2 (contact discharge)



USB 3.x and eSATA protection and filtering for high-speed and super-speed lines

Products in **bold red** are under development, types in **bold** represent new products

Baseband interface	Number of protected lines	C_d (pF)	ESD rating max (kV)	R_{dyn} (Ω)	Remark	Type	Package	Size (mm)	
USB3.0 - 5 Gbps	4	0.55	8	0.3 / 0.4	ESD Protection for high-speed interfaces	IP4292CZ10-TBR		2.5 x 1.0 x 0.48	
		0.5	10			IP4294CZ10-TBR			
USB3.1 - 10 Gbps	4	0.5	10	0.27	TrEOS Protection	PUSB3F96			
		0.5	10			PUSB3F97			
		0.5	10			PUSB3F99			
		0.5	10			PUSB3FA0			
		0.29	15			PUSB3FR4			
		0.29	15			PUSB3FA1			
		0.17	15			0.4			PUSB3AB4
		0.17	15			0.4			PUSB3FA2
6	6	0.29	15	0.27		PUSB3FR6	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48	
		0.27	15	0.5		PUSB3TB6			
		0.15	15	0.4		PUSB3AB6			


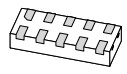

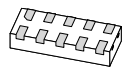

USB 3.x and eSATA protection and filtering for high-speed and super-speed lines

Products in **bold red** are under development, types in **bold** represent new products

Baseband interface	Number of protected lines	C _T (pF)	ESD rating max (kV)	R _{dyn} (Ω)	Remark	Type	Package	Size (mm)
USB3.1 - 10 Gbps	1	0.1	10	0.45	TrEOS Protection	PESD5V0R1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		0.15	15	0.25		PESD5V0H1BSF		
		0.2	20	0.23		PESD5V0C1BSF		
		0.2	20	0.23		PESD3V3C1BSF		
		0.24	15	0.28		PESD2V5Y1BSF		
		0.25	15	0.25		PESD3V3Y1BSF		
		0.28	20	0.19		PESD3V3Z1BSF		
		0.45	30	0.11		PESD3V3Z1BCSF		
		0.55	30	0.1		PESD3V3W1BCSF		
		0.45	20	0.1		PESD5V0C1USF		
		0.1	10	0.45		PESD7V0R1BSF		
		0.15	15	0.25		PESD7V0H1BSF		
		0.2	20	0.23		PESD7V0C1BSF		
		0.2	20	0.23		PESD9V0C1BSF		
		0.45	20	0.1		PESD6V5C1USF		
	2	0.25	15	0.14	Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3S	WLCSP5 	1.2 x 0.8 x 0.6
		20	0.22	Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3B/C			

ESD protection, TVS, filtering and signal conditioning

Low capacitance ESD protection for high-speed interfaces - HDMI2.0, DisplayPort

Number of protected lines		V _{RWIK} (V)	C _{line typ} (pF)	C _{line max} (pF)	ESD rating ⁽¹⁾ max (kV)	I _R max (μA) @ V _{RWIK}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional									
4	0	5.5	0.5	0.6	10	-		IP4294CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		3.3						PUSB3F96		
		5						PHDMI2F4		
0	4	3.3	0.27	0.34	15	0.1		PUSB3FR4	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		5						PHDMI2FR4		
		3.3						PUSB3AB4		
		5	0.17	0.2				PHDMI2AB4		

⁽¹⁾ according to IEC 61000-4-2 (contact discharge)

TrEOS protection devices

Unique combination of low capacitance, low clamping and high robustness for very fast, sensitive data lines

Products in **bold red** are under development, types in **bold** represent new products

Type	device	V_{RWM} (V)	Uni- or bidirectional	C_d typ (pF)	ESD rating max (kV) (Ω)	R_{dyn} TLP (Ω)	8/20 μ s (A)	Number of protected lines	Package	Size (mm)
PUSB3FR4	ESD protection	3.3	uni	0.29	15	0.27	7	4	DFN2510A-10	2.5 x 1.0 x 0.48
PUSB3FR6				0.35	15	0.29	7	6	DFN2111-7	2.1 x 1.1 x 0.48
PUSB3AB4			bi	0.17	15	0.4	7	4	DFN2510A-10	2.5 x 1.0 x 0.48
PUSB3AB6				0.15	15	0.4	7	6	DFN2111-7	2.1 x 1.1 x 0.48
PCMF1USB3S	Common Mode Filter with ESD protection	5	uni	0.3	15	0.14		2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3S								4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3S								6	WLCSP15	2.4 x 1.2 x 0.5
PESD1USB3S	ESD protection in PCMF footprint	5	uni	0.45	15	0.14		2	WLCSP5	0.8 x 1.2 x 0.5
PESD2USB3S								4	WLCSP10	1.6 x 1.2 x 0.5
PESD3USB3S								6	WLCSP15	2.4 x 1.2 x 0.5
PCMF1USB3B/C	Common Mode Filter with ESD protection	4	bi	0.3	20	0.22	9.5	2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3B/C				0.3	20	0.22	9.5	4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3B/C				0.3	20	0.22	9.5	6	WLCSP15	2.4 x 1.2 x 0.5
PCMF1USB3BA/C				0.3	20	0.22	9.5	2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3BA/C				0.3	20	0.22	9.5	4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3BA/C				0.3	20	0.22	9.5	6	WLCSP15	2.4 x 1.2 x 0.5
PESD1USB3B/C	ESD protection in PCMF footprint	4	bi	0.29	20	0.2	9.5	2	WLCSP5	0.8 x 1.2 x 0.5
PESD2USB3B/C				0.29	20	0.2	9.5	4	WLCSP10	1.6 x 1.2 x 0.5
PESD3USB3B/C				0.29	20	0.2	9.5	6	WLCSP15	2.4 x 1.2 x 0.5
PESD3V3Z1BSF	ESD protection	3.3	bi	0.28	20	0.19	9.5	1	DSN0603-2	0.6 x 0.3 x 0.3
PESD3V3W1BSF				0.45	30	0.11	15			
PESD3V3W1BCSF				0.55	30	0.1	20			
PESD3V3C1BSF				0.2	20	0.23	9			
PESD4V0Z1BSF				4	0.28	30	0.19			
PESD4V0Z1BCSF		0.45			30	0.11	15			
PESD4V0W1BCSF		0.55			30	0.1	20			
PESD5V0R1BSF		5		0.1	10	0.45	4.5			
PESD5V0H1BSF				0.15	15	0.25	7			
PESD5V0C1BSF			0.2	20	0.23	9				
PESD5V0C1USF		6.5	uni	0.45	20	0.1	9			
PESD6V5C1USF			uni	0.45	20	0.1	9			
PESD7V0R1BSF		7	bi	0.1	10	0.45	4.5			
PESD7V0H1BSF				0.15	15	0.25	7			
PESD7V0C1BSF				0.2	20	0.23	9			
PESD9V0C1USF				0.2	20	0.23	9			

TrEOS2 protection devices

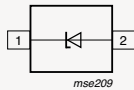






Industry-leading low trigger voltages V_{t1}

Types in **bold** represent new products

Type	device	V_{RWM} (V)	Uni- or bidirectional	C_d typ (pF)	ESD rating max (kV) (Ω)	R_{dyn} TLP (Ω)	Trigger voltage V_{t1}	Number of protected lines	Package	Size (mm)
PES2V0Y1BSF	ESD protection	2.0	bi	0.69	20	0.2	4.3	1	DSN0603-2	0.6 x 0.3 x 0.3
PES2V5Y1BSF		2.5		0.25	15	0.28	4.9			
PES3V3Y1BSF		3.3		0.24	15	0.25	7			
PES4V0Y1BSF		4		0.24	15	0.25	7			

General purpose ESD protection protection devices

Types in **bold** represent new products

Number of protected lines		V _{RWM} (V)	C _{line typ} (pF)	C _{line max} (pF)	I _{pp max} (A) [1]	ESD rating max (kV) [2]	I _r max (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)					
Unidirectional	Bidirectional															
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							
		5	207	300	15	30	2		PESD3V3S1UL							
			2	2.6		9	0.1		PESD5V0U1UL							
		5	25	30	3.5	26	0.1		PESD5V0L1UL							
			152	200	15	30	1		PESD5V0S1UL							
		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	30	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							
		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							
		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							

ESD protection, TVS, filtering and signal conditioning

[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 [2] according to IEC 61000-4-2 (contact discharge)

General purpose ESD protection protection devices

Types in **bold** represent new products

Number of protected lines		V _{RWM} (V)	C _{line} typ (pF)	C _{line} max (pF)	I _{pp} max (A) [1]	ESD rating max (kV) [2]	I _{fr} max (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
0	1	3.3	5.5	6	5.4	20	0.1		PESD3V3U1BCSF		0.6 x 0.3 x 0.3
			8.5	10	7.1	30	0.1		PESD3V3V1BCSF		
		5.5	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		
		16	5.7	6.5	1.3	12	0.05		PESD16VV1BSF		
		18	4	6	3	25	0.1		PESD18VV1BBSF		
		3.3	101	-	18	30	2		PESD3V3L1BA		
		5	75	-	15	30	1		PESD5V0L1BA		
		12	19	-	5	30	0.05		PESD12VL1BA		
		15	16	-	5	30	0.05		PESD15VL1BA		
		24	11	-	3	23	0.05		PESD24VL1BA		
		3.3	11	13	5	30	0.01		PESD3V3V1BL		1.7 x 1.25 x 0.95
			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		1.7 x 1.25 x 0.95
		5	11	13	4.8	30	0.01		PESD5V0V1BL		
			35	45	12	30	0.1		PESD5V0S1BL		
		5.5	70	84	35	30	0.1		PTVS5V5D1BL		1.7 x 1.25 x 0.95
		12	17	25	7.8	15	0.01		PESD12VV1BL		
		3	20	25	10	30	0.1		PESD3V3T1BLD		1.2 x 0.8 x 0.6
		11	13	4.8	30	0.01	PESD5V0V1BLD				
			35	45	12	30	0.1		PESD5V0S1BLD		
		11	13	4.8	30	0.01	PESD5V0V1BB			1.2 x 0.8 x 0.6	
			35	45	12	30	0.1				PESD5V0S1BB
		11	13	4.8	30	0.01	PESD5V0V1BA			1.7 x 1.25 x 0.95	
			35	45	12	12	0.1				PESD5V0S1BA
		2.9	3.5	10	0.1	PESD5V0U1BL			1.7 x 1.25 x 0.95		
						PESD5V0U1BLD					
						PESD5V0U1BB					
PESD5V0U1BB											
PESD5V0U1BA											

[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5

[2] according to IEC 61000-4-2 (contact discharge)

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{pp} max (A) [1]	ESD rating max (kV) [2]	I_R max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
2	1	3.3	22	28	3	15	0.3		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)	
		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		
		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	2		PESD3V3L2BT	SOT23	2.9 x 1.3 x 1
		5	75	-	13	30	1		PESD5V0L2BT		
		12	19	-	5	30	0.05		PESD12VL2BT		
		15	16	-	5	30	0.05		PESD15VL2BT		
		24	11	-	3	23	0.05		PESD24VL2BT		
		5	35	45	12	30	0.1		PESD5V0S2BT		
			2.9	3.5		10	0.1		PESD5V0U2BT		
			18	20	9	30	0.01		PESD5V0U2BM	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.5
			2.9	3.5	1.5	10	0.1		PESD5V0U2BMB	DFN1006B-3 (SOT883B)	
			18	20	9	30	0.01		PESD5V0V2BMB		1 x 0.6 x 0.37
			35	45	35	30	0.1		PESD5V0S2BQA	DFN1010D-3 (SOT1215)	1.1 x 1.0 x 0.37

ESD protection, TVS, filtering and signal conditioning

[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5

[2] according to IEC 61000-4-2 (contact discharge)

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)	$I_{PP max}$ (A) [1]	ESD rating max (kV) [2]	$I_R max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional											
4	3	3.3	22	28	3	20	0.3		PESD3V3L4UF		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		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		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		PESD3V3L4BHM	DFN1308-6 (SOT8006)	1.3 x 0.8 x 0.4	
										PESD5V0U4BF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5
		5	2.9	3.5		10	0.1		BZA408B	SOT457 (SC-74)	2.9 x 1.5 x 1.0	
5	4	3.3	20	24	3.2	15	2		PESD3V3L5UK		1 x 1 x 0.5	
									5			18.5
		3.3	22	28	2.5	20	0.3			PESD3V3L5UF		1.45 x 1 x 0.5
										5		
		3.3	22	28	2.5	20	0.3		PESD3V3L5UY		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		2.9 x 1.5 x 1.0	
		5	165	220	20	30	0.2	PESD5V0S5UD				
		24	45	70	4	23	0.015	PESD24VS5UD				
0	5	5	2.9	3.5	-	10	0.1		PESD5V0U5BF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5	

[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 [2] according to IEC 61000-4-2 (contact discharge)

Audio interface protection

Types in **bold** represent new products

Lines	$V_{RWM}(V)$	$V_{BR\ min}(V)$	$V_{BR\ max}(V)$	$C_D\ typ(pF)$	$C_D\ max(pF)$	$I_{ppM}\ 8/20\mu s(A)$	$V_{CL}\ 8/20\mu s @ I_{ppM}(V)$	$V_{ESD}(kV)$	Configuration	Type	Package		
1	4			0.28	0.34	10	5	2		PESD4V0Z1BSF	DSN0603-2 (SOD962) 		
				0.45	0.60	15	5	30		PESD4V0Z1BCSF			
				0.55	0.65	20	5	30		PESD4V0W1BCSF			
	3.3	4.7			22	30	-	-	30		PESD3V3T1BL	DFN1006-2 (SOD882) 	
		4.5			65	78	34	13.2	30		PTVS3V3D1BAL		
	4.5	4.7			65	78	34	13.2	30	PTVS4V5D1BL			
	5.5	5.6	7.6		70	84	35	12.2	30	PTVS5V5D1BL			
	5	5.5	9.5		35	45	12	14	30		PESD5V0S1BL		DFN1010D-3 (SOT1215)
					70	90	28	11.5	30		PESD5V0S2BQA		
					35	45	12	14	30	PESD5V0S1BLD			
	5.8	7.8			11	13	4.8	12.5	30		PESD5V0V1BL	DFN1006-2 (SOD882) 	
					11	13	4.8	12.5	30		PESD5V0V1BLD	DFN1006D-2 (SOD882D) 	
12	14.6	16.8		17	25	7.8	38	30		DFN1006-2 (SOD882) 			
2	5	5.8	7.8	18	20	9	12.5	30		PESD5V0V2BM	DFN1006-3 (SOT883) 		
				18	20	9	12.5	30		PESD5V0V2BMB	DFN1006B-3 (SOT883B) 		
	4				0.3		9.5	6	20		PCMF1USB3B/C	WLCSP5 	
					0.3		9.5	6	20		PCMF2USB3B/C	WLCSP10 	
					0.3		9.5	6	20		PCMF3USB3B/C	WLCSP15 	
	4				0.29		9.5	6	20		PESD1USB3B/C	WLCSP5 	
					0.29		9.5	6	20		PESD2USB3B/C	WLCSP10 	
					0.29		9.5	6	20		PESD3USB3B/C	WLCSP15 	

ESD protection, TVS, filtering and signal conditioning

Automotive high-speed network protection

Types in **bold** represent new products

Number of protected lines	V_{RWM} (V)	C_{line} typ (pF)	I_{RM} max (μA)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
1	5.5	0.4	0.1	10		PESD5V0F1BLD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37
2	5	1	0.1	8		PESD2ETH-X	SOT143B 	2.9 x 1.3 x 1.0
		1.8	0.1	12		PESD2ETH-AX		
2	5	1.3	0.1	8		PESD2ETH-D	SOT457 	2.9 x 1.5 x 1.0
		2	0.1	12		PESD2ETH-AD		
4	5.5	0.6	1 @ 3 V	8		PESD1LVDS	DFN2510-10 (SOT1165) 	2.5 x 1.0 x 0.48
		0.6	1 @ 3 V	8		PRTR5V0U4D	SOT457 	2.9 x 1.5 x 1.0

[1] according to IEC 61000-4-2 (contact discharge)

Automotive in-vehicle network bus line protection







Number of protected lines bidirectional	V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20μs (A)	V_{CL} 8/20μs @ I_{PPM} (V)	ESD rating max (kV) [2]	I_T max [μA] @ V_{RWM}	Configuration	Type	Package	Size (mm)
1	24	14	17	3.5	42	30	0.05		PESD1IVN24-A	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
	27	14	17	3	45	30	0.05		PESD1IVN27-A		
2	24	14	17	3.5	42	30	0.05		PESD2IVN24-T	SOT23 	2.0 x 1.25 x 0.95
	27	14	17	3	45	30	0.05		PESD2IVN27-T		
1	27	14	17	3	45	30	0.05		PESD1IVN27-U	SOT323 	2.0 x 1.25 x 0.95
2	24	14	17	3.5	42	30	0.05		PESD2IVN24-U		
	27	14	17	3	45	30	0.05		PESD2IVN27-U		
1	15 (diode 1) 24 (diode 2)	13	17	3 (diode 1) 5 (diode 2)	70 (diode 1) 44 (diode 2)	23	0.05		PESD1LIN	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
2	24	11	17	3	70	23	0.05		PESD1CAN	SOT23 	2.9 x 1.3 x 1.0
		25	30	5	41	30	0.01		PESD2CAN		
		11	17	3	70	23	0.05		PESD1FLEX	SOT323 	2.0 x 1.25 x 0.95
		9.3	12	3	50	23	0.05		PESD1CAN-U		
1	26.5	8.5	11	3	53	23	0.05		PESD1IVN-U	SOT323 	2.0 x 1.25 x 0.95
2									PESD2IVN-U		

[1] 8 / 20 μs surge pulse according to IEC 61000-4-5

[2] according to IEC 61000-4-2 (contact discharge)

Battery and charger port protection

Types in **bold** represent new products

Number of protected lines	C _{line} (pF)	V _{RWM} (V)	I _{PPM} 8/20μs (A)	Type	Package	Size (mm)
1 x bi	65	3.3	34	PTVS3V3D1BAL	DFN1006-2 	1.0 x 0.6 x 0.48
	65	4.5	34	PTVS4V5D1BL		
	70	5.5	35	PTVS5V5D1BL		
1 x uni	160	12	22.5	PESD12VS1UJ	SOD323F (SC-90)	1.7 x 1.25 x 0.7
	480	5	22.5	PESD5V0S1UJ		
	160	12	47	PESD12VS1UA	SOD323 (SC-76)	1.7 x 1.25 x 0.95
	480	5	47	PESD5V0S1UA		
2 x bi	18	5	9	PESD5V0V2BM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.48
	18	5	9	PESD5V0V2BMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37
	35	5	15	PESD5V0S2BQA	DFN1010D-3 (SOT1215) 	1.1 x 1.0 x 0.37

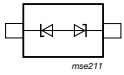
HDMI and display port protection

Interface	Number of protected lines	C _{line} (pF)	Remark	Type	Package	Size (mm)
Display port	4	0.6	ESD protection for ultra high-speed interfaces	IP4283CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.55	ESD protection for ultra high-speed interfaces	IP4292CZ10-TBR		
		0.5	ESD protection for ultra high-speed interfaces	IP4294CZ10-TBR		
			ESD protection for ultra high-speed interfaces	PHDMI2F4		
		0.27	ESD protection for ultra high-speed interfaces	PHDMI2FR4		
		0.17	ESD protection for ultra high-speed interfaces	PHDMI2AB4		
HDMI	4	0.6	ESD protection for ultra high-speed interfaces	IP4283CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.55	ESD protection for ultra high-speed interfaces	IP4292CZ10-TBR		
		0.5	ESD protection for HDMI 2.0	PHDMI2F4		
			ESD protection for ultra high-speed interfaces	IP4294CZ10-TBR		
		0.27	ESD protection for ultra high-speed interfaces	PHDMI2FR4		
		0.17	ESD protection for ultra high-speed interfaces	PHDMI2AB4		
LVDS	4	0.8	Very low clamp ESD protection with 12 kV IEC ruggedness	PUSB2X4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
		0.8	Very low clamp ESD protection with 12 kV IEC ruggedness	PUSB2X4Y	SOT363 (SC-88) 	2.0 x 1.25 x 0.95

ESD protection, TVS, filtering and signal conditioning

Antenna protection (NFC, WiFi,...)

Products in **bold red** are under development

Number of protected lines (Bidirectional)	V_{RWM} [V]	C_{line} typ [pF]	C_{line} max [pF]	ESD rating ⁽¹⁾ max [kV]	Configuration	Type	Package	Size
1	18	0.28	0.45	10	 mse211	PESD18VF1BSF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
						PESD1NFC-SF		
		0.35	0.5	10		PESD18VF1BL	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
						PESD1NFC-L		
	24	0.25	0.4	10		PESD24VF1BSF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
						PESD2NFC-SF		
		0.3	0.45	10		PESD24VF1BL	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
						PESD2NFC-L		
30	0.27		10	PESD30VF1BL				

⁽¹⁾ according to IEC 61000-4-2 (contact discharge)

USB and SATA protection

Interface	Number of protected lines	R_{line}	C_{line} (pF)	Remark	Type	Package	Size (mm)		
USB2.0 (Plastic package)	2	-	1.0	ESD protection for up to 2 ultra high-speed datalines	PRTR5V0U2X	SOT143B	2.9 x 1.3 x 1.0		
			1.8	ESD protection for up to 2 ultra high-speed datalines with 12 kV ESD robustness	PRTR5V0U2AX				
				ESD protection for up to 2 ultra high-speed datalines	PRTR5V0U2F	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48		
				USB protection for USB OTG with 5.5 V Vbat protection	PUSBM5V5X4-TL	DFN1616-6 (SOT1189)	1.6 x 1.6 x 0.48		
	3 + 1				USB protection for USB OTG with 12 V Vbat protection	PUSBM12VX4-TL			
			4	0.8	Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4Y	SOT363 (SC-88)	2.0 x 1.25 x 0.95	
				1		Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4D	SOT457 (SC-74)	2.9 x 1.5 x 1.0
						Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	IP4220CZ6		
		Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	PRTR5V0U4D						
















Common mode filter for USB 2.0

Interface	Number of protected lines	C_{line} (pF)	ESD rating max (kV) ⁽¹⁾	Remark	Type	Package	Size (mm)
USB2.0	2	1.5	15	Common Mode filter with ESD protection for high-speed interfaces such as USB 2.0	IP3319CX6	WLCSP6	1.34 x 0.95 x 0.57

⁽¹⁾ according to IEC 61000-4-2 (contact discharge)

Common mode filter for USB 3.x




Products in **bold red** are under development, types in **bold** represent new products

Interface	Number of protected line pairs	Type	Differential Mode 3dB frequency	Common Mode rejection 800 MHz - 10 GHz	C_d typical	V_{RWM}	ESD rating	Channel series resistance	Package	Size (mm)
USB3.x	1	PCMF1USB3BA/C	~ 10 GHz		0.25	4	15	3		0.8 x 1.2 x 0.5
	2	PCMF2USB3BA/C								1.6 x 1.2 x 0.5
	3	PCMF3USB3BA/C								2.4 x 1.2 x 0.5
	1	PCMF1USB3B/C	8.1 GHz	>12	0.3	4	20	3		0.8 x 1.2 x 0.5
	2	PCMF2USB3B/C								1.6 x 1.2 x 0.5
	3	PCMF3USB3B/C								2.4 x 1.2 x 0.5
	1	PCMF1USB3S	6 GHz	>12	0.3	5	15	3		0.8 x 1.2 x 0.5
	2	PCMF2USB3S								1.6 x 1.2 x 0.5
	3	PCMF3USB3S								2.4 x 1.2 x 0.5
	1	PESD1USB3B	16.1 GHz	ESD protection in PCMF footprint	0.3	4	20	-		0.8 x 1.2 x 0.5
	2	PESD2USB3B								1.6 x 1.2 x 0.5
	3	PESD3USB3B								2.4 x 1.2 x 0.5
	1	PESD1USB3S	17 GHz	ESD protection in PCMF footprint	0.5	5	15	-		0.8 x 1.2 x 0.5
	2	PESD2USB3S								1.6 x 1.2 x 0.5
	3	PESD3USB3S								2.4 x 1.2 x 0.5

^{†1} according to IEC 61000-4-2 (contact discharge)

ESD protection, TVS, filtering and signal conditioning

Common mode filter for HDMI and MIPI

Interface	Number of protected line pairs unidirectional	Type	Differential Mode 3 dB frequency (typ.)	C_d pF typical	V_{RWM}	ESD rating ^{†1} max (kV)	Channel series resistance	Package	Size (mm)
HDMI2.0	1	PCMF1HDMI2S	>6 GHz	0.3	5	15	3 Ω		0.8 x 1.2 x 0.5
	2	PCMF2HDMI2S							1.6 x 1.2 x 0.5
	3	PCMF3HDMI2S							2.4 x 1.2 x 0.5

^{†1} according to IEC 61000-4-2 (contact discharge)

HDMI signal conditioning

Interface	Number of protected lines	Buffer	Level shifter	C_{line} (pF)	Resistor (Ω)	LDO	Remark	Type	Package	Size (mm)
HDMI2.0 Tx	13	yes	yes	100 Ω differential impedance	integrated	-	Fully integrated HDMI source solution with current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4786CZ32	DFN5050-32 (SOT617)	5.0 x 5.0 x 0.85
							Fully integrated HDMI source solution with enhanced ESD protection, current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4788CZ32		
SD3.0	6	yes	yes	-	internal	LDO	SD 3.0-compliant memory card with integrated dual voltage-level translator with EMI filter and ESD protection	IP4856CX25/C	WLCSP25	2.4 x 2.4 x 0.4

LCD and camera RC filter with integrated protection

Number of protected lines	Line small-signal equivalents			Digital interface clock speed (MHz)	Insertion loss 521~3 dB (MHz)	Type	Package	Size (mm)
	R_{line} (Ω)	C_{line} (pF)	L_{line} (nH)					
4	40	18	-	~100	300	IP4252CZ8-4-TTL	DFN1714-8 (SOT1166)	1.7 x 1.35 x 0.52
	100	45	-	~40	130	IP4254CZ8-4-TTL		
8	40	18	-	~100	300	IP4252CZ16-8-TTL	DFN3314-16 (SOT1168)	3.3 x 1.35 x 0.53
	100	45	-	~40	130	IP4254CZ16-8-TTL		
		15	-	~110	330	IP4251CZ16-8-TTL		



Memory and SIM card filter with integrated protection

Types in **bold** represent new products


Interface	Number of protected lines	Line small-signal equivalents		Digital interface clock speed (MHz)	Remark	Type	Package	Size (mm)
		R_{line}	C_{line} (pF)					
SIM card	3	47 Ω / 100 Ω	20	~20	Integrated SIM-card EMI filter and ESD protection	IP4264CZ8-20-TTL	DFN1714-8 (SOT1166)	1.7 x 1.35 x 0.52
SD 3.0	6	-	0.27	5000	6-line bidirectional ESD protection for ultra high-speed interfaces	PUSB3TB6	DFN2111-7 (SOT1358)	2.1 x 1.1 x 0.5
			0.35			PUSB3FR6		
			0.15			PUSB3AB6		
SD 3.0	4	-	0.75		4-line unidirectional ESD protection	PESD3V3X4UHM	DFN1308-6	1.3 x 0.8 x 0.4

TVS diodes for mobile applications

Types in **bold** represent new products

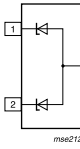

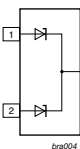
P_{RWM} 10/1000µs	V_{RWM}	V_{BR} min	V_{BR} max	I_{ppm} 8/20µs	V_{CL} 8/20µs	I_{ppm} 10/1000µs	V_{CL} 10/1000µs	Type	Package	Size
300	3.3	4.7	-	34	13.2	-	-	PTVS3V3D1BAL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
	4.5	4.7	-	34	13.2	-	-	PTVS4V5D1BL		
	5.5	5.6	7.6	35	12.2	-	-	PTVS5V5D1BL		
	7.5	8.33	9.21	178	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		

TVS diodes for mobile applications

V_{RWM} (V)	V_{BR} min (V)	V_{BR} max (V)	8/20µs pulse		10/1000µs pulse		I_{fm} typ @ V_{RWM} (nA)	I_{fm} max @ V_{RWM} (nA)	R_{dyn} (TLP) - 8/20µs	Type	Package	Size
			V_{cl} @ I_{ppm} 8/20µs (V) max	I_{ppm} 8/20µs (A)	V_{cl} @ I_{ppm} 10/1000µs (V) max	I_{ppm} 10/1000µs (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	13.3	15.4	29	65	21.8	10.5	0.1	200	0.11	PTVS12VZ1USK		
15	16.7	19.4	36	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		


ESD protection, TVS, filtering and signal conditioning

TVS diodes, 24 W/40 W (automotive)

Power (W) (10/1000 µs waveform) [1]	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV) [1]	C_{line} typ (pF)	V_{CL} max (V) @ I_{pp} [1]	I_{pp} (A) [1]	I_{RWM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)		
24	3	5.32	5.6	5.88	20	30	210	8	3	5	 mbz212	MMBZ5V6AL	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				
	4.5	6.48	6.8	7.14	1	30	150	9.6	2.5	0.3		MMBZ6V8AL				
	6	8.65	9.1	9.56	1	30	155	14	1.7	0.1		MMBZ9V1AL				
	6.5	9.5	10	10.5	1	30	130	14.2	1.7	0.02		MMBZ10VAL				
40	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		 mbz004			MMBZ12VAL	
		12	14.25	15	15.75	1	30	85	21	1.9					0.005	MMBZ15VAL
		13	15.2	16	16.8	1	30	76	23	1.9					0.005	MMBZ16VAL
		13	15.68	16	16.32	1	30	76	23	1.9					0.005	MMBZ16VTAL
		14.5	17.1	18	18.9	1	30	70	25	1.6					0.005	MMBZ18VAL
		17	19	20	21	1	30	65	28	1.4					0.005	MMBZ20VAL
		22	25.65	27	28.35	1	30	48	40	1					0.005	MMBZ27VAL
		26	31.35	33	34.65	1	30	45	46	0.87					0.005	MMBZ33VAL
		8.5	11.4	12	12.6	1	30	110	17	2.35					0.005	MMBZ12VDL
		12.8	14.3	15	15.8	1	30	85	21.2	1.9					0.005	MMBZ15VDL
		14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VCL			
		17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VCL			
		22	25.65	27	28.35	1	30	48	38	1	0.005		MMBZ27VCL			
		26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VCL			

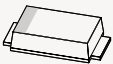
Transient voltage surge suppressor (TVS)

TVS diodes, 400 W

Power (W) (10/1000 µs waveform) ^[1]	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 (T _J max = 150 °C)	Type (T _J max = 185 °C)	Package	Size (mm)
350	3.5	5.20	5.60	6.00	10	8.0	43.8	5	600	PTVS3V3S1UR	PTVS3V3S1UTR		
400	5.0	6.40	6.70	7.00	10	9.2	43.5	5	400	PTVS5V0S1UR	PTVS5V0S1UTR		
	6.0	6.67	7.02	7.37	10	10.3	38.8	5	400	PTVS6V0S1UR	PTVS6V0S1UTR		
	6.5	7.22	7.60	7.98	10	11.2	35.7	5	250	PTVS6V5S1UR	PTVS6V5S1UTR		
	7.0	7.78	8.20	8.60	10	12.0	33.3	3	100	PTVS7V0S1UR	PTVS7V0S1UTR		
	7.5	8.33	8.77	9.21	1	12.9	31.0	0.2	50	PTVS7V5S1UR	PTVS7V5S1UTR		
	8.0	8.89	9.36	9.83	1	13.6	29.4	0.03	25	PTVS8V0S1UR	PTVS8V0S1UTR		
	8.5	9.44	9.92	10.40	1	14.4	27.8	0.01	10	PTVS8V5S1UR	PTVS8V5S1UTR		
	9.0	10.00	10.55	11.10	1	15.4	26.0	0.005	5	PTVS9V0S1UR	PTVS9V0S1UTR		
	10	11.10	11.70	12.30	1	17.0	23.5	0.005	2.5	PTVS10V51UR	PTVS10V51UTR		
	11	12.20	12.85	13.50	1	18.2	22.0	0.005	2.5	PTVS11V51UR	PTVS11V51UTR		
	12	13.30	14.00	14.70	1	19.9	20.1	0.005	2.5	PTVS12V51UR	PTVS12V51UTR		
	13	14.40	15.15	15.90	1	21.5	18.6	0.001	0.1	PTVS13V51UR	PTVS13V51UTR		
	14	15.60	16.40	17.20	1	23.2	17.2	0.001	0.1	PTVS14V51UR	PTVS14V51UTR		
	15	16.70	17.60	18.50	1	24.4	16.4	0.001	0.1	PTVS15V51UR	PTVS15V51UTR		
	16	17.80	18.75	19.70	1	26.0	15.4	0.001	0.1	PTVS16V51UR	PTVS16V51UTR		
	17	18.90	19.90	20.90	1	27.6	14.5	0.001	0.1	PTVS17V51UR	PTVS17V51UTR		
	18	20.00	21.00	22.10	1	29.2	13.7	0.001	0.1	PTVS18V51UR	PTVS18V51UTR	SOD123W	2.6 x 1.7 x 1.0
	20	22.20	23.35	24.50	1	32.4	12.3	0.001	0.1	PTVS20V51UR	PTVS20V51UTR		
	22	24.40	25.60	26.90	1	35.5	11.3	0.001	0.1	PTVS22V51UR	PTVS22V51UTR		
	24	26.70	28.10	29.50	1	38.9	10.3	0.001	0.1	PTVS24V51UR	PTVS24V51UTR		
26	28.90	30.40	31.90	1	42.1	9.5	0.001	0.1	PTVS26V51UR	PTVS26V51UTR			
28	31.10	32.80	34.40	1	45.4	8.8	0.001	0.1	PTVS28V51UR	PTVS28V51UTR			
30	33.30	35.10	36.80	1	48.4	8.3	0.001	0.1	PTVS30V51UR	PTVS30V51UTR			
33	36.70	38.70	40.60	1	53.3	7.5	0.001	0.1	PTVS33V51UR	PTVS33V51UTR			
36	40.00	42.10	44.20	1	58.1	6.9	0.001	0.1	PTVS36V51UR	PTVS36V51UTR			
40	44.40	46.80	49.10	1	64.5	6.2	0.001	0.1	PTVS40V51UR	PTVS40V51UTR			
43	47.80	50.30	52.80	1	69.4	5.8	0.001	0.1	PTVS43V51UR	PTVS43V51UTR			
45	50.00	52.65	55.30	1	72.7	5.5	0.001	0.1	PTVS45V51UR	PTVS45V51UTR			
48	53.30	56.10	58.90	1	77.4	5.2	0.001	0.1	PTVS48V51UR	PTVS48V51UTR			
51	56.70	59.70	62.70	1	82.4	4.9	0.001	0.1	PTVS51V51UR	PTVS51V51UTR			
54	60.00	63.15	66.30	1	87.1	4.6	0.001	0.1	PTVS54V51UR	PTVS54V51UTR			
58	64.40	67.80	71.20	1	93.6	4.3	0.001	0.1	PTVS58V51UR	PTVS58V51UTR			
60	66.70	70.20	73.70	1	96.8	4.1	0.001	0.1	PTVS60V51UR	PTVS60V51UTR			
64	71.10	74.85	78.60	1	103.0	3.9	0.001	0.1	PTVS64V51UR	PTVS64V51UTR			

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

TVS diodes, 600 W

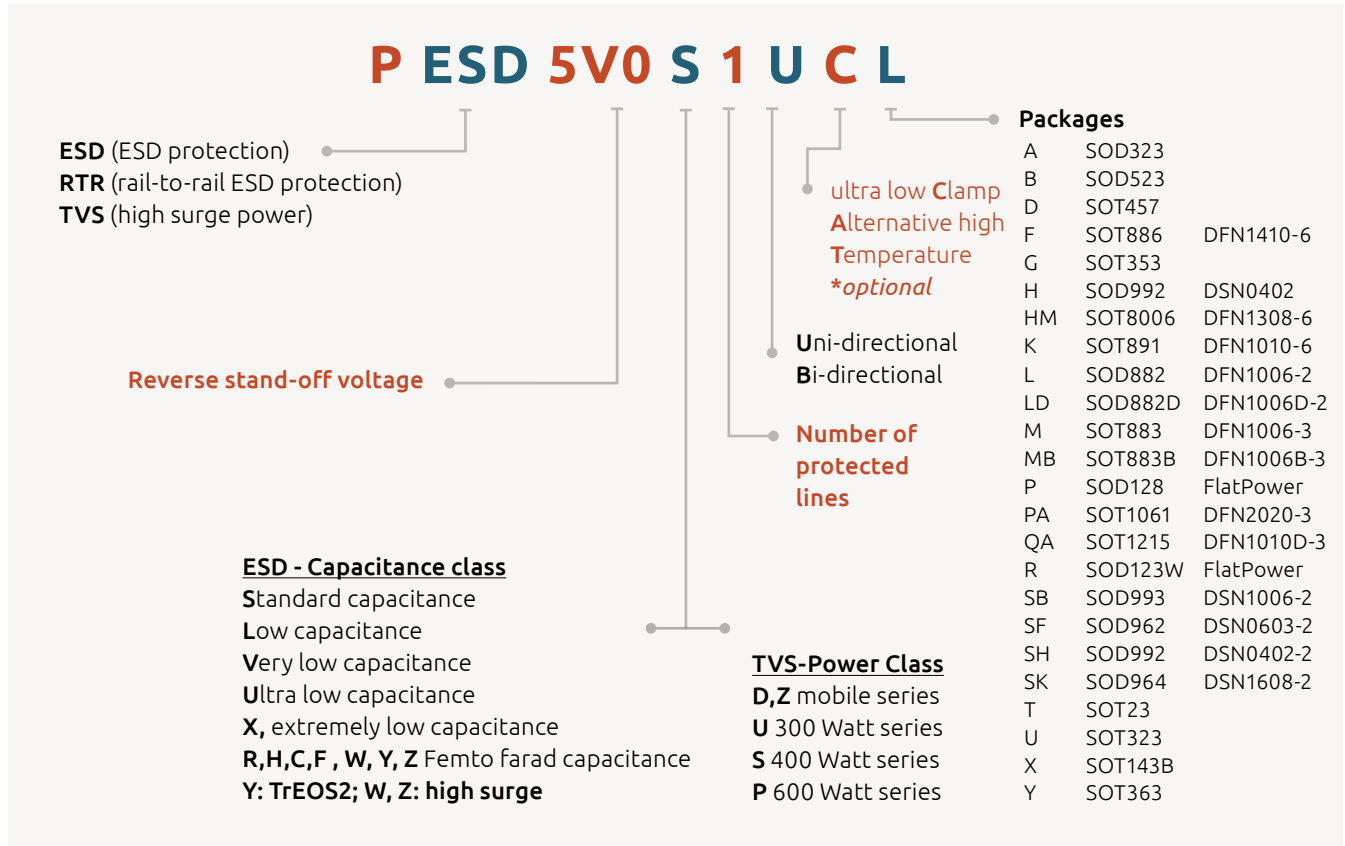
Power (W) (10 / 1000 µs waveform) ⁽¹⁾	V _{RWM} (V)	V _{BR} min (V) @ I _R	V _{BR} typ (V) @ I _R	V _{BR} max (V) @ I _R	I _R (mA)	V _{CL} max (V) @ I _{PP} ⁽¹⁾	I _{PP} (A) ⁽¹⁾	I _{RM} typ (µA) @ V _{RWM}	I _{RM} max (µA) @ V _{RWM}	Type (T _J max = 150 °C)	Type (T _J max = 185 °C)	Package	Size (mm)
600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

ESD protection, TVS, filtering and signal conditioning

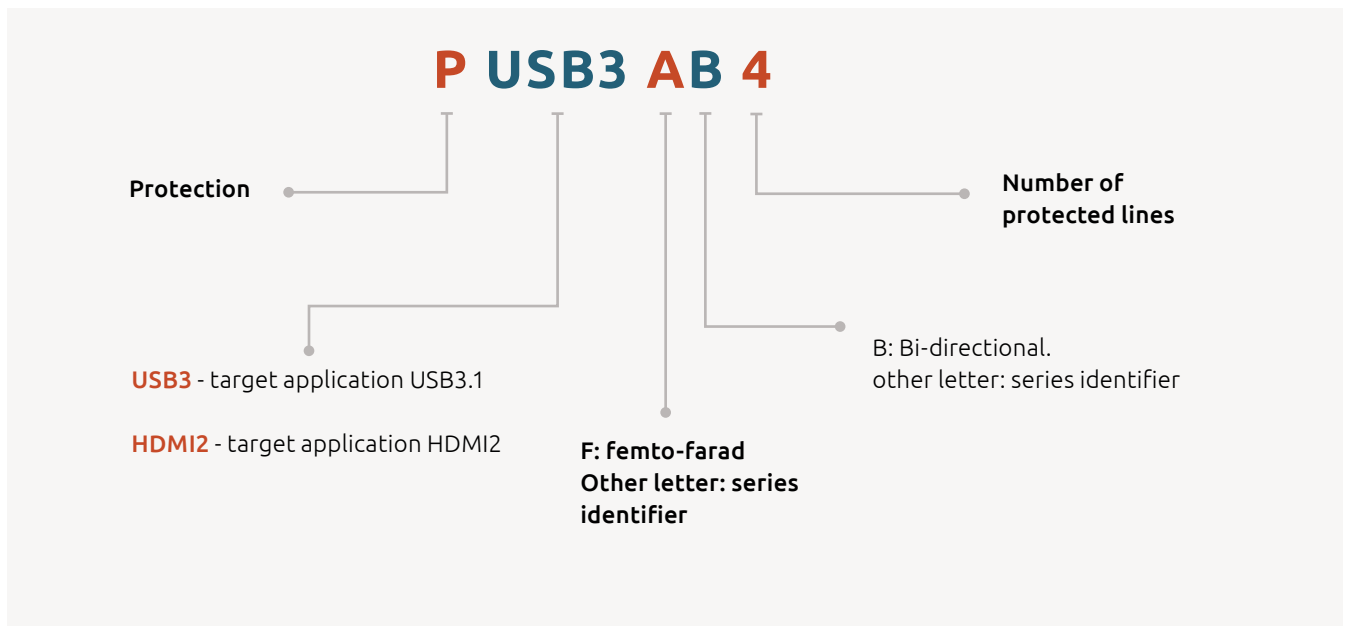
⁽¹⁾ 10 / 1000 µs according to IEC 61643-321

Nomenclatures

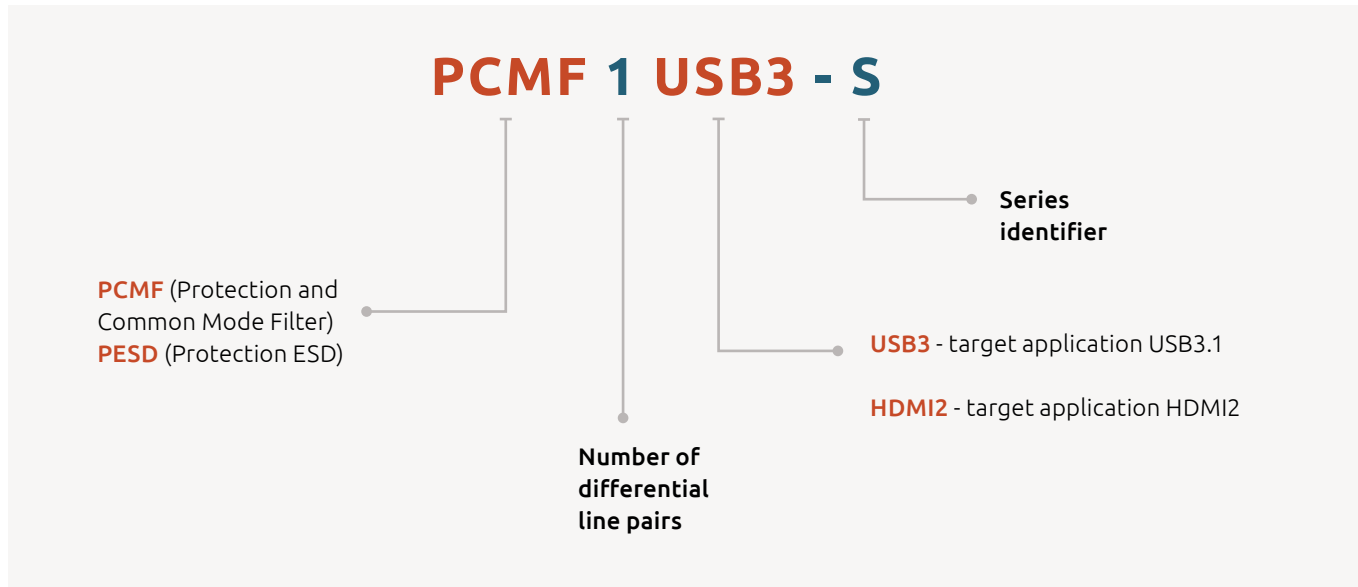
Nomenclature - protection devices



Nomenclature - application specific ESD protection



Nomenclature - common mode filter with ESD protection

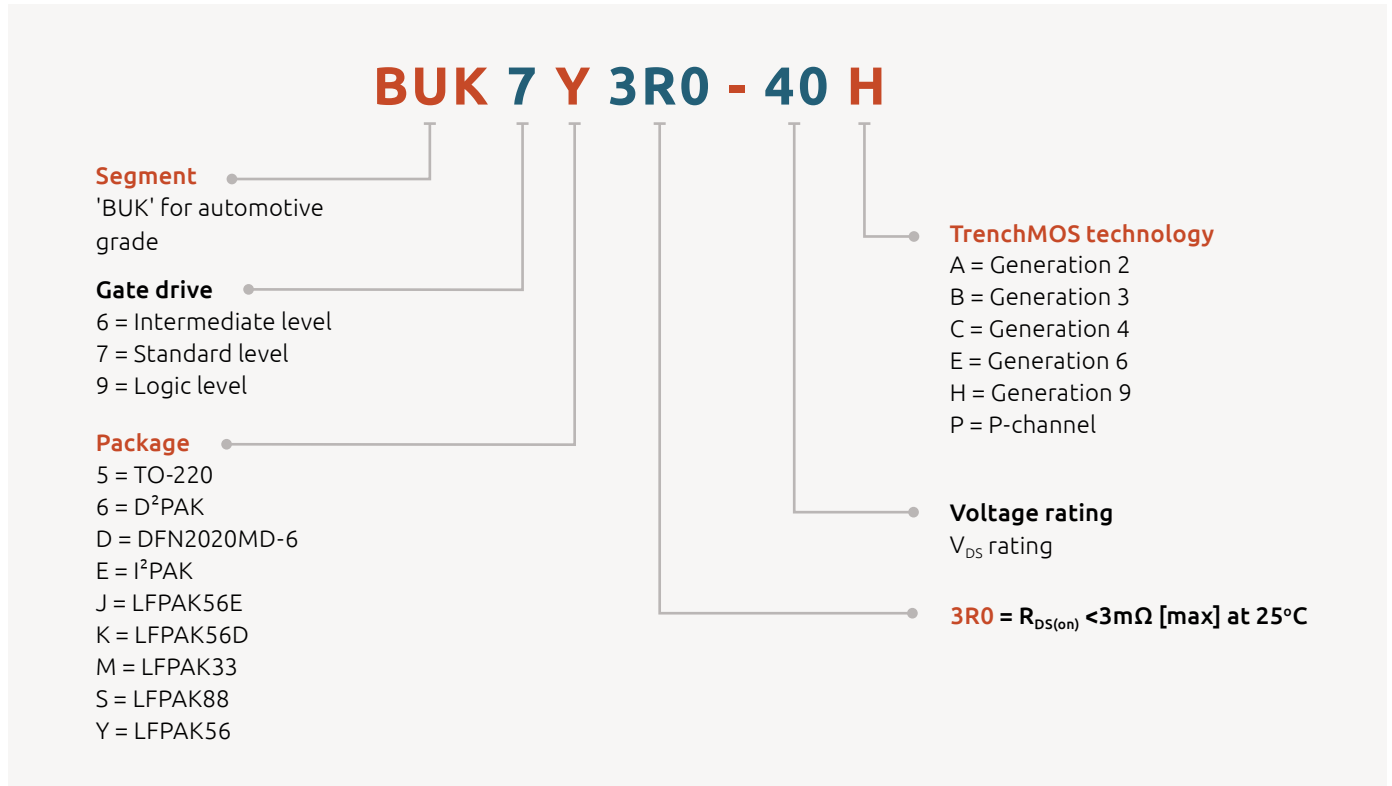


ESD protection, TVS, filtering and signal conditioning



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Automotive grade MOSFETs nomenclature









N-channel 30V 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)
D ² PAK (SOT404)	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
LFPAK56; Power-SO8 (SOT669)	BUK9Y07-30B	30	6	7	75	1.42
	BUK7Y07-30B	30	7		75	1.42
	BUK9Y11-30B	30	9	11	59	2
	BUK7Y10-30B	30	10		67	1.76
	BUK9Y22-30B	30	19	22	38	2.53
	BUK7Y20-30B	30	20		40	2.53
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 40V 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)	
TO-220AB (SOT78)		BUK751R8-40E	40	1.8		120	0.43
		BUK752R3-40E	40	2.3		120	0.51
		BUK753R1-40E	40	3.1		100	0.64
		BUK758R3-40E	40	7.4		75	1.56
LFPAK88 (SOT1235)		BUK750R7-40H	40	0.7			
		BUK750R9-40H	40	0.9			
		BUK751R0-40H	40	1		325	0.39
D ² PAK (SOT404)		BUK961R6-40E	40	1.4	1.6	120	0.43
		BUK761R6-40E	40	1.6		120	0.43
		BUK761R7-40E	40	1.6		120	0.46
		BUK762R0-40E	40	2		120	0.51
		BUK962R6-40E	40	2.4	2.8	100	0.57
		BUK762R6-40E	40	2.6		100	0.57
		BUK963R1-40E	40	2.7	3.1	100	0.64
		BUK762R9-40E	40	2.9		100	0.64
		BUK964R1-40E	40	3.5	4.1	75	0.82
		BUK764R0-40E	40	4		75	0.82
		BUK965R4-40E	40	4.4	5.4	75	1.09
		BUK765R3-40E	40	4.9		75	1.09
		BUK768R1-40E	40	7.2		75	1.56
		I ² PAK (SOT226)		BUK7E1R8-40E	40	1.8	
BUK7E1R9-40E	40			1.9		120	0.46
BUK7E2R3-40E	40			2.3		120	0.51
BUK7E3R1-40E	40			3.1		100	0.64
BUK7E8R3-40E	40			7.4		75	1.56
LFPAK56E (SOT1023)		BUK9J0R9-40H	40	0.9	1.2	220	0.3
		BUK7J1R0-40H	40	1		220	0.3
		BUK7J1R4-40H	40	1.4		120	0.38
LFPAK56; Power-SO8 (SOT669)		BUK9Y1R3-40H	40	1.3	1.8	120	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
		BUK7Y7R6-40E	40	7.6		79	1.58
		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 40V automotive power MOSFETs

Products in **bold red** are under development

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)	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
	BUK9K18-40E	40	16	20	30	3.96
	BUK7K18-40E	40	19		24	3.96
	BUK9K25-40E	40	24	29	18	4.68
	BUK7K25-40E	40	25			4.68
LFPAK33 (SOT1210)	BUK7M3R3-40H	40	3.3			
	BUK9M3R3-40H	40		3.3		
	BUK7M4R3-40H	40	4.3			
	BUK9M4R3-40H	40		4.3		
	BUK7M5R0-40H	40	5			
	BUK9M5R0-40H	40		5		
	BUK7M6R0-40H	40	6			
	BUK9M6R0-40H	40		6		
	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M6R7-40H	40	6.7			
	BUK9M6R7-40H	40		6.7		
	BUK7M8R0-40E	40	8		69	2
	BUK7M8R5-40H	40	8			
	BUK9M8R5-40H	40		8		
	BUK7M10-40E	40	10		56	2.43
	BUK7M12-40E	40	12		48	2.75
	BUK7M9R5-40H	40	9.5			
	BUK9M9R5-40H	40		9.5		
	BUK7M21-40E	40	21		33	3.4
	BUK7M11-40H	40	11			
	BUK9M11-40H	40		11		
	BUK7M45-40E	40	45		19	4.8
	BUK9M14-40E	40	11	14	44	2.75
	BUK9M24-40E	40	20	24	30	3.4
	BUK7M15-40H	40	15			
	BUK9M15-40H	40		15		
	BUK7M20-40H	40	20			
	BUK9M20-40H	40		20		
	BUK9M52-40E	40	40	52	18	4.8
	BUK9M7R2-40E	40	5.8	7.2	70	1.89
BUK9M9R1-40E	40	7.3	9.1	64	2	
BUK9M11-40E	40	9	11	53	2.43	






N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)	
TO-220AB (SOT78)		BUK953R5-60E	60	3.4	3.7	120	0.51
		BUK954R8-60E	60	4.5	4.9	100	0.64
D ² PAK (SOT404)		BUK7610-55AL	55	10		75	0.5
		BUK9620-55A	55	18	20	54	1.2
		BUK7620-55A	55	20		54	1.2
		BUK9624-55A	55	22	24	46	1.4
		BUK9628-55A	55	25	28	42	1.5
		BUK9635-55A	55	32	35	34	1.8
		BUK7635-55A	55	35		35	1.7
		BUK9675-55A	55	68	75	20	2.4
		BUK7675-55A	55	75		20	2.4
		BUK962R5-60E	60	2.3	2.5	120	0.43
		BUK762R4-60E	60	2.4		120	0.43
		BUK962R8-60E	60	2.5	2.8	120	0.46
		BUK762R6-60E	60	2.6		120	0.46
		BUK963R3-60E	60	3	3.3	120	0.51
		BUK763R1-60E	60	3.1		120	0.51
		BUK964R2-60E	60	3.9	4.2	100	0.57
		BUK763R9-60E	60	3.9		100	0.57
		BUK964R8-60E	60	4.4	4.8	100	0.64
		BUK764R4-60E	60	4.5		100	0.64
		BUK966R5-60E	60	5.9	6.5	75	0.82
		BUK766R0-60E	60	6		75	0.82
		BUK969R0-60E	60	8	9	75	1.09
		BUK768R3-60E	60	8.3		75	1.09
		BUK9614-60E	60	13	14	56	1.56
		BUK7613-60E	60	13		58	1.56
		I ² PAK (SOT226)		BUK7E2R6-60E	60	2.6	
BUK7E3R5-60E	60			3.5		120	0.51
BUK7E4R6-60E	60			4.6		100	0.64
BUK7E13-60E	60			13		58	1.56





N-channel 55V-60V 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
	BUK7Y7R2-60E	60	7.2		100	0.9
	BUK9Y8R7-60E	60	7.5	8.7	86	1.02
	BUK7Y8R7-60E	60	8.7		87	1.02
	BUK9Y15-60E	60	13	15	53	1.58
	BUK7Y15-60E	60	15		53	1.59
	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			2.21
	BUK7K13-60E	60	10		40	2.36
	BUK9K12-60E	60	11	12	35	2.21
	BUK9K13-60E	60	12	13	40	2.36
	BUK7K17-60E	60	14		30	2.84
	BUK9K17-60E	60	16	17	26	2.84
	BUK7K35-60E	60	30		21	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK7K52-60E	60	45		15	4.68
BUK9K52-60E	60	49	55	16	4.68	
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
	BUK9M19-60E	60	17	19	38	2.43
	BUK7M19-60E	60	19		36	2.75
	BUK9M24-60E	60	21	24	32	2.75
	BUK7M33-60E	60	33			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
	BUK7M67-60E	60	67		14	4.8
BUK9M85-60E	60	73	85	13	4.8	
SOT223	BUK9832-55A/CU	55	29	32		
	BUK9880-55A/CU	55	73	80		
	BUK7880-55A/CU	55	80			
	BUK98150-55A/CU	55	137	150		
	BUK78150-55A/CU	55	150			

N-channel 75V-80V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)	
TO-220AB (SOT78)	 BUK753R8-80E	80	4		120	0.43	
D ² PAK (SOT404)		BUK7613-75B	75	13		75	0.95
		BUK9616-75B	75	14	16	67	0.95
		BUK7623-75A	75	23		53	1.1
		BUK763R8-80E	80	3.8		120	0.43
		BUK964R2-80E	80	4	4.2	120	0.43
		BUK764R2-80E	80	4.2		120	0.46
		BUK964R7-80E	80	4.5	4.7	120	0.46
		BUK769R6-80E	80	9.6		75	0.82
LFPAK56; Power-SO8 (SOT669)		BUK9611-80E	80	10	11	75	0.82
		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)		BUK7K15-80E	80	15		23	2.21
		BUK7K17-80E	80	17		21	2.36
		BUK7K23-80E	80	23		17	2.21
		BUK9K20-80E	80	17	19	23	2.84
		BUK9K22-80E	80	19	22	21	2.36
LFPAK33 (SOT1210)		BUK9K30-80E	80	26	30	17	2.84
		BUK7M17-80E	80	17		43	1.89
		BUK9M23-80E	80	20	23	37	1.89
		BUK7M22-80E	80	22		37	2
		BUK7M27-80E	80	27		30	2.43
BUK9M28-80E	80	28	28	33	2		
BUK9M35-80E	80	35	35	26	2.43		

N-channel 100V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)	
TO-220AB (SOT78)		BUK755R4-100E	100	5.2		120	0.43
		BUK765R0-100E	100	5		120	0.43
D ² PAK (SOT404)		BUK965R8-100E	100	5.6	5.8	120	0.43
		BUK768R1-100E	100	8.1		100	0.57
		BUK969R3-100E	100	8.9	9.3	100	0.57
		BUK7613-100E	100	13		72	0.82
		BUK9615-100E	100	14	15	66	0.82
		BUK7631-100E	100	31		34	1.56
		BUK9637-100E	100	36	37	31	1.56
		BUK9660-100A	100	58	60	26	1.4
		BUK7660-100A	100	60		26	1.4
		BUK9675-100A	100	72	75	23	1.5
		BUK7675-100A	100	75		23	1.5
		BUK96180-100A	100	173	180	11	2.8
		I ² PAK (SOT226)		BUK7E5R2-100E	100	5.2	
BUK9Y12-100E	100			12	12	85	0.63
LFPAK56; Power-SO8 (SOT669)		BUK7Y12-100E	100	12		85	0.63
		BUK9Y15-100E	100	15	15	69	0.77
		BUK7Y15-100E	100	15		68	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

N-channel 100V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205)	BUK7K29-100E	100	25		29.5	2.21
	BUK9K29-100E	100	27	29	30	2.21
	BUK7K32-100E	100	28		29	2.36
	BUK9K32-100E	100	31	33	26	2.36
	BUK7K45-100E	100	38		21	2.84
	BUK9K45-100E	100	42	45	21	2.84
	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
LFPAK33 (SOT1210)	BUK9M34-100E	100	34	34	29	1.89
	BUK9M43-100E	100	43	44	26	1.88
	BUK9M120-100E	100	119	120	12	3.4
	BUK9M156-100E	100	150	156	9.3	4.17
SOT223	BUK98180-100A/CU	100	173	180	4.6	
	BUK9875-100A/CU	101	72	75	7	

P-channel 30V-60V automotive power MOSFETs

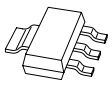
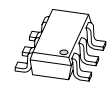




Types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56	BUK6Y12-30P	30	12	67	1.4
	BUK6Y20-30P	30	20	41	2.3
	BUK6Y15-40P	40	15	63	1.4
	BUK6Y25-40P	40	25	40	2.3
	BUK6Y32-60P	60	32	39	1.4
	BUK6Y57-60P	60	57	23	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 (m Ω) @ V_{GS} =					
							10 V	4.5 V	2.5 V	1.8 V		
N-channel	20	8	4.7	0.45	1	2	-	24	29	40		
			12.9	0.4	0.9	2	-	10	12	16		
		12	11.4	0.4	0.9	2	-	12	15	20		
			6.3	0.75	1.25	2	-	16	24	-		
	30	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	-		
		20	5.5	1	2.5	2	17	22	-	-		
			3.9	1	2.5	2	30	39	-	-		
			3.7	1	2.5	2	54	70	-	-		
	40	15	19	1.4	2.1	-	18	22	-	-		
			19	1.3	2.7	-	17	22	-	-		
			19	2.4	4	-	18	-	-	-		
		20	5	1.5	2.5	2	25	30	-	-		
			2.7	1	2.5	1	64	79	-	-		
			9	1	2.5	1	85	112	-	-		
	60	20	2.5	1	2.5	1	95	120	-	-		
			13	1.3	2.7	-	32	38	-	-		
			13	1.3	2.7	2	42	49	-	-		
			4	1.3	2.7	2	42	49	-	-		
			3.1	1.3	2.7	2	46	52	-	-		
			11	1.3	2.7	2	65	78	-	-		
			3	1.3	2.7	2	72	85	-	-		
			9	1.3	2.7	2	96	108	-	-		
			6	1.3	2.7	2	160	188	-	-		
			1.5	1.3	2.7	2	176	196	-	-		
	80	20	0.8	1.3	2.7	2	300	332	-	-		
			10	1.3	2.7	2	72	84	-	-		
			2.8	1.3	2.7	2	80	92	-	-		
			7	1.3	2.7	2	175	195	-	-		
			1.9	1.3	2.7	2	175	195	-	-		
	100	20	1.1	1.3	2.7	2	345	390	-	-		
			1.5	1.3	2.7	2	285	301	-	-		
			1.1	1.3	2.7	2	527	555	-	-		
	P-channel	12	12	11.8	0.47	0.9	-	-	15	17	21	
				5.6	0.45	0.95	2	-	27	38	50	
20		8	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	0.47	0.9	2	-	39	45	56		
			5.7	0.75	1.25	2	-	41	56	-		
			3.5	0.75	1.25	-	-	48	71	-		
			3.3	0.75	1.25	2	-	67	99	-		
			2.4	1	2.5	2	-	97	147	-		
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	-	-		

Types in **bold** represent new products

SOT223	SOT457 (SC-74)	SOT23	DFN2020MD-6 (SOT1220)	DFN2020D-6 (SOT1118D)	DFN1010D-3 (SOT1215)
					
6.5 x 3.5 x 1.65	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	1.1 x 1.0 x 0.37
1700	600	250	1250	1250	1000
		PMV28UNEA	PMPB10XNEA PMPB12UNEA PMPB20XNEA PMPB13XNEA PMPB29XNEA	PMDPB56XNEA	
	PMN25ENEA	PMV25ENEA PMV50ENEA PMV100ENEA	BUK9D23-40E BUK6D23-40E BUK7D25-40E		
	PMN20ENA				
	PMN30ENEA	PMV30ENEA PMV65ENEA	BUK6D120-40E		
	PMN40ENA	PMV130ENEA	BUK6D43-60E BUK6D56-60E PMPB55ENEA		
	PMN55ENEA	PMV55ENEA	BUK6D88-60E PMPB85ENEA BUK6D125-60E BUK6D210-60E		
	PMN120ENEA	PMV120ENEA	BUK6D98-80E PMPB95ENEA BUK6D230-80E PMPB215ENEA		
	PMN230ENEA	PMV230ENEA PMV450ENEA			PMXB360ENEA
PMT280ENEA PMT560ENEA	PMN280ENEA	PMV280ENEA	BUK6D335-100E PMPB15XPA		
		PMV27UPEA NX2301P BSH205G2			
		PMV30XPEA	PMPB20XPEA PMPB29XPEA PMPB43XPEA		
	PMN42XPEA	PMV48XPA PMV65XPEA PMV100XPEA			
		PMV50EPEA PMV250EPEA	PMPB27EPA PMPB50EPEA BUK6D43-40P BUK6D120-60P		

Automotive MOSFETs


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 (m Ω) @ 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	
			0.36	0.9	1.5	-	900	1000	-	-	
	60	20	0.36	0.48	1.6	1.5	1000	1100	1400	-	
			0.3	1	2.5	2	1000	1300	-	-	
			0.3	1	2.5	3	1100	1300	-	-	
			0.2	0.8	1.5	yes	2700	3000	4000	-	
P	30	8	0.23	0.6	1.1	2	-	2800	5300	-	
	50	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 (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	30	12	4	0.75	1.25	2	-	55	72	-	
N	20	8	0.73	0.5	0.95	2	-	290	420	600	
P			0.5	0.5	1.3	2	-	670	1200	1800	

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	



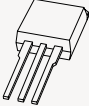

SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1006 (SOT883)
			
2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.5
250	300	200	250
NX3008NBK	NX3008NBKS	NX3008NBKW	
BSS138P	BSS138PS	BSS138PW	
BSS138BK	BSS138BKS	BSS138BKW	
2N7002BK	2N7002BKS	2N7002BKW	2N7002BKM
2N7002CK			
BSS138AKA			
NX3008PBK	NX3008PBKS	NX3008PBKW	
BSS84AK	BSS84AKS	BSS84AKW	BSS84AKM

SOT363 (SC-88)	DFN2020D-6 (SOT1118D)
	
2.0 x 1.25 x 0.95	2.0 x 2.0 x 0.65
300	1250
	PMDPB56XNEA
PMGD290UCEA	

t_{on} typ (ns)	t_{off} typ (ns)	QG typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ $V_{GS} =$					
				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	-	-	-

N-channel 25V-30V Power MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN1R1-30PL	30	1.3	1.6	120	118
	PSMN1R6-30PL	30	1.7	2.1	100	101
	PSMN1R8-30PL	30	1.8	2.3	100	83
	PSMN2R0-30PL	30	2.1	2.8	100	55
	PSMN2R7-30PL	30	2.7	3.6	100	32
	PSMN3R4-30PL	30	3.4	4.1	100	31
	PSMN4R3-30PL	30	4.3	6.2	100	19
	PSMN017-30PL	30	17	23	32	5.1
	PSMN022-30PL	30	22	34	30	4.4
D ² PAK (SOT404) 	PSMNR90-30BL	30	1	1.4	120	118
	PSMN1R5-30BLE	30	1.5	1.85	120	108
	PSMN1R8-30BL	30	1.8	2.1	100	83
	PSMN1R6-30BL	30	1.9	2.2	100	101
	PSMN2R0-30BL	30	2.1	2.9	100	55
	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
	PSMN017-30BL	30	17	23	32	5.1
	PSMN022-30BL	30	22	30	30	4.4
I ² PAK (SOT226) 	PSMN1R1-30EL	30	1.3	1.6	120	118
	PSMN017-30EL	30	17	23	32	5.1
LFPAK56 (Power-SO8) 	PSMNR51-25YLH	25	0.51	0.75	300	52
	PSMNR60-25YLH	25	0.6	0.89	300	40.9
	PSMN0R7-25YLD	25	0.74	0.92	300	50.9
	PSMN0R9-25YLD	25	0.86	1.2	300	41.5
	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
	PSMN1R2-25YL	25	1.2	1.9	100	50.6
	PSMN1R2-25YLC	25	1.3	1.7	100	31
	PSMN1R5-25YL	25	1.5	2.2	100	36
	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

N-channel 25V-30V Power MOSFETs

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

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56 (Power-SO8)	PSMNR58-30YLH	30	0.66	0.86	300	48
	PSMNR70-30YLH	30	0.7	0.98	300	40
	PSMN0R9-30YLD	30	0.87	1.1	300	51
	PSMN1R0-30YLD	30	1.02	1.3	300	38.2
	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
	PSMN1R3-30YL	30	1.3	2	100	46.6
	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
	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
	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
	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	
PSMN013-30YLC	30	13	17	32	4	
PSMN011-30YLC	30	11.6	15	37	4.9	
PSMN3R2-30YLC	30	3.5	4.6	100	14.2	
PSMN4R5-30YLC	30	4.8	6.1	84	9.6	
LFPAK56-UL2595 (SOT1023A)	PSMN0R9-30ULD	30	0.87	1.09	300	

N-channel 25V-30V Power MOSFETs

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




Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK33 (SOT1210)	PSMN1R5-25MLH	25	1			
	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	100	16
	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
	PSMN6R5-30MLD	30	6.5	8.6	65	6.4
	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

N-channel 40V-60V Power MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78)	PSMN1R5-40PS	40	1.6		150	136
	PSMN1R9-40PL	40	1.7	1.9	150	230
	PSMN2R2-40PS	40	2.1		100	110
	PSMN2R1-40PL	40	2.2	2.6	150	168.9
	PSMN2R8-40PS	40	2.8		100	71
	PSMN4R5-40PS	40	4.6		100	35
	PSMN8R0-40PS	40	7.6		77	17
	PSMN2R0-60PSR	60	2		120	137
	PSMN2R0-60PS	60	2.2		120	137
	PSMN2R5-60PL	60	2.6	3.1	150	223
	PSMN2R6-60PS	60	2.6		150	140
	PSMN3R0-60PS	60	3		100	130
	PSMN3R3-60PL	60	3.4	3.8	130	175
	PSMN4R2-60PL	60	3.9	4.3	130	151
	PSMN3R9-60PS	60	3.9		130	103
	PSMN4R6-60PS	60	4.6		100	70.8
	PSMN7R6-60PS	60	7.8		92	38.7
PSMN015-60PS	60	15		50	20.9	
LFPAK88 (SOT1235)	PSMNR70-40SSH	40	0.7			
	PSMNR90-40SSH	40	0.9			
	PSMN1R0-40SSH	40	1			

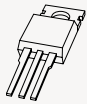
N-channel 40V-60V Power MOSFETs

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

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)	
D ² PAK (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
I ² PAK (SOT226)		PSMN1R5-40ES	40	1.6		120	136
		PSMN2R0-60ES	60	2.2		120	137
		PSMN3R0-60ES	60	3		100	130
LFPAK56 (Power-SO8)		PSMNR90-40YLH	40	0.9			
		PSMN1R0-40YSH	40	1			
		PSMN1R0-40YLD	40	1.1	1.4	280	127
		PSMN1R4-40YLD	40	1.4	1.9	240	96
		PSMN1R5-40YSD	40	1.5			
		PSMN1R7-40YLD	40	1.7			
		PSMN1R8-40YLC	40	1.8	2.1	100	96
		PSMN1R9-40YSD	40	1.9			
		PSMN2R0-40YLD	40	2			
		PSMN2R2-40YSD	40	2.2			
		PSMN2R5-40YLD	40	2.5			
		PSMN2R6-40YS	40	2.8		100	63
		PSMN2R8-40YSD	40	2.8			
		PSMN3R2-40YLD	40	3.2			
		PSMN3R3-40YS	40	3.3		100	49
		PSMN3R5-40YLD	40	3.5			
		PSMN4R0-40YS	40	4.2		100	38
		PSMN5R8-40YS	40	5.7		90	28.8
		PSMN8R3-40YS	40	8.6		70	20
		PSMN014-40YS	40	14		46	12
		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		
LFPAK56-UL2595 (SOT1023A)		PSMN1R0-40ULD	40	1.1	1.4		
LFPAK33 (SOT1210)		PSMN011-60ML	60	11	13	61	37.2
		PSMN011-60MS	60	11		61	23


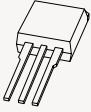
N-channel 75V-200V Power MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(total)}$ [typ] (nC)
TO-220 (SOT78)	PSMN3R3-80PS	80	3.3		120	139
	PSMN3R5-80PS	80	3.5		120	139
	PSMN4R4-80PS	80	4.1		100	112
	PSMN4R3-80PS	80	4.3		120	111
	PSMN5R0-80PS	80	4.7		100	87
	PSMN6R5-80PS	80	6.9		100	71
	PSMN8R7-80PS	80	8.7		90	52
	PSMN012-80PS	80	11		74	36
	PSMN017-80PS	80	17		50	26
	PSMN4R3-100PS	100	4.3		120	170
	PSMN4R8-100PSE	100	4.8		120	196
	PSMN5R0-100PS	100	5		120	170
	PSMN5R6-100PS	100	5.6		100	141
	PSMN7R0-100PS	100	6.8		100	125
	PSMN7R8-100PSE	100	7.8		100	128
	PSMN8R5-100PS	100	8.5		100	111
	PSMN8R5-100PSF	100	8.5		98	44.5
	PSMN9R5-100PS	100	9.6		98	45
	PSMN013-100PS	100	13		68	59
	PSMN016-100PS	100	16		57	49
	PSMN018-100PSF	100	18		57	21.3
	PSMN027-100PS	100	27		53	21
	PSMN034-100PS	100	35		32	23.8
	PSMN015-110P	110	15		75	90
	PHP27NQ11T	110	50		27.6	30
	PHP23NQ11T	110	70		23	22
	PHP18NQ11T	110	90		18	21
	PSMN6R3-120PS	120	6.7		70	207.1
	PSMN7R8-120PS	120	7.9		70	167
	PSMN030-150P	150	30		55.5	98
	PHP28NQ15T	150	65		28.5	24
	PSMN057-200P	200	57		39	96
PHP33NQ20T	200	77		32.7	32.2	
PHP20NQ20T	200	130		20	65	





N-channel 75V-200V Power MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (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
	PSMN050-80BS	80	46		22	11
	PSMN3R8-100BS	100	3.9		120	170
	PSMN3R7-100BSE	100	4		120	170
	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
	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
PHB45NQ15T	150	42		45.1	32	
PSMN057-200B	200	57		39	96	
PHB33NQ20T	200	77		32.7	32.2	
I ² PAK (SOT226) 	PSMN3R3-80ES	80	3.3		120	139
	PSMN3R5-80ES	80	3.5		120	139
	PSMN4R3-80ES	80	4.3		120	111
	PSMN4R3-100ES	100	4.3		120	170
	PSMN5R0-100ES	100	5		120	170
	PSMN7R0-100ES	100	6.8		100	125
	PSMN8R5-100ES	100	8.5		100	111
	PSMN8R5-100ESF	100	8.5		97	45
	PSMN018-100ESF	100	18		53	21
	PSMN6R3-120ES	120	6.7		70	207.1
	PSMN7R8-120ES	120	7.9		70	167


N-channel 75V-200V Power MOSFETs

Types in **bold red** are in development

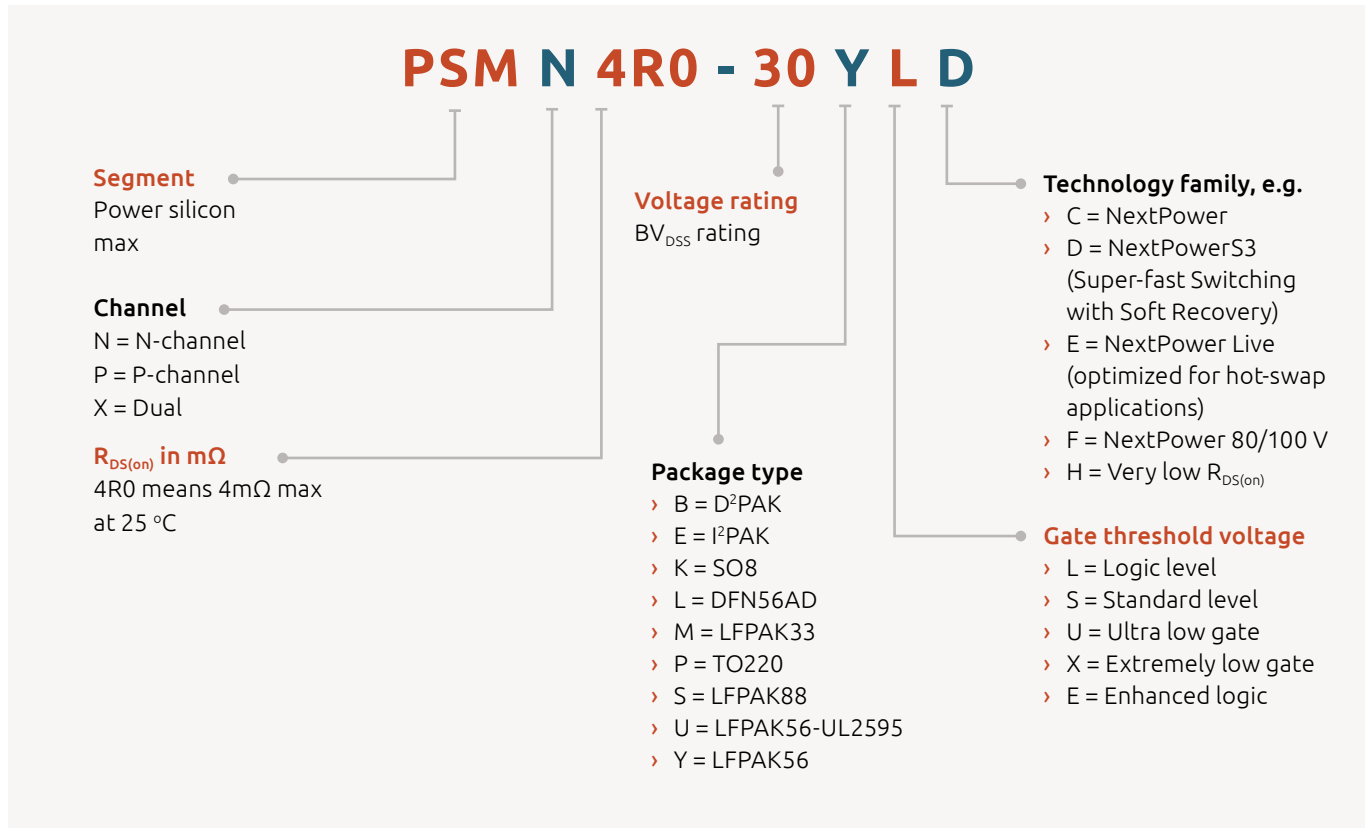
Package	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ V _{GS} = 10 V (mΩ)	R _{DS(on)} [max] @ V _{GS} = 4.5 V or 5 V (mΩ)	I _D [max] (A)	Q _{G(tot)} [typ] (nC)
LFPAK56 (Power-SO8) 	PSMN8R0-80YL	80	8	8.5	100	104
	PSMN8R2-80YS	80	8.5		82	55
	PSMN010-80YL	80	10	11	84	84.7
	PSMN011-80YS	80	11		67	45
	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
	PSMN3R9-100YSF	100	4			
	PSMN5R6-100YSF	100	5.6		158	63
	PSMN6R9-100YSF	100	6.9		128	51
	PSMN8R7-100YSF	100	8.7		100	39
	PSMN011-100YSF	100	10.6			
	PSMN012-100YL	100	12	12	85	118
	PSMN012-100YS	100	12		60	64
	PSMN013-100YSE	100	13		82	75
	PSMN015-100YL	100	15	15	69	86.3
	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	
LFPAK33 (SOT1210) 	PSMN040-100MSE	100	37		30	30
	PSMN075-100MSE	100	71		18	16.4
SOT873	PML260SN	200	294		8.8	13.3
	PML340SN	220	386		7.3	13.2

P-channel Power MOSFETs

Types in **bold** represent new products



Package	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ V _{GS} = 10 V (mΩ)	I _D [max] (A)	Q _{G(tot)} [typ] (nC)
LFPAK56 	PSMP012-30YE	30	12	67	52
	PSMP020-30YE	30	20	41	24
	PSMP015-40YE	40	15	63	43.5
	PSMP025-40YE	40	25	39	28
	PSMP032-60YE	60	32	39	46
	PSMP057-60YE	60	57	23	21

Power MOSFETs nomenclature




Small-signal MOSFETs

Small-signal MOSFETs in DFN1006 and DFN1006B packages



Package											DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)					
																	
Size (mm)											1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37					
Ptot (mW)											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	
			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
			0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210	PMZ600UNE	PMZB600UNE
	30	8	1.5	0.45	0.95	5	17	1.6	2	-	210	240	270	300	-	PMZ200UNE	PMZB200UNE
			1	0.45	0.95	4	12	0.8	2	-	390	460	30	610	-	PMZ390UNE	PMZB390UNE
			0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-	PMZ550UNE	PMZB550UNE
	60	20	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	-	-	-	-	NX7002BKM	NX7002BKMB
P-channel	20	8	1.4	0.45	0.95	4	26	1.3	1.8	-	330	420	520	-	-	PMZ350UPE	PMZB350UPE
			0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500	PMZ950UPE	PMZB950UPE
	30	8	1	0.45	0.95	2.9	22	1.45	2	-	430	470	750	950	-	PMZ320UPE	PMZB320UPE
			0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-	PMZ1200UPE	PMZB1200UPE
	50	20	0.23	1.1	2.1	13	48	0.26	1	4500	5700	-	-	-	-	BSS84AKM	BSS84AKMB

Small-signal MOSFETs in DFN0606




Types in **bold** represent new products

Package											DFN0606-3 (SOT8001)						
																	
Size (mm)											0.6 x 0.6 x 0.37						
Ptot (mW)											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		0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210	PMH600UNE	
	30	8		0.45	0.95	4	12	0.6	2	-	550	660	770	890	-	PMH550UNE	
	60	20		1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-	NX7002BKH	
P-channel	20	8		0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500	PMH950UPE	
	30	10		0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-	PMH1200UPE	

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 _c 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	8	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	20	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	8	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	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMDXB600UNE
		30	8	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	-	-	-	-		NX7002BKXB
	P-ch	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		PMDXB950UPE
		30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		PMDXB1200UPE
Complementary	N	20	8	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		
	P	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		PMCXB900UE
	N	30	8	0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		
	P	30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		PMCXB1000UE



Small-signal low-leakage MOSFETs

Package													DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010B-6 (SOT1216)		
																	
Size (mm)													1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37		
P _{tot} (mW)													250	250	350		
ConFig.	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	I _{DSS} max (nA)	I _{GSS} max (nA)	ESD Protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =							
										4.5 V	2.5 V	1.8 V	1.5 V	1.2 V			
Single	N	20	8	0.6	0.45	0.95	25	50	1	470	620	845	1125	2210	PMZ600UNEL	PMZB600UNEL	
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500	PMZ950UPEL	PMZB950UPEL	
Dual	N	20	8	0.6	0.45	0.95	25	50	1	470	620	845	1125	2210			PMDXB600UNEL
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500			PMDXB950UPEL
Compl.	N	20	8	0.6	0.45	0.95	25	50	1	470	620	845	1125	2210			
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500			PMCXB900UEL



MOSFETs

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

Types in **bold** represent new products

Package															DFN2020MD-6 (SOT1220)	DFN2020-6 (SOT1118)	
																	
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	11.3	0.4	1	9	26	8.8	1	-	14	17	21	PMPB12UNE		
				12.9	0.4	0.9	13	54	23	2.2	-	10	12	16	PMPB10XNE		
			12	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		
		30	12	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		
			20	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		
	60	20	5.1	1	2.5	3	15	3.5	2	54	70	-	-	PMPB100ENE			
			4	1.3	2.7	4.5	13.5	7.5	2	42	48	-	-	PMPB55ENE			
		80	3	1.3	2.7	4	10.5	6.2	2	72	85	-	-	PMPB85ENE			
			2.8	1.3	2.7	5	15	9.9	2	80	92	-	-	PMPB95ENE			
			1.9	1.3	2.7	3.5	9.5	4.8	2	175	195	-	-	PMPB215ENE			
	P-channel	20	12	8	12.7	0.45	0.9	6	64	22	-	-	14	19	24	PMPB14XP	
				10.3	0.47	0.9	16	43	28.8	-	-	19	21	27	PMPB19XP		
			12	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	20	5	0.47	0.9	9	57	15.6	1	-	39	45	56	PMPB43XPE		
12				5	0.47	0.9	15	28	14	-	47	54	74	PMPB47XP			
Dual		Nch	20	12	5.3	0.4	0.9	4	40	14.4	-	-	32	40	60		PMDPB30XN
					3.1	0.75	1.25	9	19	2.9	2	-	55	72	-	PMDPB56XNEA	
			30	12	3.1	0.5	1.5	6	18	1.65	1.8	-	95	130	-	PMDPB95XNE2	
		4.5	0.45		0.95	7	41	6.3	2	-	58	74	97	PMDPB58UPE			
	P-channel	20	8	3.7	0.45	0.95	6	47	5.4	2	-	82	107	142		PMDPB85UPE	
				4.5	0.47	0.9	4	135	16.5	-	-	55	75	110		PMDPB55XP	
12			4.2	0.75	1.25	7	33	5	2	-	66	98			PMDPB70XPE		
		3.7	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		
MOSFET-Schottky		P-channel	20	12	3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMFPB8032XP
Pre-biased NPN	P	30	12	3.4	0.45	1	3	112	5.2	-	-	85	105	-		PMC85XP	
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 WLCSP4 and WLCSP6 packages

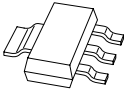



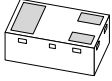
Package															WLCSP4	WLCSP6
																
Size (mm)															0.78 x 0.78 x 0.35	1.48 x 0.98 x 0.35
P _{tot} (mW)															1300	1300
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
											4.5 V	2.5 V	1.8 V	1.5 V		
	N	12	8	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	
	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
		20	8	7.3	0.4	0.9	6	105	19	2	22	28	38	-		PMCM6501UPE
	Common drain	N	20	8	4.1	0.4	0.9	6	39	9	2	40	50	63	-	

Small-signal MOSFETs

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	4.7	0.45	1	8.2	39.5	6.2	2	-	24	29	40	
		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	
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	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	
	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	30	39	-	-	
		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	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	20	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	-	-	
		1.1	1.3	2.7	5.7	10.2	2.9	1	527	555	-	-	

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	DFN1006 (SOT883)	DFN1006B (SOT883B)
						
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
	1700	600	250	200	250	250
		PMN28UNE	PMV28UNEA			
			PMV65UNE	PMF63UNE		
					PMZ130UNE	
						PMZB150UNE
					PMZ290UNE2	PMZB290UNE2
					PMZ600UNE	PMZB600UNE
			PMV20XNEA			
			PMV16XN			
		PMN16XNE				
			PMV30UN2			
		PMN30UNE				
					PMZ200UNE	PMZB200UNE
					PMZ390UNE	PMZB390UNE
					PMZ550UNE	PMZB550UNE
			NX3008NBK	NX3008NBKW		
			PMV20XNE			
		PMN30UN				
			PMV40UN2			
				PMF250XNE		
			PMV20EN			
		PMN25ENE	PMV25ENEA			
			PMV50ENEA			
			PMV37EN2			
		PMN40ENE	PMV42ENE			
			PMV45EN2			
			PMV90ENE			
			NX3020NAK	NX3020NAKW		
			PMV65ENEA			
			PMV130ENEA			
			BSH111BK			
		PMN55ENE	PMV55ENEA			
		PMN120ENE	PMV120ENEA			
		PMN230ENE	PMV230ENEA			
			PMV450ENEA			
			NX138AK			
			NX138BK	NX138BKW		
			BSN20BK			
			NX7002AK	NX7002AKW		
			NX7002BK	NX7002BKW	NX7002BKM	NX7002BKMB
	PMT280ENEA	PMN280ENEA	PMV280ENEA			
	PMT560ENEA					

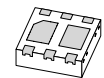
Small-signal MOSFETs

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 _C 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	1.1	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	
		1.4	0.45	0.95	9	35	1.3	1.8	-	330	420	520	
	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700		
	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		
	5.7	0.75	1.25	44	60	11.5	2	-	41	56	-		
	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	-		
	4.1	0.75	1.25	20	57	5.2	2	-	70	101	-		
	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	-			
30	8	1	0.45	0.95	2.9	22	1.45	2	-	400	480	600	
		0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	
		0.23	0.6	1.1	49	103	0.55	2	-	2800	5300	-	
	20	5.3	1	3	6	36	12.8	2	35	49	-	-	
4.4	1	3	5	19	6.5	2	60	96	-	-	-		
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	-	-	
70	20	2.4	1	3	6	42	10.6	2	130	150	-	-	

Small-signal MOSFET-Schottky combination

Package													DFN2020-6 (SOT1118)		
Size (mm)													2.0 x 2.0 x 0.65		
P _{tot} (mW)													1250		
Configuration	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 _C typ (nC)	I _F (A)	V _R (V)	V _F typ. (mV)	R _{DS(on)} typ (mΩ) @ V _{GS} =			
												4.5 V	2.5 V	1.8 V	
Single + Schottky	20	8	3.7	0.4	1	20	170	5.7	2	30	455	80	95	120	PMFPB8040XP



Types in **bold** represent new products




SOT223	SOT457 (SC-74)	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
						
6.5 x 3.5 x 1.65	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	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
1700	600	250	300	200	250	250
		PMV27UPE				
		PMV33UPE				
		PMV32UP				
		PMV50UPE				
		NX2301P				
		PMV160UP				
		BSH205G2				
					PMZ350UPE	PMZB350UPE
					PMZ950UPE	PMZB950UPE
	PMN30XPE	PMV30XPEA				
	PMN30XP					
	PMN48XP	PMV48XP				
		PMV50XP				
	PMN52XP					
		PMV65XP				
		PMV65XPE				
	PMN70XPE					
	PMN70XP					
		PMV75UP				
			PMG85XP			
		PMV100XPEA				
				PMF170XP		
					PMZ320UPE	PMZB320UPE
					PMZ1200UPE	PMZB1200UPE
		NX3008PBK		NX3008PBKW		
	PMN50EPE	PMV35EPE				
	PMN70EPE					
		PMV250EPEA				
		BSS84AK		BSS84AKW	BSS84AKM	BSS84AKMB
PMT200EPE						




Small-signal MOSFETs

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 _C typ (nC)	ESD protection (kV)	
N-channel	20	8	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	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	
			0.5	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

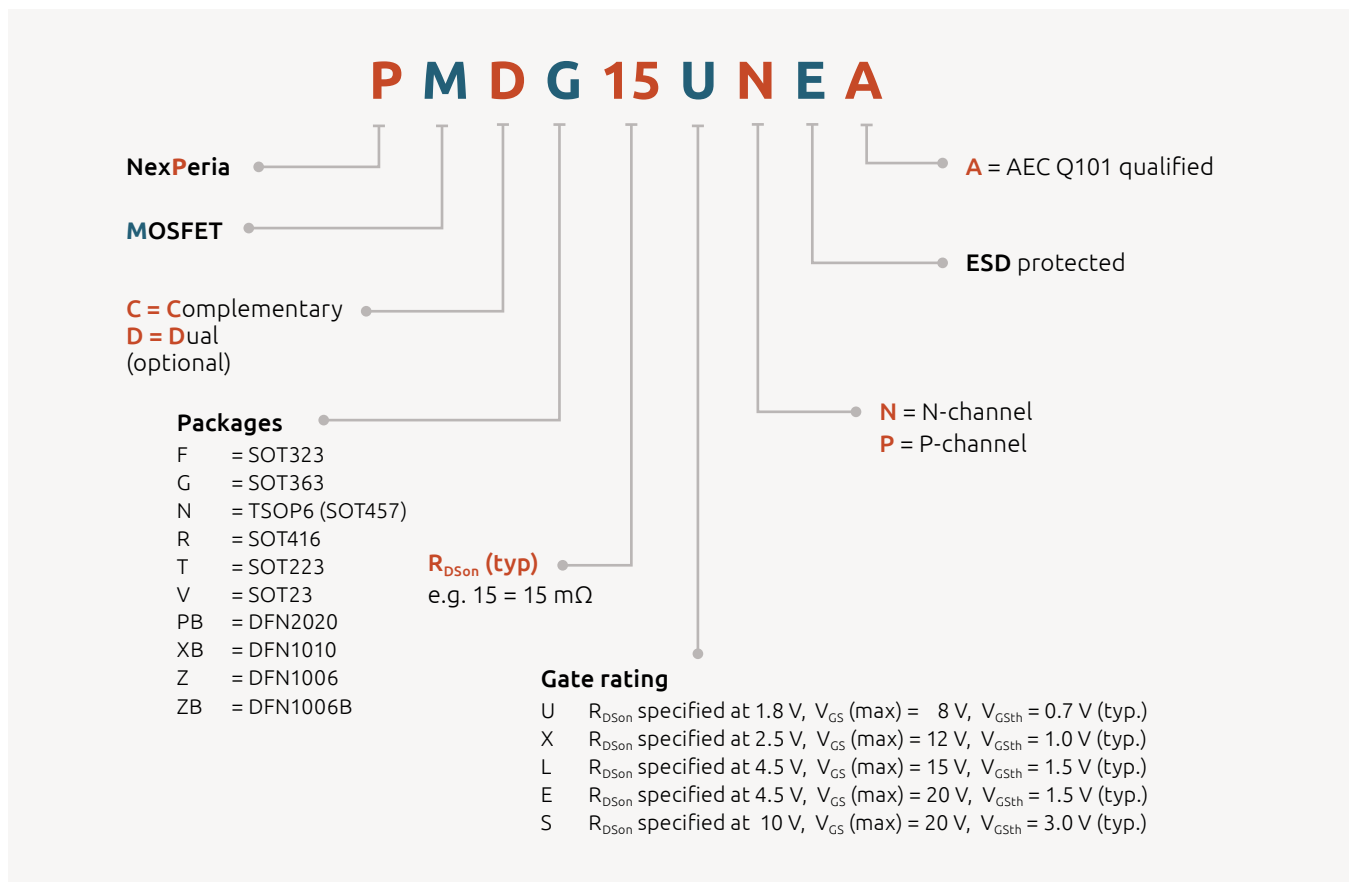
Package	Type	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	NX3008CBKS	N	30	8	0.35	0.6	1.1	
		P	30	8	0.2	0.6	1.1	
	NX6020CAKS	N	60	20	0.17	1.1	2.1	
		P	50	20	0.16	1.1	2.1	
 DFN1010B-6 (1.1 x 1.0 x 0.37)	PMCXB900UE	N	20	8	0.6	0.45	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 (m Ω) @ $V_{GS} =$					
					10 V	4.5 V	2.5 V	1.8 V		
	-	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					
	2800	3500	4500	-	NX138AKS					
	2100	2200	2600	-	NX138BKS					
	3000	3700	-	-	NX7002AKS					
	2200	2500	-	-	NX7002BKS				NX7002BKXB	
	-	58	74	97					PMDPB58UPE	
	-	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					

Types in **bold** represent new products

	t_{on} typ (ns)	t_{off} typ (ns)	Q_c typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ $V_{GS} =$					
					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



AIRBAG

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Q100 Standard logic functions and packages

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)	SOT137-1 (D)	SOT355-1 (PW)	SOT1815-1 (BQ)
74HC4051-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4051-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	225	20	-40~125				•	•	•			
74HC4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4052-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	200	20	-40~125				•	•	•			
74HC4053-Q100	Triple single-pole, double-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4053-Q100	Triple single-pole, double-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	200	20	-40~125				•	•	•			
74HC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	2.0 - 10.0	105	23	-40~125	•	•	•						
74HCT4066-Q100	Quad single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125	•	•	•						
74HC4067-Q100	Single-pole, 16-throw analog switch	SP16T-Z	2.0 - 10.0	200	25	-40~125							•	•	•
74HCT4067-Q100	Single-pole, 16-throw analog switch; TTL-enabled	SP16T-Z	4.5 - 5.5	225	25	-40~125							•	•	•
74HC4851-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	220	-	-40~125				•	•	•			
74HCT4851-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	240	-	-40~125				•	•	•			
74HC4852-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	220	-	-40~125				•	•	•			
74HCT4852-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	240	-	-40~125				•	•	•			
74LV4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	1.0 - 6.0	125	15	-40~125				•	•				
74LV4053-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	1.0 - 6.0	150	30	-40~125				•	•	•			
74LVC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125	•	•	•						
HEF4051B-Q100	Single-pole, octal-throw analog switch	SP8T-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4052B-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4053B-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4066B-Q100	Quad single-pole, single-throw analog switch	SPST-NO	3.0 - 15	175	20	-40~85	•								
HEF4067B-Q100	Single-pole, 16-throw analog switch	SP16T-Z	3.0 - 15	175	20	-40~85							•		

Buffers/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)
74AHC04-Q100	Hex inverter	2.0 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC125-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74AHT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC240-Q100	Octal inverter/line driver (3-state)	2.0 - 5.5	± 8	2.8	-40~125						•	•	•	
74AHT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125						•	•	•	
74AHC244-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHCU04-Q100	Hex inverter; unbuffered	2.0 - 5.5	± 8	2.4	-40~125	•	•	•						
74ALVC125-Q100	Quad buffer/line driver (3-state)	1.65 - 3.6	± 24	1.8	-40~85	•	•	•						
74ALVC541-Q100	Octal buffer/line driver (3-state)	1.65 - 3.6	± 24	2.3	-40~85						•	•	•	
74HC05-Q100	Hex inverter; open-drain	2.0 - 6.0	5.2	11	-40~125	•	•	•						
74HC04-Q100	Hex inverter	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•						
74HCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 4.0	8.0	-40~125	•	•	•						
74HC125-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125	•	•							
74HC126-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125	•	•							
74HC240-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	9.0	-40~125						•	•	•	
74HC244-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•	•	•	
74HC365-Q100	Hex buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125				•	•				
74HCT365-Q100	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HC366-Q100	Hex inverter/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125				•	•				
74HCT366-Q100	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HCS40-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•			
74HCT540-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•			
74HCS41-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125						•	•		

Buffers/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)
74HCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125						•	•		
74HCU04-Q100	Hex inverter; unbuffered	2.0 - 6.0	± 5.2	5.0	-40~125	•	•	•						
74LV244-Q100	Octal buffer/line driver (3-state)	1.0 - 5.5	± 16	8.0	-40~125						•	•		
74LVC04A-Q100	Hex inverter	1.65 - 5.5	± 24	2.0	-40~125	•	•	•						
74LVC06A-Q100	Hex inverter; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•	•						
74LVC07A-Q100	Hex buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•	•						
74LVC125A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40~125	•	•	•						
74LVC126A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40~125	•	•	•						
74LVC541A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	3.3	-40~125						•	•	•	
74LVC16240A-Q100	16-bit inverter/line driver (3-state)	1.2 - 3.6	± 24	2.7	-40~125									•
74LVC244A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	2.8	-40~125						•	•	•	
74LVCH244A-Q100	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	2.8	-40~125						•	•	•	
74LVC16244A-Q100	16-bit buffer/line driver (3-state)	1.2 - 3.6	± 24	3.0	-40~125									•
74LVCH16244A-Q100	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	3.0	-40~125									•
74LVCU04A-Q100	Hex inverter; unbuffered	1.2 - 3.6	± 24	2.0	-40~125	•	•							
74LVT04-Q100	Hex inverter	2.7 - 3.6	-20 / +32	2.6	-40~85	•	•							
74LVT244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74LVTH244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74VHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74VHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74VHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74VHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
HEF4049B-Q100	Hex inverter/line driver	3.0 - 15.0	-3 / +20	20	-40~85				•					
HEF4050B-Q100	Hex buffer/line driver	3.0 - 15.0	-3 / +20	40	-40~85				•					
HEF4069UB-Q100	Hex inverter; unbuffered	3.0 - 15.0	± 3.4	15	-40~85	•	•							

Counters/Frequency dividers

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{FHD} (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	-40~125				•	•	
74HC163-Q100	Presettable synchronous 4-bit binary counter; synchronous reset	2.0 - 6.0	± 5.2	17	-40~125				•	•	
74HCT163-Q100	Presettable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC193-Q100	Presettable synchronous 4-bit binary up/down counter	2.0 - 6.0	± 5.2	20	-40~125				•	•	
74HCT193-Q100	Presettable synchronous 4-bit binary up/down counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC393-Q100	Dual 4-bit binary ripple counter	2.0 - 6.0	± 5.2	12	-40~125	•	•	•			
74HCT393-Q100	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125	•	•	•			
74HC4017-Q100	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	± 5.2	18	-40~125				•	•	•
74HCT4017-Q100	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125				•		•
74HC4020-Q100	14-stage binary ripple counter	2.0 - 6.0	± 5.2	11	-40~125				•	•	•
74HCT4020-Q100	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	15	-40~125				•	•	•
74HC4024-Q100	7-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40~125	•	•				
74HC4040-Q100	12-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40~125				•	•	•
74HCT4040-Q100	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	16	-40~125				•	•	•
74HC4060-Q100	14-stage binary ripple counter with oscillator	2.0 - 6.0	± 5.2	31	-40~125				•	•	•
74HCT4060-Q100	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	± 4.0	31	-40~125				•		•
74HC4520-Q100	Dual 4-bit synchronous binary counter	2.0 - 6.0	± 5.2	24	-40~125				•		
74HCT4520-Q100	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	± 4.0	24	-40~125				•		
74LV393-Q100	Dual 4-bit binary ripple counter	1.0 - 3.6	± 6	12	-40~125	•	•				
HEF4017B-Q100	5-stage Johnson decade counter	3.0 - 15	± 2.4	40	-40~85				•		
HEF4020B-Q100	14-stage binary ripple counter	3.0 - 15	± 2.4	30	-40~85				•		
HEF4040B-Q100	12-stage binary ripple counter	3.0 - 15	± 2.4	35	-40~85				•		
HEF4060B-Q100	14-stage binary ripple counter with oscillator	3.0 - 15	± 2.4	50	-40~85				•		
HEF4541B-Q100	Programmable timer	3.0 - 15	- 4/ + 2.7	38	-40~85	•					
HEF4520B-Q100	Dual 4-bit synchronous binary counter	3.0 - 15	± 2.4	15	-40~85				•		

Bus switches

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} ($^{\circ}$ 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)
74CBTLV3125-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40~125	•							
74CBTLV3126-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40~125	•	•						
74CBTLV3253-Q100	Dual 4:1 mux/demux	2.3 - 3.6	3.3	7	-40~125			•	•	•			
74CBTLV3257-Q100	Quad 2:1 mux/demux	2.3 - 3.6	3.3	7	-40~125			•	•	•			
74CBTLV3245-Q100	Octal bus switch	2.3 - 3.6	3.3	7	-40~125							•	•
74CBTLVD3245-Q100	Octal bus switch level translator	3.0 - 3.6	1.8	7	-40~125							•	•
CBT3245A-Q100	Octal bus switch	4.5 - 5.5	3.9	7	-40~85						•	•	•

Digital decoders/Demultiplexers

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

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	-40~125	•	•	•
74AHCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 8	3.2	-40~125	•	•	•
74AHC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 5.5	± 8	2.9	-40~125	•	•	
74AHCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 8	3.7	-40~125	•	•	
74HC151-Q100	8-input multiplexer	2.0 - 6.0	± 5.2	17	-40~125	•	•	
74HCT151-Q100	8-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	
74HC153-Q100	Dual 4-input multiplexer	2.0 - 6.0	± 5.2	17	-40~125	•	•	
74HCT153-Q100	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	
74HC157-Q100	Quad 2-input multiplexer	2.0 - 6.0	± 5.2	11	-40~125	•	•	•
74HCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	13	-40~125	•	•	•
74HC251-Q100	8-input multiplexer (3-State)	2.0 - 6.0	± 5.2	18	-40~125	•	•	
74HCT251-Q100	8-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 4	22	-40~125	•	•	
74HC253-Q100	Dual 4-input multiplexer (3-State)	2.0 - 6.0	± 7.8	17	-40~125	•		
74HCT253-Q100	Dual 4-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	17	-40~125	•		
74HC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 6.0	± 7.8	11	-40~125	•	•	
74HCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	13	-40~125	•	•	
74LVC157A-Q100	Quad 2-input multiplexer	1.2 - 3.6	± 24	2.5	-40~125	•	•	•

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	-40~125	•	•	•							
74AHCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•							
74AHC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	± 8	4.2	-40~125					•	•	•			
74AHCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125					•	•	•			
74AHC374-Q100	Octal D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	4.4	-40~125					•	•				
74AHCT374-Q100	Octal D-type flip-flop; positive-edge trigger (3-state); TTL-enabled (3-state)	4.5 - 5.5	± 8	4.3	-40~125					•	•				
74AHC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 5.5	± 8	3.9	-40~125						•				
74AHCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125						•	•			
74AVC16374-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 12	1.5	-40~85										•

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)
74HC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	14	-40~125	•	•	•							
74HCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40~125	•	•	•							
74HC107-Q100	Dual J-K flip-flop with reset; negative-edge trigger	2.0 - 6.0	± 5.2	16	-40~125	•	•								
74HCT107-Q100	Dual J-K flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40~125	•									
74HC109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40~125				•						
74HCT109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125				•						
74HC174-Q100	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40~125				•	•					
74HCT174-Q100	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	18	-40~125				•	•					
74HC175-Q100	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40~125				•	•					
74HCT175-Q100	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40~125				•	•					
74HC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40~125						•	•	•		
74HCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40~125						•	•	•		
74HC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	± 7.8	13	-40~125						•	•			
74HCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 6	14	-40~125						•	•			
74HC574-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	± 7.8	14	-40~125						•	•			
74HCT574-Q100	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	± 6	15	-40~125						•	•			
74LV74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	± 12	11	-40~125	•	•								
74LVC74A-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	± 24	2.5	-40~125	•	•	•							
74LVC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	± 24	6.0	-40~125						•	•	•		
74LVC374A-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	2.7	-40~125						•	•	•		

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)
74LVC573A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.4	-40~125						•	•	•		
74LVC823A-Q100	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	5.4	-40~125									•	
74LVC16374A-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40~125										•
74LVCH16374A-Q100	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40~125										•
HEF4013B-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15	± 2.4	30	-40~85	•	•								
HEF4027B-Q100	Dual J-K flip-flop	3.0 - 15	± 2.4	30	-40~85				•						

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)
74AHC00-Q100	Quad 2-input NAND gate	2.0 - 5.5	± 8	3.2	-40~125	•	•	•
74AHCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•
74AHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74AHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•
74AHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	•
74AHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74AHC30-Q100	8-input NAND gate	2.0 - 5.5	± 8	3.6	-40~125	•	•	•
74AHCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•
74AHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	•
74AHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74AHC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40~125	•	•	•
74AHCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.4	-40~125	•	•	•
74ALVC00-Q100	Quad 2-input NAND gate	1.65 - 3.6	± 24	2.1	-40~85	•	•	•

Gates

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT1402-1 (PW)	SOT762-1 (BQ)
74ALVC32-Q100	Quad 2-input OR gate	1.65 - 3.6	± 24	2.0	-40~125	•	•	•
74HC00-Q100	Quad 2-input NAND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	•
74HC02-Q100	Quad 2-input NOR gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	9.0	-40~125	•	•	•
74HC03-Q100	Quad 2-input NAND gate; open-drain	2.0 - 6.0	5.2	8.0	-40~125	•	•	
74HCT03-Q100	Quad 2-input NAND gate; open-drain; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	
74HC08-Q100	Quad 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	•
74HC10-Q100	Triple 3-input NAND gate	2.0 - 6.0	± 5.2	9.0	-40~125	•	•	
74HCT10-Q100	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	
74HC11-Q100	Triple 3-input AND gate	2.0 - 6.0	± 5.2	10	-40~125	•	•	
74HCT11-Q100	Triple 3-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	
74HC20-Q100	Dual 4-input NAND gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	
74HCT20-Q100	Dual 4-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	13	-40~125	•		•
74HC27-Q100	Triple 3-input NOR gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	•
74HCT27-Q100	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	•
74HC30-Q100	8-input NAND gate	2.0 - 6.0	± 5.2	12	-40~125	•	•	
74HCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125	•	•	
74HC32-Q100	Quad 2-input OR gate	2.0 - 6.0	± 5.2	6.0	-40~125	•	•	•
74HCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	9.0	-40~125	•	•	•
74HC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	11	-40~125	•	•	
74HCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4	14	-40~125	•	•	
74HC4002-Q100	Dual 4-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40~125	•	•	
74HC4075-Q100	Triple 3-input OR gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	
74HCT4075-Q100	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	
74LV08-Q100	Quad 2-input AND gate	1.0 - 5.5	± 12	7.0	-40~125	•	•	
74LVC00A-Q100	Quad 2-input NAND gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC02A-Q100	Quad 2-input NOR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC08A-Q100	Quad 2-input AND gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC11-Q100	Triple 3-input AND gate	1.2 - 3.7	± 24	3.7	-40~125	•	•	
74LVC32A-Q100	Quad 2-input OR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74VHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74VHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•

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)
74VHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74VHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	
74VHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
HEF4001B-Q100	Quad 2-input NOR gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4011B-Q100	Quad 2-input NAND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4030B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4070B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4081B-Q100	Quad 2-input AND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4082B-Q100	Dual 4-input AND gate	3.0 - 15	± 2.4	25	-40~85	•		

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)
74AHC573-Q100	Octal D-type transparent latch (3-state)	2.0 - 5.5	± 8	4.2	-40~125				•	•	•	
74AHCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.9	-40~125				•	•	•	
74HC259-Q100	8 bit addressable latch	2.0 - 6.0	± 5.2	18	-40~125	•	•	•				
74HCT259-Q100	8 bit addressable latch; TTL-enabled	4.5 - 5.5	± 4	20	-40~125	•	•	•				
74HC373-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	12	-40~125				•	•	•	
74HCT373-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	14	-40~125				•	•	•	
74HCS73-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	14	-40~125				•	•	•	
74HCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	17	-40~125				•	•	•	
74LVC373A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.0	-40~125				•	•	•	
74LVC16373A-Q100	16-bit D-type transparent latch (3-state)	1.2 - 3.6	± 24	2.4	-40~125							•
74LVCH16373A-Q100	16-bit D-type transparent latch with bushhold (3-state)	1.2 - 3.6	± 24	2.4	-40~125							•
HEF4043B-Q100	Quad R/S latch with set and reset (3-state)	3.0 - 15	± 2.4	25	-40~85	•						

Level shifters/Translators

Type number	Description	Features				Package (suffix)									
		V _{cc(A)} (V)	V _{cc(B)} (V)	I _o (mA)	T _{amb} (°C)	SOT402-1 (PW)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT137-1 (D)	SOT355-1 (PW)	SOT815-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)	SOT364-1 (DGG)
74ALVC164245-Q100	16-bit dual-supply voltage level translating transceiver (3-state)	1.5 - 3.6	1.5 - 5.5	± 24	-40~125										
74AVC4T245-Q100	4-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•	•	•						
74AVC8T245-Q100	8-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125						•	•			
74AVC16T245-Q100	16-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125									•	
74AVC20T245-Q100	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125										•
74AVCH4T245-Q100	4-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•	•	•						
74HC4050-Q100	Hex buffer with 15V tolerant inputs	2.0 - 6.0	n.a	± 5.2	-40~125		•	•							
74LVC4T3144-Q100	4-bit dual supply buffer/line driver (3-state)	1.2 to 5.5	1.2 to 5.5	± 24	-40~125	•									
74LVC4245A-Q100	8-bit dual-supply voltage translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	± 24	-40~125					•	•	•			
74LVC8T245-Q100	8-bit dual-supply voltage translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125						•	•			
74LVCH8T245-Q100	8-bit dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125						•	•			
HEF4104B-Q100	Quad low-to-high voltage translator (3-state)	3.0 - 15.0	3.0 - 15.0	± 2.4	-40~85		•								

Multivibrators

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	-40~125	•	•	•
74AHCT123A-Q100	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74HC123-Q100	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	± 7.8	9.0	-40~125	•	•	•
74HCT123-Q100	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	± 4	26	-40~125	•	•	•
74HC4538-Q100	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	± 5.2	27	-40~125	•	•	
74HCT4538-Q100	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	± 4	30	-40~125	•	•	
HEF4528B-Q100	Dual retriggerable monostable multivibrator with reset	3.0 - 15	± 2.4	40	-40~85	•		
HEF4538B-Q100	Dual retriggerable precision monostable multivibrator	3.0 - 15	± 2.4	60	-40~85	•		

Schmitt-triggers

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	-40~125	•	•	•		
74AHCT14-Q100	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125	•	•	•		
74AHC132-Q100	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	± 8	3.3	-40~125	•	•	•		
74AHCT132-Q100	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•	•		
74HC7014-Q100	Hex buffer precision Schmitt-trigger	2.0 - 6.0	± 5.2	27	-40~125	•				
74HC14-Q100	Hex inverter Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40~125	•	•	•		
74HCT14-Q100	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125	•	•	•		
74HC132-Q100	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	± 5.2	11	-40~125	•	•	•		
74HCT132-Q100	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125	•	•	•		
74HC7541-Q100	Octal buffer/line driver Schmitt-trigger (3-State)	2.0 - 6.0	± 7.8	11	-40~125				•	•
74HCT7541-Q100	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	± 6	16	-40~125				•	•
74LV132-Q100	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	± 12	10	-40~125	•	•	•		
74LVC14A-Q100	Hex inverter Schmitt-trigger	1.2 - 3.6	± 24	3.2	-40~125	•	•	•		
74LVC132A-Q100	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	± 24	3.4	-40~125	•	•	•		
HEF40106B-Q100	Hex inverter Schmitt-trigger	4.5 - 15.5	± 2.4	30	-40~85	•	•			

Shift registers

Type number	Description	Features				Package (suffix)							
		V _{CC} (V)	I _o (mA)	t _{prop} (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	-40~125	•	•	•					
74AHCT164-Q100	8-bit serial-in/parallel-out shift register; TTL-enabled	4.5 - 5.5	± 8	3.4	-40~125	•	•	•					
74AHC594-Q100	8-bit serial-in/parallel-out shift register with output register	2.0 - 5.5	± 8	4.1	-40~125				•	•	•		
74AHCT594-Q100	8-bit serial-in/parallel-out shift register with output register; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
74AHC595-Q100	8-bit serial-in/parallel-out shift register with output register (3-state)	2.0 - 5.5	± 8	4.0	-40~125				•	•	•		
74AHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
74HC164-Q100	8-bit serial-in/parallel-out shift register	2.0 - 6.0	± 5.2	12	-40~125	•	•	•					
74HCT164-Q100	8-bit serial-in/parallel-out shift register; TTL-enabled	4.5 - 5.5	± 4	12	-40~125	•	•	•					
74HC165-Q100	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	± 5.2	16	-40~125				•	•	•		
74HCT165-Q100	8-bit parallel or serial-in/serial-out shift register; TTL-enabled	4.5 - 5.5	± 4	14	-40~125				•	•	•		
74HC166-Q100	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	± 5.2	15	-40~125				•	•			
74HCT166-Q100	8-bit parallel or serial-in/serial-out shift register; TTL-enabled	4.5 - 5.5	± 4	23	-40~125				•				
74HCS94-Q100	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	± 7.8	14	-40~125			•					
74HCTS94-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled	4.5 - 5.5	± 6	15	-40~125				•				
74HCS95-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 6.0	± 7.8	16	-40~125				•	•	•		
74HCTS95-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 6	25	-40~125				•	•	•		
74HCS97-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register	2.0 - 6.0	± 5.2	16	-40~125				•	•			
74HCTS97-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register; TTL-enabled	4.5 - 5.5	± 4	20	-40~125				•				
74HC4094-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	2.0 - 6.0	± 5.2	15	-40~125				•	•			
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	-40~125				•				
74LV164-Q100	8-bit serial-in/parallel-out shift register	1.0 - 5.5	± 12	12	-40~125	•	•	•					
74LV165-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	18	-40~125				•	•			

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)
74LV165A-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	7.5	-40~125				•	•			
74LV4060-Q100	14-stage binary ripple counter with oscillator	1.0 - 5.5	± 6	29	-40~125				•	•			
74LVC594A-Q100	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	± 24	3.1	-40~125				•	•	•		
74VHC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	± 8	4.0	-40~125				•	•	•		
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	-40~125				•	•	•		
HEF4014B-Q100	8-bit shift register with synchronous parallel enable	3.0 - 15	± 2.4	40	-40~85				•				
HEF4021B-Q100	8-bit shift register with asynchronous parallel load	3.0 - 15	± 2.4	40	-40~85				•	•			
HEF4094B-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	3.0 - 15	± 2.4	50	-40~85				•	•			
HEF4794B-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85				•				
HEF4894B-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85							•	•
NPIC6C595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596A-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	2.3 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C4894-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.5 - 15	-100	105	-40~125							•	•

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)
74AHC245-Q100	Octal transceiver (3-state)	2.0 - 5.5	± 8	3.5	-40~125	•	•	•	
74AHCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 8	5.0	-40~125	•	•	•	
74AVC16245-Q100	16-bit transceiver (3-state)	1.2 - 3.6	± 12	2.0	-40~85				•
74HC245-Q100	Octal transceiver (3-state)	2.0 - 6.0	± 7.8	7.0	-40~125	•	•	•	
74HCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 6	10	-40~125	•	•	•	
74LVC245A-Q100	Octal transceiver (3-state)	1.2 - 3.6	± 24	2.9	-40~125	•	•	•	
74LVCH245A-Q100	Octal transceiver with bus hold (3-state)	1.2 - 3.6	± 24	2.9	-40~125	•	•	•	
74LVC162245A-Q100	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	± 12	3.3	-40~125				•

Q100 mini logic functions and packages

Analog switches

Type number	Description	Features					Package (suffix)					
		Configuration	V_{CC} (V)	R_{ON} (Ω)	$R_{ON}(FLAT)$ (Ω)	T_{amb} ($^{\circ}C$)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	2.0 - 5.5	40	5	-40~125	•	•				
74AHC1G66-Q100	Single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	40	5	-40~125	•	•				
74HC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	2.0 - 9.0	105	23	-40~125	•	•				
74HCT1G66-Q100	Single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125	•	•				
74HC2G66-Q100	Dual single-pole, single-throw analog switch	SPST-NO	2.0 - 9.0	105	23	-40~125					•	•
74HCT2G66-Q100	Dual single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125					•	•
74LVC1G53-Q100	Single-pole, double-throw analog switch	SPDT-Z	1.65 - 5.5	15	1.5	-40~125					•	•
74LVC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125	•	•				
74LVC1G384-Q100	Single-pole, single-throw analog switch	SPST-NC	1.65 - 5.5	15	1.5	-40~125	•	•				
74LVC1G3157-Q100	Single-pole, double-throw analog switch	SPDT	1.65 - 5.5	15	1.5	-40~125			•	•		
74LVC2G66-Q100	Dual single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125					•	•

Bus switches

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} ($^{\circ}C$)	SOT96-1 (D)	SOT530-1 (PW)
CBT3306-Q100	Dual bus switch	4.5 - 5.5	3.9	7	-40~85	•	•

Buffers/Inverters

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

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)
74HC2G04-Q100	Dual inverter	2.0 - 6.0	± 5.2	8.0	-40~125			•	•		
74HCT2G04-Q100	Dual inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125			•	•		
74HC2G34-Q100	Dual buffer	2.0 - 6.0	± 5.2	9.0	-40~125			•	•		
74HCT2G34-Q100	Dual buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125			•	•		
74HC2G125-Q100	Dual buffer/line driver (3-state)	2.0 - 6.0	± 5.2	10	-40~125					•	•
74HCT2G125-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 4.0	12	-40~125					•	•
74HC3G04-Q100	Triple inverter	2.0 - 6.0	± 5.2	8.0	-40~125					•	•
74HCT3G04-Q100	Triple inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125					•	•
74HC3G07-Q100	Triple buffer; open-drain	2.0 - 6.0	5.2	9.0	-40~125					•	•
74HCT3G07-Q100	Triple buffer; open-drain; TTL-enabled	4.5 - 5.5	4	9.0	-40~125					•	•
74HC3G34-Q100	Triple buffer	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT3G34-Q100	Triple buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125						•
74LVC1G04-Q100	Single inverter	1.65 - 5.5	± 32	2.0	-40~125	•	•				
74LVC1G06-Q100	Single inverter; open-drain	1.65 - 5.5	32	2.3	-40~125	•	•				
74LVC1G07-Q100	Single buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•				
74LVC1G34-Q100	Single buffer	1.65 - 5.5	± 32	2.0	-40~125	•	•				
74LVC1G125-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G126-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.0	-40~125	•	•				
74LVC1GU04-Q100	Single inverter; unbuffered	1.65 - 5.5	± 32	1.6	-40~125	•	•				
74LVC2G04-Q100	Dual inverter	1.65 - 5.5	± 32	2.7	-40~125			•	•		
74LVC2G06-Q100	Dual inverter; open-drain	1.65 - 5.5	32	2.3	-40~125			•	•		
74LVC2G07-Q100	Dual buffer; open-drain	1.65 - 5.5	32	2.6	-40~125			•	•		
74LVC2G125-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.3	-40~125					•	•
74LVC2G126-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.4	-40~125					•	•
74LVC2G240-Q100	Dual inverter/line driver (3-state)	1.65 - 5.5	± 32	2.5	-40~125					•	•
74LVC2G241-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.6	-40~125					•	•
74LVC2GU04-Q100	Dual inverter; unbuffered	1.65 - 5.5	± 32	2.3	-40~125			•	•		
74LVC3G04-Q100	Triple inverter	1.65 - 5.5	± 32	2.7	-40~125					•	•
74LVC3G07-Q100	Triple buffer; open-drain	1.65 - 5.5	32	2.1	-40~125					•	•
74LVC3G34-Q100	Triple buffer	1.65 - 5.5	± 32	2.2	-40~125					•	•

Digital 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	-40~125	•	•
74LVC1G19-Q100	1-to-2 demultiplexer	1.65 - 5.5	± 32	1.8	-40~125	•	

Digital multiplexers

Type number	Description	Features				Package (suffix)	
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT363 (GW)	SOT457 (GV)
74LVC1G157-Q100	Single 2-input multiplexer	1.65 - 5.5	± 32	2.2	-40~125	•	•

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)
74AHC1G79-Q100	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	3.5	-40~125	•	•				
74AHCT1G79-Q100	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AUP1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	± 1.9	8.1	-40~125						•
74AUP1G175-Q100	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	± 1.9	7.4	-40~125			•			
74AUP1G374-Q100	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	± 1.9	7.9	-40~125			•			
74AUP2G79-Q100	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	8.5	-40~125						•
74LVC1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40~125					•	•
74LVC1G79-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.2	-40~125	•	•				
74LVC1G80-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.4	-40~125	•	•				
74LVC1G175-Q100	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	± 32	3.1	-40~125			•	•		
74LVC2G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40~125					•	•

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)
74AHC1G09-Q100	Single 2-input AND gate; open-drain	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•				
74AHC1G02-Q100	Single 2-input NOR gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AHC1G08-Q100	Single 2-input AND gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•				
74AHC1G32-Q100	Single 2-input OR gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•				
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AHC2G00-Q100	Dual 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125					•	•
74AHC2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125					•	•
74AHC2G08-Q100	Dual 2-input AND gate	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC2G08-Q100	Dual 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125					•	•
74AHC2G32-Q100	Dual 2-input OR gate	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125					•	•
74AUP1G02-Q100	Single 2-input NOR gate	1.1 - 3.6	± 1.9	8.2	-40~125	•					
74AUP1G08-Q100	Single 2-input AND gate	1.1 - 3.6	± 1.9	8.2	-40~125	•					
74AUP1G32-Q100	Single 2-input OR gate	1.1 - 3.6	± 1.9	7.9	-40~125	•					
74AUP1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	3.3	-40~125	•					
74AUP1T98-Q100	Configurable gate with voltage level translation	2.3 - 3.6 V	± 1.9	8.7	-40~125			•			
74HC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 2.6	9.0	-40~125	•	•				
74HC1G00-Q100	Single 2-input NAND gate	2.0 - 6.0	± 2.6	7.0	-40~125	•					
74HCT1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 2	10	-40~125	•	•				
74HC1G02-Q100	Single 2-input NOR gate	2.0 - 6.0	± 2.6	7.0	-40~125	•	•				
74HCT1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 2.0	9.0	-40~125	•	•				
74HC1G08-Q100	Single 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•				
74HCT1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 2	11	-40~125	•	•				
74HC1G32-Q100	Single 2-input OR gate	2.0 - 6.0	± 2.6	8.0	-40~125	•	•				
74HCT1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40~125	•	•				
74HC2G00-Q100	Dual 2-input NAND gate	2.0 - 6.0	± 5.6	9.0	-40~125					•	•
74HCT2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125					•	•
74HC2G02-Q100	Dual 2-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G02-Q100	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125					•	•
74HC2G08-Q100	Dual 2-input AND gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•

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)
74HCT2G08-Q100	Dual 2-input AND gate; TTL-enabled	4.5 - 5.5	± 4	14	-40~125					•	•
74HC2G32-Q100	Dual 2-input OR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	13	-40~125					•	•
74HC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G86-Q100	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4.0	11	-40~125					•	•
74HCT1G86-Q100	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40~125	•	•				
74LVC1G00-Q100	Single 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125	•	•				
74LVC1G02-Q100	Single 2-input NOR gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G08-Q100	Single 2-input AND gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G10-Q100	Single 3-input NAND gate	1.65 - 5.5	± 32	2.6	-40~125			•			
74LVC1G11-Q100	Single 3-input AND gate	1.65 - 5.5	± 32	2.6	-40~125			•	•		
74LVC1G32-Q100	Single 2-input OR gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G38-Q100	Single 2-input NAND gate; open-drain	1.65 - 5.5	32	2.3	-40~125	•	•				
74LVC1G57-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40~125			•	•		
74LVC1G58-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40~125			•	•		
74LVC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.4	-40~125	•	•				
74LVC1G332-Q100	Single 3-input OR gate	1.65 - 5.5	± 32	2.6	-40~125			•	•		
74LVC1GX04-Q100	Crystal driver	1.65 - 5.5	± 24	2.8	-40~125			•	•		
74LVC2G00-Q100	Dual 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125						•
74LVC2G02-Q100	Dual 2-input NOR gate	1.65 - 5.5	± 32	2.4	-40~125					•	•
74LVC2G08-Q100	Dual 2-input AND gate	1.65 - 5.5	± 24	2.1	-40~125					•	•
74LVC2G32-Q100	Dual 2-input OR gate	1.65 - 5.5	± 32	2.2	-40~125					•	•
74LVC2G34-Q100	Dual buffer	1.65 - 5.5	± 32	2.2	-40~125			•	•		
74LVC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.3	-40~125					•	•

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	-40~125	•

Multivibrators

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	-40~125	•	•

Schmitt-triggers

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)
74AHC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHT1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125	•	•				
74AHC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHT3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125					•	•
74HC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 6.0	± 2.6	10	-40~125	•	•				
74HCT1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 2.0	15	-40~125	•	•				
74HC2G14-Q100	Dual inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40~125			•	•		
74HCT2G14-Q100	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125			•	•		
74HC2G17-Q100	Dual buffer Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40~125			•	•		
74HCT2G17-Q100	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125			•	•		
74HC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40~125					•	•
74HCT3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125					•	•
74LVC1G14-Q100	Single inverter Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40~125	•	•				
74LVC1G17-Q100	Single buffer Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40~125	•	•				
74LVC2G14-Q100	Dual inverter Schmitt-trigger	1.65 - 5.5	± 32	3.9	-40~125			•	•		
74LVC2G17-Q100	Dual buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125			•	•		
74LVC3G17-Q100	Triple buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125					•	•

Level shifters/Translators

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)	SOT505-2 (DP)	SOT765-1 (DC)	SOT552-1 (DP)
74AUP1T34-Q100	Single dual supply translating buffer	1.1 - 3.6	1.1 - 3.6	± 1.9	-40~125	•				
74AVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•			
74AVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125			•	•	
74AVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•			
74AXP1T57-Q100	Dual-supply translating configurable multiple function gate, Schmitt-trigger inputs	0.7 - 2.75	1.2 - 5.5	± 12	-40~125				•	
74AXP2T08-Q100	Dual-supply 2-input AND gate	0.7 - 2.75	1.2 - 5.5	± 12	-40~125					•
74LVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125		•			
74LVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125		•			
74LVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125				•	
74LVCH2T45-Q100	Dual-bit dual-supply voltage level translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125				•	

Buffers/Inverters/Drivers

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	-40~85
74ABT125	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.1	100	-40~85
74ABT126	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.0	100	-40~85
74ABT162244	16-bit buffer/line driver with 30 Ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	50	3.2	100	-40~85
74ABT16240A	16-bit inverter/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.0	150	-40~85
74ABT16244A	16-bit buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.1	150	-40~85
74ABT244	Octal buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.9	100	-40~85
74AHC04	Hex inverter	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74AHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74AHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40~125
74AHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1G04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40~125
74AHC1G125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC1G126	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC1G14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1G17	Single buffer with Schmitt-trigger inputs	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1GU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.6	60	-40~125
74AHC244	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74AHC2G125	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC2G126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC2G241	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC3G04	Triple inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40~125
74AHC3G14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC3GU04	Triple inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.5	60	-40~125
74AHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74AHC9541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±8	15	3.4	60	-40~125
74AHCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT04A	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.1	60	-40~125
74AHCT07A	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	±8	15	4.0	60	-40~125
74AHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT14	Hex inverting; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT14A	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.7	60	-40~125
74AHCT17A	Hex buffer; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.2	60	-40~125
74AHCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT1G17	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
74AHCT244A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40~125
74AHCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

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)
74AHCT2G126	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT2G241	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT3G14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
74AHCT541A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40~125
74AHCU04	Hex inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.4	60	-40~125
74AHCV07A	Hex buffer; Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	15	3.8	60	-40~125
74AHCV14A	Hex inverter; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40~125
74AHCV17A	Hex buffer; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40~125
74AHCV244A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40~125
74AHCV541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40~125
74ALVC04	Hex inverter	1.65 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVC125	Quad buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	1.8	145	-40~85
74ALVC14	Hex inverter; Schmitt-trigger	1.65 - 3.6	TTL	±24	30	2.4	150	-40~85
74ALVC16244	16-bit buffer/line driver (3-state)	1.2 - 3.6	TTL	±24	50	1.9	150	-40~85
74ALVC244	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.9	130	-40~85
74ALVC541	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.3	130	-40~85
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	-40~85
74ALVCH16244	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	TTL	±24	30	1.9	150	-40~85
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	-40~85
74ALVCH16825	18-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVCH16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVT16244	16-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTTL	-32 / 64	50	1.5	200	-40~85
74ALVT162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	LVTTTL	±12	50	2.2	75	-40~85
74ALVT16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTTL	-32 / 64	50	1.3	200	-40~85
74AUP1G04	Single inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40~125
74AUP1G06	Single inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40~125
74AUP1G07	Single buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40~125
74AUP1G125	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40~125
74AUP1G126	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40~125
74AUP1G14	Single inverter; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40~125
74AUP1G16	Single buffer	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40~125
74AUP1G240	Single inverter/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.2	70	-40~125
74AUP1G34	Single buffer	1.1 - 3.6	CMOS	±1.9	30	3.9	70	-40~125
74AUP1GU04	Single inverter; unbuffered	1.1 - 3.6	CMOS	±1.9	30	2.3	70	-40~125
74AUP1T04	Single supply voltage-translating inverter	2.3 - 3.6	CMOS	±4	15	3.9	70	-40~125
74AUP1T14	Single supply voltage-translating inverter	2.3 - 3.6	CMOS	±4	15	3.6	70	-40~125
74AUP1T17	Single supply voltage-translating buffer	2.3 - 3.6	CMOS	±4	15	3.6	70	-40~125
74AUP1T50	Single supply voltage-translating buffer	2.3 - 3.6	CMOS	±4	15	3.6	70	-40~125
74AUP2G04	Dual inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40~125
74AUP2G06	Dual inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40~125
74AUP2G07	Dual buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

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)
74AUP2G125	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.3	70	-40~125
74AUP2G126	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.3	70	-40~125
74AUP2G14	Dual inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP2G16	Dual buffer	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP2G17	Dual buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	7.8	70	-40~125
74AUP2G240	Dual inverter/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.2	70	-40~125
74AUP2G241	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+ 1.9	30	4.3	70	-40~125
74AUP2G34	Dual buffer	1.1 - 3.6	CMOS	+1.9	30	3.9	70	-40~125
74AUP2GU04	Dual inverter; unbuffered	1.1 - 3.6	CMOS	+1.9	30	2.3	70	-40~125
74AUP3G04	Triple inverter	1.1 - 3.6	CMOS	+1.9	30	4.0	70	-40~125
74AUP3G14	Triple inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP3G16	Triple buffer	1.1 - 3.6	CMOS	+1.9	30	4.0	70	-40~125
74AUP3G17	Triple buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AVC16244	16-bit buffer/line driver (3-state)	0.8 - 3.6	CMOS/LVTTL	-12	30	2.0	200	-40~85
74AVC1T1004	1-to-4 translating fan-out buffer	0.8 - 3.6	CMOS/LVTTL	±12	15	4.9	200	-40~125
74AVC4T3144	4-bit dual-supply buffer/level-translator (3-state)	0.8 - 3.6	CMOS/ LVTTTL	±12	15	3.5	200	-40~125
74AVC9112	1-to-4 fan-out buffer	0.8 - 3.6	CMOS/LVTTL	±12	15	4.0	200	-40~125
74AVCH16244	16-bit buffer/line driver with bus hold (3-state)	0.8 - 3.6	CMOS/LVTTL	+12	30	2.0	200	-40~85
74AXP1G04	Single inverter	0.7 - 2.75	CMOS	+4.5	5	2.6	70	-40~85
74AXP1G06	Single inverter; open drain	0.7 - 2.75	CMOS	4.5	5	3.5	70	-40~85
74AXP1G07	Single buffer; open-drain	0.7 - 2.75	CMOS	4.5	5	3.5	70	-40~85
74AXP1G125	Single buffer/line driver (3-state)	0.7 - 2.75	CMOS	+4.5	5	2.7	70	-40~85
74AXP1G14	Single inverter; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.9	70	-40~85
74AXP1G17	Single buffer; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.8	70	-40~85
74AXP2G17	Dual buffer; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.8	70	-40~85
74AXP2G34	Dual buffer	0.7 to 2.75	CMOS	+4.5	5	2.5	70	-40~85
74AXP2G3404	Single buffer and Single inverter	0.7 to 2.75	CMOS	+4.5	5	2.5	70	-40~85
74HC04	Hex inverter	2.0 - 6.0	CMOS	+5.2	50	7.0	36	-40~125
74HC05	Hex inverter; open drain	2.0 - 6.0	CMOS	5.2	50	11	36	-40~125
74HC125	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC126	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC14	Hex inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+5.2	50	12	36	-40~125
74HC1G04	Single inverter	2.0 - 6.0	CMOS	+2.6	50	7.0	36	-40~125
74HC1G125	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+2.6	50	9.0	36	-40~125
74HC1G126	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+2.6	50	9.0	36	-40~125
74HC1G14	Single inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+2.6	50	10	36	-40~125
74HC1GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	+ 2.6	50	5.0	36	-40~125
74HC240	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC241	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	7.0	36	-40~125
74HC244	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC2G04	Dual inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40~125
74HC2G125	Dual buffer/line driver (3-state)	2.0 - 6.0	CMOS	±5.2	50	10	36	-40~125
74HC2G14	Dual inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40~125

Asynchronous interface logic

Buffers/Inverters/Drivers

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)
74HC2G17	Dual buffer; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	12	36	-40~125
74HC2G34	Dual buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC2GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	±2.6	50	5.0	36	-40~125
74HC365	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC366	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40~125
74HC367	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	8.0	36	-40~125
74HC368	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC3G04	Triple inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40~125
74HC3G06	Triple inverter; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40~125
74HC3G07	Triple buffer; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40~125
74HC3G14	Triple inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40~125
74HC3G16	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC3G34	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC3GU04	Triple inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	6.0	36	-40~125
74HC540	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC541	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40~125
74HC7014	Hex buffer; precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	27	36	-40~125
74HC7540	Octal inverter/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	11	36	-40~125
74HC7541	Octal buffer/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	10	36	-40~125
74HC9114	9-bit inverter; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40~125
74HC9115	9-bit buffer; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40~125
74HCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	8.0	36	-40~125
74HCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40~125
74HCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	17	36	-40~125
74HCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±2	50	8.0	36	-40~125
74HCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40~125
74HCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40~125
74HCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2	50	15	36	-40~125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	9.0	36	-40~125
74HCT241	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT2G04	Dual inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	12	36	-40~125
74HCT2G14	Dual inverter; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40~125
74HCT2G17	Dual buffer; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40~125
74HCT2G34	Dual buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	32	-40~125
74HCT365	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT366	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT367	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT368	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT3G06	Triple inverter; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

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)
74HCT3G07	Triple buffer; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40~125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	21	36	-40~125
74HCT3G16	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT3G34	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT540	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40~125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40~125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40~125
74HCT9114	9-bit inverter Schmitt-trigger; open-drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	15	13	36	-40~125
74HCU04	Hex inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	5.0	36	-40~125
74LV04	Hex inverter	1.0 - 5.5	CMOS	±12	50	6.0	30	-40~125
74LV04AT	Hex buffer	4.5 - 5.5	TTL	±12	15	3.3	60	-40~125
74LV05A	Hex inverter; open-drain	2.0 - 5.5	CMOS	12	15	2.9	60	-40~125
74LV07A	Hex buffer; open-drain	2.0 - 5.5	CMOS	16	15	3.6	60	-40~125
74LV07AT	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	16	15	3.5	60	-40~125
74LV14	Hex inverter; Schmitt-trigger	1.0 - 5.5	TTL	±12	50	13	30	-40~125
74LV14A	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40~125
74LV17A	Hex buffer; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40~125
74LV1T04	Single supply translating inverter	1.6 - 5.5	CMOS	±8	15	3.1	60	-40~125
74LV1T34	Single supply translating buffer	1.6 - 5.5	CMOS	±8	15	3.1	60	-40~125
74LV1T125	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	CMOS	±8	15	3.2	60	-40~125
74LV1T126	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	CMOS	±8	15	3.2	60	-40~125
74LV244	Octal buffer/line driver (3-state)	1.0 - 5.5	CMOS	±16	50	8.0	30	-40~125
74LV244A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40~125
74LV244AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40~125
74LV365	Hex buffer/line driver (3-state)	1.0 - 3.6	CMOS	±8	50	9.0	30	-40~125
74LV540A	Octal buffer/line driver (3-state); inverting	1.65 - 5.5	CMOS/LVTTL	±16	15	3.1	60	-40~125
74LV541A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40~125
74LV541AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40~125
74LVC04A	Hex inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC06A	Hex inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC07A	Hex buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC125A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40~125
74LVC126A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40~125
74LVC14A	Hex inverter; Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	50	3.2	175	-40~125
74LVC162244A	16-bit buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40~125
74LVC16240A	16-bit inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVC16241A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40~125
74LVC16244A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40~125
74LVC1G04	Single inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40~125
74LVC1G06	Single inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40~125
74LVC1G07	Single buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC1G125	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.1	175	-40~125

Buffers/Inverters/Drivers

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)
74LVC1G126	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40~125
74LVC1G14	Single inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40~125
74LVC1G16	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC1G17	Single buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40~125
74LVC1G34	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC1GU04	Single inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	1.6	175	-40~125
74LVC2244A	Octal buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	3.1	175	-40~125
74LVC240A	Octal inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.5	175	-40~125
74LVC244A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40~125
74LVC2G04	Dual inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVC2G06	Dual inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40~125
74LVC2G07	Dual buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.6	175	-40~125
74LVC2G125	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC2G126	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.4	175	-40~125
74LVC2G14	Dual inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.9	175	-40~125
74LVC2G16	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC2G17	Dual buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40~125
74LVC2G240	Dual inverter/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.5	175	-40~125
74LVC2G241	Dual buffer/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.6	175	-40~125
74LVC2G34	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40~125
74LVC2GU04	Dual inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC3G04	Triple inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.7	175	-40~125
74LVC3G06	Triple inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.0	175	-40~125
74LVC3G07	Triple buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.1	175	-40~125
74LVC3G14	Triple inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.2	175	-40~125
74LVC3G16	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC3G17	Triple buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40~125
74LVC3G34	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40~125
74LVC3GU04	Triple inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC541A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.3	175	-40~125
74LVC827A	10-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	4.0	175	-40~125
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	-40~125
74LVCH16244A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40~125
74LVCH16541A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVCH244A	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40~125
74LVCU04A	Hex inverter; unbuffered	1.2 - 3.6	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVT04	Hex inverter	2.7 - 3.6	TTL	-20 / 32	50	2.6	150	-40~85
74LVT125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40~85
74LVT126	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.4	150	-40~85
74LVT14	Hex inverter; Schmitt-trigger	2.7 - 3.6	TTL	-32 / 64	50	3.8	150	-40~85
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	-40~85
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	-40~85
74LVT16240A	16-bit inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85

Buffers/Inverters/Drivers

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)
74LVT16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
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	-40~85
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	-40~85
74LVT240	Octal inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.5	150	-40~85
74LVT241	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.8	150	-40~85
74LVT244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40~85
74LVT244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVTH125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40~85
74LVTH16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74LVTH244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40~85
74LVTH244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVTN16244B	16-bit buffer/line driver (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74VHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74VHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40~125
74VHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74VHC244	Octal inverter/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74VHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74VHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74VHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74VHCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74VHCT244	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	5.0	60	-40~125
74VHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
HEF40098B	Hex inverter	3.0 - 15.0	CMOS	-10 / 20	50	25	10	-40~125
HEF40244B	Octal buffer/line driver (3-state)	3.0 - 15.0	CMOS	-62 / 45	50	30	10	-40~125
HEF4049B	Hex inverter/line driver	3.0 - 15.0	CMOS	-3 / 20	50	20	10	-40~125
HEF4050B	Hex buffer/line driver	3.0 - 15.0	CMOS	-3 / 20	50	40	10	-40~125
HEF4069UB	Hex inverter; unbuffered	3.0 - 15.0	CMOS	±3.4	50	15	10	-40~125
PDI1284P11	Printer parallel interface transceiver/buffer	3.0 - 3.6	LVTTTL	±14	50	13.9		0~70
XC7SET04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
XC7SET125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
XC7SET14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
XC7SH04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
XC7SH125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
XC7SH14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
XC7SHU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
XC7WH126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
XC7WH14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
XC7WT14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125

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	-40~125
74AHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40~125
74AHC1G14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC1G17	Single buffer Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC3G14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40~125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40~125
74AHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	60	6	-40~125
74AHCT17A	Hex buffer Schmitt-trigger	4.5 - 5.5	TTL	±8	3.2	50	60	8	-40~125
74AHCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
74AHCT1G17	Single buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
74AHCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40~125
74AHCV07A	Hex buffer Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	3.8	15	60	6	-40~125
74AHCV14A	Hex inverter Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40~125
74AHCV17A	Hex buffer Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40~125
74AHCV244A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40~125
74AHCV245A	Octal transceiver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	15	60	8	-40~125
74AHCV541A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40~125
74ALVC14	Hex inverter Schmitt-trigger	1.65 - 3.6	TTL	±24	2.4	50	150	6	-40~85
74AUP1G132	Single 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10.0	30	70	1	-40~125
74AUP1G14	Single inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40~125
74AUP1G17	Single buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	1	-40~125
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40~125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40~125
74AUP2G14	Dual inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	2	-40~125
74AUP2G17	Dual buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	2	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	2	-40~125

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)
74AUP3G14	Triple inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40~125
74AUP3G17	Triple Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40~125
74AXP1G14	Single inverter Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.9	5	70	1	-40~85
74AXP1G17	Single buffer Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.8	5	70	1	-40~85
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1T14	Dual-supply Schmitt-trigger inverter	0.75 - 2.75	CMOS	±12	4.9	5	45	1	-40~125
74AXP1T57	Single dual-supply translating configurable gate; Schmitt-trigger inputs	0.75 - 2.75	CMOS	±12	4.8	5	45	1	-40~125
74AXP2G14	Dual inverter Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.9	5	70	2	-40~85
74AXP2G17	Dual buffer Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.8	5	70	1	-40~85
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HC14	Hex inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	6	-40~125
74HC1G14	Single inverter Schmitt-trigger	2.0 - 6.0	CMOS	±2.6	10	50	36	1	-40~125
74HC2G14	Dual inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	2	-40~125
74HC2G17	Dual buffer Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	2	-40~125
74HC3G14	Triple inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	3	-40~125
74HC7014	Hex buffer precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	27	50	36	6	-40~125
74HC7540	Octal inverter/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40~125
74HC7541	Octal buffer/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40~125
74HC9114	9-bit inverter Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5.2	12	50	36	9	-40~125
74HC9115	9-bit buffer Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5.2	12	50	36	9	-40~125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40~125
74HCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	6	-40~125
74HCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2.0	15	50	36	1	-40~125
74HCT2G14	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40~125
74HCT2G17	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40~125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	3	-40~125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40~125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40~125

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)
74HCT9114	9-bit inverter Schmitt-trigger; open drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	13	50	36	9	-40~125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40~125
74LV14	Hex inverter Schmitt-trigger	1.0 - 5.5	TTL	±12	13	50	30	6	-40~125
74LV14A	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±12	3.4	15	60	6	-40~125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	175	4	-40~125
74LVC14A	Hex inverter Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	175	6	-40~125
74LVC1G14	Single inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40~125
74LVC1G17	Single buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40~125
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	8.4	50	150	1	-40~125
74LVC2G14	Dual inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.9	50	175	2	-40~125
74LVC2G17	Dual buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	2	-40~125
74LVC3G14	Triple inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.2	50	175	3	-40~125
74LVC3G17	Triple buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	3	-40~125
74LVT14	Hex inverter Schmitt-trigger	2.7 - 3.6	TTL	±32	3.8	50	150	6	-40~125
74VHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40~125
74VHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	6	-40~125
HEF40106B	Hex inverter Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	6	-40~85
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~125
XC7SET14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
XC7SH14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
XC7WH14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40~125
XC7WT14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40~125

Transceivers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _{vj} (°C)
74ABT162245A	16-bit transceiver with 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	100	-40~85
74ABT16245B	16-bit transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.3	16	150	-40~85
74ABT245	Octal transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.9	8	100	-40~85
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	-40~85
74AHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40~125
74AHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40~125
74AHCT245A	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.0	8	60	-40~125
74AHCV245A	Octal transceiver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	8	60	-40~125
74ALVC16245	16-bit transceiver (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40~85
74ALVC245	Octal transceiver (3-state)	1.65 - 3.6	TTL	±24	2.3	8	130	-40~85
74ALVCH162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±12	2.4	16	150	-40~85
74ALVCH16245	16-bit transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40~85
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	-40~85
74ALVCH16500	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.9	18	150	-40~85
74ALVCH16501	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16543	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.8	16	150	-40~85
74ALVCH16600	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16601	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16646	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40~85
74ALVCH16652	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40~85
74ALVCH16952	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.2	16	150	-40~85
74ALVT162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	2.3	16	75	-40~85
74AVC16245	16-bit transceiver (3-state)	1.2 - 3.6	CMOS	±12	2.0	16	200	-40~85
74AVC4T774	4-bit dual supply translating transceiver (3-state)	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	4	200	-40~125
74AVCH16245	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS	±12	2.0	16	200	-40~85
74HC245	Octal transceiver (3-state)	2.0 - 6.0	CMOS	±7.8	7.0	8	36	-40~125
74HCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	10	8	36	-40~125
74LV245	Octal transceiver (3-state)	1.0 - 5.5	TTL	±16	7.0	8	30	-40~125
74LV245A	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±16	3	8	60	-40~125
74LV245AT	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	3	8	60	-40~125
74LVC162245A	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTTL	±12	3.3	16	175	-40~125
74LVC16245A	16-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	3.0	16	175	-40~125
74LVC2245A	Octal transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTTL	±12	3.3	8	175	-40~125
74LVC245A	Octal transceiver (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	2.9	8	175	-40~125
74LVC32245A	32-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	2.2	32	175	-40~125
74LVCH162245A	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTTL	±12	3.3	16	175	-40~125
74LVCH16245A	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	3.0	16	175	-40~125
74LVCH245A	Octal transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	2.9	8	175	-40~125

Transceivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _v (°C)
74LVT162245B	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	2.5	16	150	-40~85
74LVT16245B	16-bit transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40~85
74LVT16543A	16-bit registered transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	2.2	16	150	-40~85
74LVT16543A	16-bit registered transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	2	16	150	-40~85
74LVT2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	3.2	8	150	-40~85
74LVT245	Octal transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	2.4	8	150	-40~85
74LVT245B	Octal transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	2	8	150	-40~85
74LVT640	Octal transceiver with bus hold; inverting (3-state)	2.7 - 3.6	TTL	-32 / 64	2.4	8	150	-40~85
74LVTH16245B	16-bit transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40~85
74LVTH2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	3.2	8	150	-40~85
74LVTN16245B	16-bit transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40~85
74VHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40~125
74VHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40~125

Voltage translators (level-shifters)

Types in **bold** represent new products

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	-40~85
74AUP1T00	Single supply 2-input voltage-translating NAND gate	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40~125
74AUP1T02	Single supply 2-input voltage-translating NOR gate	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T04	Single supply voltage-translating inverter	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T08	Single supply 2-input voltage-translating AND gate	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T14	Single supply voltage-translating inverter	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T17	Single supply voltage-translating buffer	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T32	Single supply 2-input voltage-translating OR gate	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T34	Single dual-supply translating buffer	1.1 - 3.6	1.1 - 3.6	CMOS	±4	3.9	15	1	-40~125
74AUP1T45	Single dual-supply voltage-translating transceiver (3-state)	1.1 - 3.6	1.1 - 3.6	CMOS	±4	4.5	15	1	-40~125
74AUP1T50	Single supply voltage-translating buffer	2.3 - 3.6	n.a.	CMOS	±4	8.7	15	1	-40~125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125
74AUP1T86	Single supply 2-input voltage-translating XOR gate	2.3 - 3.6	n.a.	CMOS	±4	8.7	15	1	0
74AUP1T87	Single supply 2-input voltage-translating XNOR gate	2.3 - 3.6	n.a.	CMOS	±4	8.7	15	1	-40~125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125

Voltage translators (level-shifters)

Types in **bold** represent new products

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)
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 - 3.6	1.1 - 3.6	CMOS	±4	3.8	15	2	-40~125
74AVC1T1004	1-to-4 fan-out buffer	0.8 - 3.6	n.a.	CMOS/ LVTTTL	±12	4.9	15	1	-40~125
74AVC1T8128	Single dual-supply translating 2-input NOR with enable	0.8 - 3.6	n.a.	CMOS/ LVTTTL	±12	2.4	15	1	-40~125
74AVC1T8832	Single dual-supply translating 2-input OR with strobe	0.8 - 3.6	n.a.	CMOS/ LVTTTL	±12	2.4	15	1	-40~125
74AVC16T245	16-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	16	-40~125
74AVC1T1022	1-to-4 fan out buffer	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	1	-40~125
74AVC1T45	Single dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	1	-40~125
74AVC20T245	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	30	20	-40~125
74AVC2T245	2-bit dual-supply voltage-translating transceiver	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	2	-40~125
74AVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	2	-40~125
74AVC32T245	32-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	32	-40~125
74AVC4T245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	4	-40~125
74AVC4T774	4-bit dual supply translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	15	4	-40~125
74AVC4T3144	4-bit dual-supply buffer/level-translator (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	15	4	-40~125
74AVC4TD245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	4	-40~125
74AVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	8	-40~125
74AVCH16T245	16-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	16	-40~125
74AVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	1	-40~125
74AVCH20T245	20-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	30	20	-40~125
74AVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	2	-40~125
74AVCH4T245	4-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	4	-40~125
74AVCH8T245	8-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS	±12	2.1	15	8	-40~125
74AXP1T125	Dual-supply buffer/line driver (3-state)	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74AXP1T14	Dual-supply schmitt-trigger inverter	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T32	Dual-supply 2-input or gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T34	Single dual-supply voltage-translating buffer	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T57	Schmitt-trigger inputs, Dual supply configurable multiple function gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~85
74AXP2T08	Dual-supply 2-input AND gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74AXP2T3407	Dual-supply single buffer and single buffer with open drain	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74HC4049	Hex inverter with 15 V-tolerant inputs	2.0 - 6.0	n.a.	CMOS	±5.2	8.0	50	6	-40~125
74HC4050	Hex buffer with 15 V-tolerant inputs	2.0 - 6.0	n.a.	CMOS	±5.2	7.0	50	6	-40~125
74LV1T00	Single supply 2-input translating NAND gate	1.6 - 5.5	n.a.	CMOS	±8	3.1	15	1	-40~125
74LV1T02	Single supply 2-input translating NOR gate	1.6 - 5.5	n.a.	CMOS	±8	3.1	15	1	-40~125
74LV1T04	Single supply translating inverter	1.6 - 5.5	n.a.	CMOS	±8	4.1	15	1	-40~125

Voltage translators (level-shifters)

Types in **bold** represent new products

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)
74LV1T08	Single supply 2-input translating AND gate	1.6 - 5.5	n.a.	CMOS	±8	4.1	15	1	-40~125
74LV1T32	Single supply 2-input translating OR gate	1.6 - 5.5	n.a.	CMOS	±8	3.2	15	1	-40~125
74LV1T34	Single supply translating buffer	1.6 - 5.5	n.a.	CMOS	±8	3.1	15	1	-40~125
74LV1T86	Single supply 2-input translating XOR gate	1.6 - 5.5	n.a.	CMOS	±8	3.4	15	1	-40~125
74LV1T87	Single supply 2-input translating XNOR gate	1.6 - 5.5	n.a.	CMOS	±8	3.4	15	1	-40~125
74LV1T125	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	n.a.	CMOS	±8	3.2	15	1	-40~125
74LV1T126	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	n.a.	CMOS	±8	2.9	15	1	-40~125
74LVC1T45	Single dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	1	-40~125
74LVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	2	-40~125
74LVC4245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
74LVC4245A	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
74LVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
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/ LVTTTL	±24	4.1	15	8	-40~125
74LVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	1	-40~125
74LVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	2	-40~125
74LVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
HEF4104B	Quad low-to-high voltage translator (3-state)	3.0 - 15	3.0 - 15	CMOS	±2.4	3.4	50	16	-40~85

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		-40~125
74AHCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	40	14	280	0.015		-40~125
74HC1G66	Single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02		-40~125
74HC2G66	Dual single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02	-60	-40~125
74HC4016	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	300	80	160	0.4	-60	-40~125
74HC4051	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02		-40~125
74HC4052	Dual single-pole, quad-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02	-60	-40~125
74HC4053	Triple single-pole, double-throw analog switch	2.0 - 10	CMOS	200	20	170	0.02		-40~125
74HC4066	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	105	23	200	0.02	-60	-40~125
74HC4067	Single-pole, 16-throw analog switch	2.0 - 10	CMOS	200	25	100	0.02		-40~125
74HC4316	Quad single-pole, single-throw analog switch with translation	2.0 - 10	CMOS	300	80	160	0.4	-60	-40~125
74HC4351	Single-pole, octal-throw analog switch with latch	2.0 - 10	CMOS	200	20	180	0.02		-40~125
74HC4851	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	220					-40~125
74HC4852	Dual single-pole, quad-throw analog switch; TTL-enabled	2.0 - 10	CMOS	220					-40~125
74HCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04		-40~125
74HCT2G66	Dual single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40~125
74HCT4051	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40~125
74HCT4052	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04	-60	-40~125
74HCT4053	Triple single-pole, double-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	160	0.04		-40~125
74HCT4066	Quad single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40~125
74HCT4067	Single-pole, 16-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	25	90	0.04		-40~125
74HCT4316	Quad single-pole, single-throw analog switch with translation; TTL-enabled	4.5 - 5.5	TTL	400	50	150	0.8	-60	-40~125
74HCT4351	Single-pole, octal-throw analog switch with latch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40~125
74HCT4851	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40~125
74HCT4852	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40~125
74LV4051	Single-pole, octal-throw analog switch	1.0 - 6.0	TTL	135	35	200	0.4	-60	-40~125
74LV4052	Dual single-pole, quad-throw analog switch	1.0 - 6.0	TTL	125	15	180	0.4	-60	-40~125
74LV4053	Triple single-pole, double-throw analog switch	1.0 - 6.0	TTL	150	30	180	0.4	-60	-40~125
74LV4066	Quad single-pole, single-throw analog switch	1.0 - 6.0	TTL	50	3.0	180	0.02	-60	-40~125
74LVC1G3157	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC1G384	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.001		-40~125
74LVC1G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC1G66	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.001		-40~125
74LVC2G3157	Dual single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078	-54	-40~125
74LVC2G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC2G66	Dual single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.005	-56	-40~125
74LVC4066	Quad single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.005	-58	-40~125
74LVCV2G66	Dual single-pole, single-throw analog switch; overvoltage tolerant	2.3 - 5.5	CMOS/ LVTTTL	15	3.0	210	0.01	-55	-40~125
HEF4016B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	350	65	90	0.04	-50	-40~85
HEF4051B	Single-pole, octal-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4052B	Dual single-pole, quad-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4053B	Triple single-pole, double-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4066B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	175	20	90	0.04	-50	-40~85
HEF4067B	Single-pole, 16-throw analog switch	3.0 - 15	CMOS	175	20	13	0.04	-50	-40~85

Bus Switches

Type number	Description	V _{CC} (V)	V _{PASS} (V)	Logic switching levels	R _{ON} (Ω)	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	V _{CC}	CMOS/LVTTL	4	500	2	0.2	-40~85
74CB3Q3257	Quad 1-of-2 FET multiplexer/ demultiplexer with charge pump	2.3 - 3.6	V _{CC}	CMOS/LVTTL	4	500	4	0.2	-40~85
74CBTLV16211	24-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLV1G125	Single bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	1	0.2	-40~125
74CBTLV3125	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3126	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3244	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLV3245	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLV3253	Dual 4:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	2	0.2	-40~125
74CBTLV3257	Quad 2:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3306	2-bit bus switch	2.3 - 3.6	5.0	CMOS/LVTTL	7	400	2	0.2	-40~125
74CBTLV3384	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLV3861	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLVD3244	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLVD3245	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLVD3384	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLVD3861	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40~125
CBT16210	20-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	20	0.25	-40~85
CBT3125	Quad bus switch	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40~85
CBT3244A	Octal bus switch	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3245A	Octal bus switch	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3251	8:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3253	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3253A	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3257A	Quad 2:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40~85
CBT3306	Dual bus switch	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3861	10-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	10	0.25	-40~85
CBTD16210	20-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	20	0.25	-40~85
CBTD3306	Dual bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	2	0.25	-40~85
CBTD3384	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40~85
CBTD3861	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40~85

Decoders/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	-40~125
74AHC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 5.5	CMOS	±8	3.9	50	-40~125
74AHCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	TTL	±8	4.4	50	-40~125
74AHCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	-40~125
74AUP1G18	1-to-2 demultiplexer (3-state)	1.1 - 3.6	CMOS	±1.9	3.2	30	-40~125
74AUP1G19	1-to-2 decoder/demultiplexer	1.1 - 3.6	CMOS	±1.9	3.0	30	-40~125
74HC137	3-to-8 line decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	18	50	-40~125
74HC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 6.0	CMOS	±5.2	12	50	-40~125
74HC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40~125
74HC154	4-to-16 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	11	50	-40~125
74HC237	3-to-8 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	18	50	-40~125
74HC238	3-to-8 decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40~125
74HC42	BCD to decimal decoder (1-of-10)	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HC4511	BCD to 7-segment latch/decoder/driver with lamp test input	2.0 - 6.0	CMOS	-10	28	50	-40~125
74HC4514	4-to-16 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	27	50	-40~125
74HC4515	4-to-16 decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	29	50	-40~125
74HCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	-40~125
74HCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	-40~125
74HCT154	4-to-16 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	-40~125
74HCT238	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	-40~125
74HCT4511	BCD to 7-segment latch/decoder/driver with lamp test input; TTL-enabled	4.5 - 5.5	TTL	-10	28	50	-40~125
74HCT4514	4-to-16 decoder/demultiplexer with address latches; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40~125
74LV138	3-to-8 line decoder/demultiplexer; inverting	1.0 - 5.5	TTL	±12	12	50	-40~125
74LVC138A	3-to-8 line decoder/demultiplexer; inverting	1.2 - 3.6	CMOS/LVTTL	±24	2.7	50	-40~125
74LVC139	Dual 2-to-4 line decoder/demultiplexer	1.2 - 3.6	CMOS/LVTTL	±24	2.5	50	-40~125
74LVC1G18	1-to-2 demultiplexer (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	2.3	50	-40~125
74LVC1G19	1-to-2 decoder/demultiplexer	1.65 - 5.5	CMOS/LVTTL	±32	1.8	50	-40~125
HEF4028B	1-of-10 decoder	3.0 - 15.0	CMOS	±2.4	30	50	-40~85
HEF4543B	BCD to 7-segment latch/decoder/driver with phase input	3.0 - 15.0	CMOS	±2.4	55	50	-40~85
HEF4555B	Dual 1-to-4 line decoder/demultiplexer	3.0 - 15.0	CMOS	±2.4	30	50	-40~85

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	-40~125
74AHC257	Quad 2-input multiplexer (3-state)	2.0 - 5.5	CMOS	±8	50	2.9	-40~125
74AHCT157	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.2	-40~125
74AHCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.7	-40~125
74AUP1G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.2	-40~125
74AUP1G158	Single 2-input multiplexer; inverting	1.1 - 3.6	CMOS	±1.9	30	3.2	-40~125
74AUP2G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.4	-40~125
74AXP1G157	Single 2-input multiplexer	0.7 - 2.75	CMOS	±4.5	5	2.7	-40~85
74HC151	8-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40~125
74HC153	Dual 4-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40~125
74HC157	Quad 2-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	11	-40~125
74HC158	Quad 2-input multiplexer; inverting	2.0 - 6.0	CMOS	±5.2	50	12	-40~125
74HC251	8-input multiplexer (3-state)	2.0 - 6.0	CMOS	±5.2	50	18	-40~125
74HC253	Dual 4-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	17	-40~125
74HC257	Quad 2-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	11	-40~125
74HCT151	8-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40~125
74HCT153	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40~125
74HCT157	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	13	-40~125
74HCT251	8-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	22	-40~125
74HCT253	Dual 4-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	17	-40~125
74HCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	13	-40~125
74LVC157A	Quad 2-input multiplexer	1.2 - 3.6	CMOS/LVTTL	±24	50	2.5	-40~125
74LVC1G157	Single 2-input multiplexer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	-40~125
74LVC257A	Quad 2-input multiplexer (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	-40~125

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)
74HC194	4-bit bidirectional parallel or serial-in/parallel-out shift register	2.0 - 6.0	CMOS	+/- 5.2	14	102	4	-40~125
74AHC164	8-bit serial-in/parallel-out shift register	2.0 - 5.5	CMOS	+/- 8	4.5	115	8	-40~125
74AHCT164	8-bit serial-in/parallel-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 8	3.4	115	8	-40~125
74AHC594	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 5.5	CMOS	+/- 8	4.1	160	8	-40~125
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	-40~125
74AHC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	CMOS	+/- 8	4	170	8	-40~125
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	-40~125
74HC299	8-bit universal shift register (3-state)	2.0 - 6.0	CMOS	+/- 7.8	19	54	8	-40~125

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)
74HC164	8-bit serial-in/parallel-out shift register	2.0 - 6.0	CMOS	+/- 5.2	12	78	8	-40~125
74HCT164	8-bit serial-in/parallel-out shift register; TTL enabled	2.0 - 6.0	TTL	+/- 5.2	12	78	8	-40~125
74HC165	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	CMOS	+/- 5.2	16	56	8	-40~125
74HCT165	8-bit parallel or serial-in/serial-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 4	14	48	8	-40~125
74HC166	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	CMOS	+/- 5.2	15	63	8	-40~125
74HCT166	8-bit parallel or serial-in/serial-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 4.0	23	50	8	-40~125
74HC594	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	CMOS	+/- 7.8	14	109	8	-40~125
74HCT594	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled	4.5 - 5.5	TTL	+/- 6	15	100	8	-40~125
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	-40~125
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	-40~125
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	-40~125
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	-40~125
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	-40~125
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	-40~125
74LV164	8-bit serial-in/parallel-out shift register	1.0 - 5.5	CMOS	+/- 12	12	78	8	-40~125
74LV165	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	CMOS	+/- 12	18	78	8	-40~125
74LV165A	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	CMOS	+/- 12	7.5	115	8	-40~125
74LV595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	1.0 - 3.6	CMOS	+/- 8	15	77	8	-40~125
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	-40~125
74LVC594A	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	CMOS/LVTTL	+/- 24	3.1	180	8	-40~125
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	-40~125
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	-40~125
74VHC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	CMOS	+/- 8	4	170	8	-40~125
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	-40~125
NPIC6C595	8-bit serial-in/parallel-out shift register with output storage register (3-state); open-drain	4.5 - 5.5	CMOS	100	90	10	8	-40~125
NPIC6C596	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state); open-drain	4.5 - 5.5	CMOS	100	90	10	8	-40~125
NPIC6C596A	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state); open-drain	2.3 - 5.5	CMOS	100	90	10	8	-40~125
NPIC6C4894	12-bit shift registers; open-drain	4.5 - 5.5	CMOS	100	90	10	12	-40~125
HEF4014B	8-bit shift register with synchronous parallel enable	4.5 - 15	CMOS	+/- 2.4	40	40	8	-40~85
HEF4015B	dual 4-bit serial-in/parallel-out shift register	4.5 - 15	CMOS	+/- 2.4	40	44	2	-40~85
HEF4021B	8-bit shift register with asynchronous parallel load	4.5 - 15	CMOS	+/- 2.4	40	40	8	-40~85
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	-40~85
HEF4557B	1-to-64 bit shift register with variable length	4.5 - 15	CMOS	+/- 2.4	65	20	64	-40~85
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	-40~85
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	-40~85

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	-40~125
74AHC573	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.2	50	8	-40~125
74AHCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.9	50	8	-40~125
74ALVC162334A	16-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	16	-40~85
74ALVC162834A	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	18	-40~85
74ALVC162835A	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	18	-40~85
74ALVC162836A	20-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	20	-40~85
74ALVC16834A	18-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	18	-40~85
74ALVC16835A	18-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	18	-40~85
74ALVC16836A	20-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	20	-40~85
74ALVC373	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40~85
74ALVC573	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40~85
74ALVCH16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	16	-40~85
74ALVCH16841	20-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.4	50	20	-40~85
74ALVCH16843	18-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	18	-40~85
74ALVCH32973	16-bit transceiver and transparent D-type latch with 8 independent buffers	1.8 - 3.6	TTL	±24	2.5	50	16	-40~85
74ALVT16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	16	-40~85
74AUP1G373	Single D-type transparent latch (3-state)	1.1 - 3.6	CMOS	±1.9	8.5	30	1	-40~125
74AVC16334A	16-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	16	-40~85
74AVC16373	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	16	-40~85
74AVC16834A	18-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	18	-40~85
74AVC16835A	18-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	18	-40~85
74AVC16836A	20-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	20	-40~85
74HC259	8-bit addressable latch	2.0 - 6.0	CMOS	±5.2	18	50	8	-40~125
74HC373	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	12	50	8	-40~125
74HC573	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	8	-40~125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40~125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40~125
74HCT259	8-bit addressable latch; TTL-enabled	4.5 - 5.5	TTL	±4	20	50	8	-40~125
74HCT373	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	14	50	8	-40~125
74HCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	8	-40~125
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	-40~125
74LVC16373A	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40~125
74LVC373A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	8	-40~125
74LVC573A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	8	-40~125
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	-40~125
74LVCH16373A	16-bit D-type transparent latch with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40~125

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)
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	-40~85
74LVT16373A	16-bit D-type transparent latch with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	50	16	-40~85
74LVT573	Octal D-type transparent latch (3-state)	2.7 - 3.6	TTL	-32 / 64	2.7	50	8	-40~85
HEF40373B	Octal D-type transparent latch (3-state)	3.0 - 15.0	CMOS	-50 / 62	40	50	8	-40~85
HEF4043B	Quad R/S latch with set and reset (3-state)	3.0 - 15.0	CMOS	±2.4	25	50	4	-40~85

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)
74AHC1G79	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.5	50	90	-40~125
74AHC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	4.2	50	165	-40~125
74AHC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	185	-40~125
74AHC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.9	50	175	-40~125
74AHC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	130	-40~125
74AHC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.7	50	170	-40~125
74AHCT1G79	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	90	-40~125
74AHCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	120	-40~125
74AHCT374	Octal D-type flip-flop; positive-edge trigger (3-state)	4.5 - 5.5	TTL	±8	4.3	50	140	-40~125
74AHCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	140	-40~125
74AHCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	4.4	50	130	-40~125
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	-40~125
74ALVC374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40~85
74ALVC574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40~85
74ALVC74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.65 - 3.6	TTL	±24	2.3	50	425	-40~85
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	-40~85
74ALVCH16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±24	2.5	50	350	-40~85
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	-40~85
74ALVT162821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±12	3.2	50	150	-40~85
74ALVT162823	18-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	3.0	50	150	-40~85
74ALVT16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	150	-40~85
74ALVT16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.9	50	250	-40~85
74AUP1G175	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	7.4	30	70	-40~125
74AUP1G374	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	CMOS	±1.9	7.9	30	400	-40~125
74AUP1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.2	30	400	-40~125
74AUP1G79	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AUP1G80	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AUP2G79	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	8.5	30	400	-40~125
74AUP2G80	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AVC16374	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS	±12	1.5	30	350	-40~85
74HC107	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	78	-40~125
74HC109	Dual JK-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	75	-40~125
74HC112	Dual JK-type flip-flop with set and reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	66	-40~125
74HC173	Quad D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	17	50	88	-40~125
74HC174	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	99	-40~125
74HC175	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	83	-40~125
74HC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	122	-40~125

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)
74HC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	83	-40~125
74HC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	CMOS	±7.8	13	50	83	-40~125
74HC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	133	-40~125
74HC73	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	77	-40~125
74HC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	14	50	82	-40~125
74HCT107	Dual JK-type flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	73	-40~125
74HCT109	Dual JK-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	61	-40~125
74HCT112	Dual JK-type flip-flop with set and reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	70	-40~125
74HCT173	Quad D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	88	-40~125
74HCT174	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	69	-40~125
74HCT175	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	54	-40~125
74HCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	36	-40~125
74HCT374	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	13	50	48	-40~125
74HCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±6	14	50	53	-40~125
74HCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	15	50	76	-40~125
74HCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	59	-40~125
74LV74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	TTL	±12	11	50	75	-40~125
74LVC16374A	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
74LVC1G175	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.1	50	300	-40~125
74LVC1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.5	50	280	-40~125
74LVC1G79	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	450	-40~125
74LVC1G80	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	450	-40~125
74LVC273	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	6.0	50	230	-40~125
74LVC2G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.5	50	280	-40~125
74LVC374A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	2.7	50	100	-40~125
74LVC377	Octal D-type flip-flop with data enable; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	6.0	50	230	-40~125
74LVC574A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.2	50	150	-40~125
74LVC74A	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	2.5	50	250	-40~125
74LVC823A	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	5.4	50	150	-40~125
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/ LVTTTL	±24	3.8	50	150	-40~125
74LVCH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
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	-40~85
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	-40~85
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	-40~85
HEF4013B	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15.0	CMOS	±2.4	30	50	40	-40~85
HEF40175B	Quad D-type flip-flop with reset; positive-edge trigger	3.0 - 15.0	CMOS	±2.4	25	50	45	-40~85
HEF4027B	Dual JK-type flip-flop	3.0 - 15.0	CMOS	±2.4	30	50	30	-40~85

Synchronous interface logic

FIFO registers

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)
74HC40105	4-bit x 16-word FIFO register	2.0 - 6.0	CMOS	±5.2	15	50	30	-40~125

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)
74AHC1G4210	10-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	17	15	125	-40~125
74AHC1G4212	12-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	20	15	125	-40~125
74AHC1G4214	14-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	23	15	125	-40~125
74HC160	Presetable synchronous BCD decade counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	18	50	55	-40~125
74HC161	Presetable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	19	50	48	-40~125
74HCT161	Presetable synchronous 4-bit binary counter; asynchronous reset; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	41	-40~125
74HCT163	Presetable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	50	-40~125
74HC191	Presetable synchronous 4-bit binary up/down counter	2.0 - 6.0	±5.2	CMOS	22	50	36	-40~125
74HC193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks	2.0 - 6.0	±5.2	CMOS	20	50	49	-40~125
74HCT193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	43	-40~125
74HC390	Dual decade ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	60	-40~125
74HCT390	Dual decade ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	18	50	55	-40~125
74HC393	Dual 4-bit binary ripple counter	2.0 - 6.0	±5.2	CMOS	12	50	107	-40~125
74HCT393	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	53	-40~125
74HC4017	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	±5.2	CMOS	18	50	77	-40~125
74HCT4017	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	±4.0	TTL	21	50	67	-40~125
74HC4020	14-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	11	50	52	-40~125
74HCT4020	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	15	50	52	-40~125
74HC4040	12-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40~125
74HCT4040	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	16	50	79	-40~125
74HC4060	14-stage binary ripple counter with oscillator	2.0 - 6.0	±5.2	CMOS	31	50	95	-40~125
74HCT4060	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	±4.0	TTL	31	50	88	-40~125
74HC4520	Dual 4-bit synchronous binary counter	2.0 - 6.0	±5.2	CMOS	24	50	64	-40~125
74HCT4520	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	24	50	64	-40~125
74HCS555	Programmable delay timer with oscillator	2.0 - 6.0	-0.8	CMOS	89	50	24	-40~125
74HC6323	Programmable ripple counter with oscillator (3-state)	2.0 - 6.0	±7.8	CMOS	17	50	100	-40~125
74HCT6323	Programmable ripple counter with oscillator (3-state); TTL-enabled	4.5 - 5.5	±4.0	TTL	17	50	85	-40~125
74HC40103	8-bit synchronous binary down counter	2.0 - 6.0	±5.2	CMOS	15	50	14	-40~125
74HC4024	7-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40~125
74HC590	8-bit binary counter with output register (3-state)	2.0 - 6.0	±5.2	CMOS	19	50	61	-40~125
74LV393	Dual 4-bit binary ripple counter	1.0 - 3.6	±6	TTL	12	50	90	-40~125
74LV4020	14-stage binary ripple counter	1.0 - 5.5	±6	TTL	16	50	100	-40~125
74LV4060	14-stage binary ripple counter with oscillator	1.0 - 5.5	±6	TTL	29	50	100	-40~125

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)
74LVC161	Presetable synchronous 4-bit binary counter; asynchronous reset	1.2 - 3.6	±24	CMOS/LVTTL	4.9	50	200	-40~125
74LVC163	Presetable synchronous 4-bit binary counter; synchronous reset	1.2 - 3.6	±24	CMOS/LVTTL	4.9	50	200	-40~125
HEF4017B	Johnson decade counter with 10 decoded outputs	3.0 - 15	±2.4	CMOS	40	50	30	-40~85
HEF4020B	14-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	35	-40~85
HEF4024B	7-stage binary ripple counter	3.0 - 15	±2.4	CMOS	30	50	35	-40~85
HEF4040B	12-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	50	-40~85
HEF4060B	14-stage binary ripple counter with oscillator	3.0 - 15	±2.4	CMOS	50	50	30	-40~85
HEF4518B	Dual BCD counter	3.0 - 15	±2.4	CMOS	40	50	40	-40~85
HEF4520B	Dual 4-bit synchronous binary counter	3.0 - 15	±2.4	CMOS	15	50	40	-40~85
HEF4521B	24-stage frequency divider and oscillator	3.0 - 15	±2.4	CMOS	220	50	35	-40~85
HEF4541B	Programmable timer	3.0 - 15	-4/2.7	CMOS	38	50	150	-40~85

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	-40~125
74AHCT123A	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	-40~125
74HC123	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±7.8	9.0	50	-40~125
74HCT123	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125
74HCT221	dual non-retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	32	50	-40~125
74HC423	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±5.2	23	50	-40~125
74HCT423	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125
74HC4538	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	CMOS	±5.2	27	50	-40~125
74HCT4538	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40~125
74LV123	Dual retriggerable monostable multivibrator with reset	1.0 - 5.5	TTL	±12	20	50	-40~125
74LVC1G123	Single retriggerable monostable multivibrator	1.65 - 5.5	CMOS/LVTTL	±32	3.5	50	-40~125
HEF4047B	Monostable/astable multivibrator	3.0 - 15	CMOS	±2.4	50	50	-40~85
HEF4528B	Dual retriggerable monostable multivibrator with reset	3.0 - 15	CMOS	±2.4	40	50	-40~85
HEF4538B	Dual retriggerable precision monostable multivibrator	3.0 - 15	CMOS	±2.4	60	50	-40~85

Phase-locked loops

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)
74HC4046A	Phase-locked loop with VCO	3.0 - 6.0	CMOS	±5.2	18	50	21	-40~125
74HCT4046A	Phase-locked loop with VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40~125
74HCT9046A	Phase-locked loop with bandgap controlled VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40~125
HEF4046B	Phase-locked loop with VCO	3.0 - 15.0	CMOS	±2.4		50	2.7	-40~125

AND Gates

Types in **bold** represent new products

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	-40~85
74AHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74AHC1G08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC1G09	Single 2-input AND gate; open drain	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC2G08	Dual 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	2	-40~125
74AHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
74AHCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
74AHCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40~125
74ALVC08	Quad 2-input AND gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.0	50	145	4	-40~85
74AUP1G08	Single 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30	70	1	-40~125
74AUP1G09	Single 2-input AND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	1	-40~125
74AUP1G11	Single 3-input AND gate	1.1 - 3.6	CMOS	±1.9	6.9	30	70	1	-40~125
74AUP1T08	Single supply 2-input voltage-translating AND gate	2.3 - 3.6	CMOS	±4	3.6	15	70	1	-40~125
74AUP2G08	Dual 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30	70	2	-40~125
74AXP1G08	Single 2-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74AXP1G09	Single 2-input AND gate with open-drain output	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74AXP1G11	Single 3-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC08	Quad 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HC11	Triple 3-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50	36	3	-40~125
74HC1G08	Single 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	1	-40~125
74HC21	Dual 4-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50	36	2	-40~125
74HC2G08	Dual 2-input AND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	4	-40~125
74HCT11	Triple 3-input AND gate	4.5 - 5.5	TTL	±4	11	50	36	3	-40~125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±2	11	50	36	1	-40~125
74HCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50	36	2	-40~125
74LV08	Quad 2-input AND gate	1.0 - 5.5	TTL	±12	7.0	50	30	4	-40~125
74LV1T08	Single supply 2-input translating AND gate	1.6 - 5.5	CMOS	±8	13.4	15	60	1	-40~125
74LVC08A	Quad 2-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	2.1	50	150	4	-40~125
74LVC11	Triple 3-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	3.7	50	150	3	-40~125
74LVC1G08	Single 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50	150	1	-40~125
74LVC1G11	Single 3-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.6	50	150	1	-40~125
74LVC2G08	Dual 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50	150	2	-40~125
74LVT08	Quad 2-input AND gate	2.7 - 3.6	TTL	-20 / 32	3.4	50	150	4	-40~85
74VHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74VHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
HEF4073B	Triple 3-input AND gate	3.0 - 15	CMOS	±2.4	20	50	10	3	-40~85
HEF4081B	Quad 2-input AND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85
HEF4082B	Dual 4-input AND gate	3.0 - 15	CMOS	±2.4	25	50	10	2	-40~85
XC7SET08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
XC7SH08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125

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	-40~125
74AUP1G3208	Single 3-input OR-AND gate	1.1 - 3.6	CMOS	±1.9	7.4	30	70	1	-40~125
74AUP1G885	Dual function gate	1.1 - 3.6	CMOS	±1.9	7.6	30	70	1	-40~125
74AUP1Z04	Crystal driver with enable and internal resistor	1.1 - 3.6	CMOS	±1.9	5.6	30	70	1	-40~125
74AUP1Z125	Crystal driver with enable and internal resistor (3-state)	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40~125
74AUP2G0604	Inverter with open drain and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	2	-40~125
74AUP2G3404	Buffer and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	2	-40~125
74AUP2G3407	Buffer and buffer with open drain	1.1 - 3.6	CMOS	±1.9	4.1	30	70	2	-40~125
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 - 3.6	CMOS	±4	3.8	15	70	2	-40~125
74AUP3G0434	Dual inverter and single buffer	1.1 - 3.6	CMOS	±1.9	4.0	30	70	3	-40~125
74AUP3G3404	Dual buffer and single inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	3	-40~125
74LVC1GX04	Crystal driver	1.65 - 5.5	CMOS / LVTTTL	±24	2.8	50	150	1	-40~125
HEF4007UB	Dual complementary pair and inverter	3.0 - 15	CMOS	±3.4	15	50	10	2	-40~85

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	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40~125
74AUP1G3208	Configurable multiple function gate	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP2G57	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	8.4	50	150	1	-40~125

EXCLUSIVE-NOR Gates

Types in **bold** represent new products

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	3.9	15	70	-40~125
74LV1T87	Single supply 2-input translating EXCLUSIVE-NOR gate	1.6 - 5.5	CMOS	±8	15.8	15	60	-40~125
HEF4077	Quad 2-input EXCLUSIVE-NOR gate	3.0 - 15	CMOS	±2.4	30	50	10	-40~85

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	-40~125
74AHCT1G86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	4	-40~125
74AHCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.4	50	60	4	-40~125
74AUP1G386	Single 3-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	8.6	30	70	1	-40~125
74AUP1G86	Single 2-input Exclusive-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	1	-40~125
74AUP1T86	Single supply 2-input translating EXCLUSIVE-OR gate	2.3 - 3.6	CMOS	±1.9	3.8	15	70	1	-40~125
74AUP2G86	Dual 2-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	2	-40~125
74AXP1G86	Single 2-input Exclusive-OR gates	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74HC1G86	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±2.6	9.0	50	36	1	-40~125
74HCT1G86	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50	36	1	-40~125
74HC2G86	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT2G86	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	11	50	36	2	-40~125
74HC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50	36	4	-40~125
74LV1T86	Single supply 2-input translating EXCLUSIVE-OR gate	1.6 - 5.5	CMOS	±8	13.3	15	60	1	-40~125
74LVC1G386	Single 3-Input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	4.5	50	150	1	-40~125
74LVC1G86	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	150	1	-40~125
74LVC2G86	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.3	50	150	2	-40~125
74LVC86	Quad 2-input EXCLUSIVE-OR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.0	50	150	4	-40~125
HEF4030B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~85
HEF4070B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~85
XC7SET86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
XC7SH86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	1	-40~125

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	-40~85
74ABT20	Dual 4-input NAND gate	4.5 - 5.5	TTL	-15 / 20	2.7	50	100	2	-40~85
74AHC00	Quad 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	4	-40~125
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40~125
74AHC1G00	Single 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	1	-40~125
74AHC2G00	Dual 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	2	-40~125
74AHCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	4	-40~125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40~125

NAND Gates

Types in **bold** represent new products

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)
74AHCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
74AHCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40~125
74AUP1T00	Single supply 2-input voltage-translating NAND gate	2.3 - 3.6	CMOS	±1.9	3.7	15	70	1	-40~125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40~125
74AXP1G00	Single 2-input NAND gate	0.7 - 2.75	CMOS	±4.5	2.7	5	70	1	-40~85
74AXP1G10	Single 3-input NAND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40~125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40~125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	3.4	50	175	4	-40~125
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	3.0	50	10	4	-40~85
74AHC30	8-input NAND gate	2.0 - 5.5	CMOS	±8	3.6	50	60	1	-40~125
74AHCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
74ALVC00	Quad 2-input NAND gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.1	50	145	4	-40~85
74AUP1G00	Single 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40~125
74AUP1G132	Single 2-input NAND gate Schmitt trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	1	-40~125
74AUP1G38	Single 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	1	-40~125
74AUP2G00	Dual 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40~125
74AUP2G38	Dual 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	2	-40~125
74HC00	Quad 2-input NAND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HC03	Quad 2-input NAND gate; open drain	2.0 - 6.0	CMOS	5.2	8.0	50	36	4	-40~125
74HC10	Triple 3-input NAND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	3	-40~125
74HC1G00	Single 2-input NAND gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40~125
74HC20	Dual 4-input NAND gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	2	-40~125
74HC2G00	Dual 2-input NAND gate	2.0 - 6.0	CMOS	±5.6	9.0	50	36	2	-40~125
74HC30	8-input NAND gate	2.0 - 6.0	CMOS	±5.2	12	50	36	1	-40~125
74HCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	4	-40~125
74HCT03	Quad 2-input NAND gate; TTL-enabled; open drain	4.5 - 5.5	TTL	±4	10	50	36	4	-40~125
74HCT10	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	3	-40~125
74HCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±2	10	50	36	1	-40~125
74HCT20	Dual 4-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	36	2	-40~125
74HCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40~125
74HCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	1	-40~125
74LV00	Quad 2-input NAND gate	1.0 - 5.5	TTL	±12	7	50	30	4	-40~125
74LV03	Quad 2-input NAND gate; TTL-enabled; open drain	1.0 - 5.5	TTL	±12	8.0	50	30	4	-40~125
74LV1T00	Single supply 2-input translating NAND gate	1.6 - 5.5	CMOS	±8	3.1	15	60	1	-40~125
74LVC00A	Quad 2-input NAND gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50	150	4	-40~125
74LVC10A	Triple 3-input NAND gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.9	50	150	3	-40~125
74LVC1G00	Single 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	175	1	-40~125
74LVC1G10	Single 3-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50	175	1	-40~125
74LVC1G38	Single 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTTL	32	2.3	50	175	1	-40~125
74LVC2G00	Dual 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	175	2	-40~125
74LVC2G38	Dual 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTTL	32	2.1	50	175	2	-40~125
74LVC30A	8-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	24	3.6	50	175	1	-40~125
HEF4011B	Quad 2-input NAND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85

NOR Gates

Types in **bold** represent new products

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	-40~125
74AHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50	60	4	-40~125
74AHC1G02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
74ALVC02	Quad 2-input NOR gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.2	50	150	4	-40~85
74AUP1G02	Single 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40~125
74AUP1T02	Single supply 2-input voltage-translating NOR gate	2.3 - 3.6	CMOS	±1.9	3.6	15	70	1	-40~125
74AUP2G02	Dual 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40~125
74AXP1G02	Single 2-input NOR gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC02	Quad 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	9.0	50	36	4	-40~125
74HC1G02	Single 2-input NOR gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40~125
74HCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	9.0	50	36	1	-40~125
74HC27	Triple 3-input NOR gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	3	-40~125
74HCT27	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	3	-40~125
74HC2G02	Dual 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40~125
74HC4002	Dual 4-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT4002	Dual 4-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	2	-40~125
74LV02	Quad 2-input NOR gate	1.0 - 5.5	TTL	±12	6.0	50	30	4	-40~125
74LV1T02	Single supply 2-input translating NOR gate	1.6 - 5.5	CMOS	±8	3.2	15	60	1	-40~125
74LVC02A	Quad 2-input NOR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50	150	4	-40~125
74LVC1G02	Single 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.1	50	150	1	-40~125
74LVC1G27	Single 3-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50	150	1	-40~125
74LVC2G02	Dual 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	150	2	-40~125
74LVT02	Quad 2-input NOR gate	2.7 - 3.6	TTL	-20 / 32	2.8	50	150	4	-40~85
74VHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50	60	4	-40~125
74VHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50	60	4	-40~125
HEF4001B	Quad 2-input NOR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85
HEF4002B	Dual 4-input NOR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85
XC7SET02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
XC7SH02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125

OR Gates

Types in **bold** represent new products

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	-40~85
74AHC1G32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHCT1G32	Single 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
74AHC2G32	Dual 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	2	-40~125
74AHCT2G32	Dual 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50	60	2	-40~125
74AHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74AHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
74ALVC32	Quad 2-input OR gate	1.65 - 3.6	CMOS/LVTTL	±24	2.0	50	150	4	-40~125
74AUP1G32	Single 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30	70	1	-40~125
74AUP1G332	Single 3-input OR gate	1.1 - 3.6	CMOS	±1.9	6.8	30	70	1	-40~125
74AUP1T32	Single supply 2-input voltage-translating OR gate	2.3 - 3.6	CMOS	±1.9	3.6	15	70	1	-40~125
74AUP2G32	Dual 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30	70	2	-40~125
74AXP1G32	Single 2-input OR gate	0.7 - 2.75	CMOS	±4.5	2.5	5	70	1	-40~85
74HC1G32	Single 2-input OR gate	2.0 - 6.0	CMOS	±2.6	8.0	50	36	1	-40~125
74HCT1G32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50	36	1	-40~125
74HC2G32	Dual 2-input OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT2G32	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	13	50	36	2	-40~125
74HC32	Quad 2-input OR gate	2.0 - 6.0	CMOS	±5.2	6.0	50	36	4	-40~125
74HCT32	Quad 2-input OR gate	4.5 - 5.5	TTL	±4.0	9.0	50	36	4	-40~125
74HC4075	Triple 3-input OR gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	3	-40~125
74HCT4075	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	3	-40~125
74LV1T32	Single supply 2-input translating OR gate	1.6 - 5.5	CMOS	±8	4.4	15	60	1	-40~125
74LVC1G32	Single 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.1	50	150	1	-40~125
74LVC1G332	Single 3-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.6	50	150	1	-40~125
74LVC2G32	Dual 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.2	50	150	2	-40~125
74LVC32A	Quad 2-input OR gate	1.2 - 3.6	CMOS/LVTTL	±24	2.1	50	150	4	-40~125
74VHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74VHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
HEF4071B	Quad 2-input OR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~125
XC7SET32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
XC7SH32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125

Digital comparators

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74HC688	8-bit magnitude comparator	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HCT688	8-bit magnitude comparator; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	-40~125
74HC85	4-bit magnitude comparator	2.0 - 6.0	CMOS	±5.2	23	50	-40~125
74HCT85	4-bit magnitude comparator; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125

Parity generators-checkers

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74HC280	9-bit odd/even parity generator/checker	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HCT280	9-bit odd/even parity generator/checker; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	-40~125

Standard logic functions

74 XXX XXX XXX

Logic family	Function number	Package type
AHC(T)		BQ DQFN
ALVC		BX DQFN
ALVT		D SO
AUP		DB SSOP
AVC(M)		DC VSSOP
CBT(D)		DG TSSOP
CBTLV(D)		DGG TSSOP
HC(T)		DL SSOP
HEF4000B		DP TSSOP
LV		FC BGA
LVC		EV BGA
LVT		GU DQFN
NPIC		P TSSOP
VHC(T)		T SO
XC7		TS SSOP
		TT TSSOP

Mini logic functions

74 XXX XG
XT XXX XXX















Logic family	Gate format	Translator format	Function number	Package type
AHC(T)	1G Single-gate			DC PicoGate
AUP	2G Dual-gate			DP PicoGate
AVC(M)	3G Triple-gate			GD MicroPak
AXP				GF MicroPak
CBT(D)		Translator format		GM MicroPak
CBTLV(D)				GN MicroPak
HC(T)	1T Single-translator			GS MicroPak
LVC	2T Dual-translator			GT MicroPak
XC7	3T Triple-translator			GV PicoGate
	4T Quad-translator			GW PicoGate
				GX MicroPak








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14-pin SMD packages	201
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20-pin SMD packages	203
24-pin SMD packages	204
32-pin SMD packages	205
48-pin SMD packages	205
56-pin SMD packages	205

Package details and packing methods

Package details and packing methods WLCSP

Basic Type	Length x width x height	# of balls	Pitch	Package	Package name
IP4369CX4	0.76 x 0.76 x 0.5	4	0.4		WLCSP4
PMCM440VNE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM4401VNE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM440VPE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM4401VPE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PCMF1USB3S	1.17 x 0.77 x 0.57	5	0.4		WLCSP5
PESD1USB3S	1.17 x 0.77 x 0.57	5	0.4		WLCSP5
SOT1454-1	0.65 x 0.44 x 0.27	6	0.23		WLCSP6
PCMF2USB3S	1.17 x 1.57 x 0.57	10	0.4		WLCSP10
PESD2USB3S	1.17 x 1.57 x 0.57	10	0.4		WLCSP10
PCMF3USB3S	1.17 x 2.37 x 0.57	15	0.4		WLCSP15
PESD3USB3S	1.17 x 2.37 x 0.57	15	0.4		WLCSP15
IP3319CX6	1.34 x 0.95 x 0.57	6	0.4		WLCSP6
IP4340CX15	1.56 x 1.56 x 0.47	15	0.4		WLCSP15

Packing details glass diodes, single ended and through hole packages

Pins/leads	Package	Packing method and tape/reel/tube dimensions	Package	Ordering code (12 NC ending)	Packing quantity
2	SOD27	26 mm tape ammo pack, axial		-143	5000 pcs
		52 mm tape ammo pack, axial		-133	10000 pcs
		52 mm reel pack, axial		-113	10000 pcs
	SOD66	52 mm tape ammo pack, axial		-133	10000 pcs
		52 mm reel pack, axial		-113	10000 pcs
	SOD68	26 mm tape ammo pack, axial		-143	5000 pcs
52 mm reel pack, axial		-113		10000 pcs	
52 mm tape ammo pack, axial		-133		10000 pcs	
3	SOT78 (TO-220)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	1000 pcs
	I2PAK (SOT226)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	1000 pcs

Package cross reference list

Type	Competitor	Nexperia	Pins/Leads
μ8FL	OnSemi	LFPAK33 (SOT1210)	8
μQFN-10L	ST	DFN2510A-10 (SOT1176)	10
μQFN-2L	ST	DFN1006-2 (SOD882)	2
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/ CMAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
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 3	ON Semi	D2PAK (SOT404)	3
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK-3	OnSemi	D2PAK (SOT404)	3
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
DFN-5	OnSemi	LFPAK56 (SOT669)	4
DFN-8	OnSemi	LFPAK56D (SOT1205)	8
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
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
EMD2	Rohm	SOD523	2
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
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

Type	Competitor	Nexperia	Pins/Leads
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	OnSemi	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
LFPAK56, HSON-8	Renesas	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
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	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1*	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 1.6 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
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	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

Types with * show footprint compatibility only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
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- DI5060-8	Diodes Inc	LFPAK56E (SOT1023)	4
Power- FLAT (6x5)	ST	LFPAK56E (SOT1023)	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
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDi5	Diodes Inc.	CFP15 (SOT1289)	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 SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPak SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPak SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
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
S08	Vishay	SOT96	8
SC2	Toshiba	DSN0603-2 (SOD962)	2
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	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
SC70-6	Vishay	SOT363	6
SC70-6L	Semtech	SOT363	6

Type	Competitor	Nexperia	Pins/ Leads
SC74 TSOP6	Infineon	SOT457	6
SC-74 TSOP-6	ON Semi	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC-88	ON Semi	SOT363	6
SC88/SC 7 0-6/SOT 363 6 LEAD	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC89-3	Fairchild	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Vishay	DFN1006-3 (SOT883)	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
SGP0603P2X3	Semtech	DFN0603-2 (SOD972E)	2
SL2	Toshiba	DFN0603-2 (SOD972E)	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
SLP1510N6	Semtech	DFN1410-6 (SOT886)	6
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1610P4	Semtech	DFN2510A-10 (SOT1176)	10
SLP1616P6	Semtech	DFN1616-6 (SOT1189)	6
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
SMD TO-263	Renesas	D2PAK (SOT404)	3
SMD0402	Rohm	DSN0402-2 (SOD992)	2
SMD6/SMT6	Rohm	SOT457	6
SMD6/SMZ6	Rohm	SOT457	6
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC TO-277A	Vishay	CFP15 (SOT1289)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPAK56 (SOT669)	5

Types with * show footprint compatibility only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
SO-8 FL, DFN-5	ON Semi	LFPAK56E (SOT1023)	4
SO-8FL Dual	OnSemi	LFPAK56D (SOT1205)	8
SO-8FL Dual	OnSemi	LFPAK56 (SOT669)	4
SOD-123	ST	SOD123F	2
SOD-123-FL	ON Semi	SOD123F	2
SOD-123-FL	ON Semi	SOD123W	2
SOD323	Infineon	SOD323	2
SOD323	Semtech	SOD323	2
SOD323	Vishay	SOD323	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ON Semi	SOD323	2
SOD-323	ST	SOD323	2
SOD523	Diodes Inc.	SOD523	2
SOD523	Semtech	SOD523	2
SOD523	Vishay	SOD523	2
SOD-523	ON Semi	SOD523	2
SOD-523	ST	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 3x3*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SOP / DSOP Advance	Toshiba	LFPAK56E (SOT1023)	4
SOP / DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP8	Rohm	SOT96	8
SOP-8	Renesas	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT063*	ON Semi	DFN1010B-6 (SOT1216)	6
SOT-143	Diodes Inc.	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT223	Diodes Inc.	SOT223	4
SOT223	Fairchild	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Vishay	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	Infineon	SOT223	4
SOT-223	ON Semi	SOT223	4
SOT-223	OnSemi	SOT223	4
SOT-223	ST	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

Type	Competitor	Nexperia	Pins/ Leads
SOT-23	Diodes Inc.	SOT23	3
SOT-23	ON Semi	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	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
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	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
SOT-363	Diodes Inc.	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3
SOT523F	Fairchild	DFN1006-3 (SOT883)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Diodes Inc.	SOT89	3
SOT89	Infineon	SOT89	3
SOT-89	ON Semi	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
T0263	Diodes Inc.	D2PAK(SOT404)	3
T0263-3	Infineon	D2PAK (SOT404)	3

Types with * show footprint compatibility only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO220	Infineon	TO-220 (SOT78)	3
TO-220	ST	TO-220 (SOT78)	3
TO-220	Toshiba	TO-220 (SOT78)	3
TO-220	Vishay	TO-220 (SOT78)	3
TO220-3	Diodes Inc.	TO-220 (SOT78)	3
TO-220-3	OnSemi	TO-220 (SOT78)	3
TO-220-3L	OnSemi	TO-220 (SOT78)	3
TO-220AB	Vishay	TO-220 (SOT78)	3
TO-220F-3FS	OnSemi	TO-220 (SOT78)	3
TO-220FM	Rohm	TO-220 (SOT78)	3
TO-220S	Renesas	D2PAK (SOT404)	3
TO-220SM	Toshiba	D2PAK (SOT404)	3
TO262	Infineon	I2PAK (SOT226)	3
TO-262	Renesas	I2PAK (SOT226)	3
TO-262	Vishay	I2PAK (SOT226)	3
TO-262-2L	OnSemi	I2PAK (SOT226)	3
TO-262-3L	OnSemi	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	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-263-2L	OnSemi	D2PAK (SOT404)	3
TO-263AB	Vishay	D2PAK (SOT404)	3
To-LL	Infineon	LFPAK88 (SOT1235)	4
To-LL	ON Semi	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
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	SOT457	6
TSOP6	Vishay	SOT457	6
TSOP-6	Renesas	SOT457	6
TSOP-6/ 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	Competitor	Nexperia	Pins/ Leads
UDFN 1.6 x 1.6	ON Semi	DFN1616-6 (SOT1189)	6
UDFN 1.7 x 1.35, 0.4P	ON Semi	DFN1714U-8 (SOT983)	8
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
U-DFN2020-3 Type B 2.0 x 2.0 x 0.6	Diodes Inc.	DFN2020-3 (SOT1061)	3
U-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	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
US6	Toshiba	SOT363	6
US6/ UF6/ USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
US-Flat	Toshiba	SOD323F	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5
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
V56	Toshiba	SOT457	6
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WDFN-8	OnSemi	LFPK33 (SOT1210)	8
WLCSP 1 x 1*	Fairchild	WLCSP4	3
WLCSP1.6 x 1.6*	AOS	WLCSP6	6
WLCSP2	ON Semi	DSN0603-2 (SOD962)	2
WLCSP-4*	Fairchild	WLCSP4	3
WLCSP-4*	ON Semi	WLCSP4	3
WLL-2-2	Infineon	DSN0402-2 (SOD992)	2
WLL-2-2	Infineon	DSN0402B-2 (SOD992B)	2
WLP1.5x 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
WLPI.Ox 1.0*	Texas Instruments	DFN1010D-3 (SOT1215)	3
WLPI.Ox 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
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
X3-DFN0603-2	Diodes Inc.	DFN0603-2 (SOD972E)	2
X3-DFN0603-2	Diodes Inc.	DSN0603-2 (SOD962)	2
X3DFN2	ON Semi	DFN0603-2 (SOD972E)	2
X3DFN-2	ON Semi	DSN0603-2 (SOD962)	2
XDFN3	ON Semi	DFN1006-3 (SOT883)	3
XI-DFN1006-2	Diodes Inc.	DFN1006-2 (SOD882)	2

Types with * 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
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 (f5C)	(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 (f5C)	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
	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			S-Flat	SOD-123-FL			PowerDI123	SOD-123		
	SOD123W		2.6 x 1.7 x 1.0	900		PMDU	S-Flat	SOD-123-FL	SRP-F		PowerDI123	Stmite flat		
	SOD128		3.8 x 2.5 x 1.0	1000		PMDT	M-Flat					SMA flat		
	SOD323	SC-76	1.7 x 1.25 x 0.95	400			USC	SOD-323	URP	SOD323	SOD-323	SOD-323	SOD323	SOD323
	SOD323F	SC-90	1.7 x 1.25 x 0.7	830		UMD2	US-Flat				PowerDI323			
	SOD523	SC-79	1.2 x 0.8 x 0.6	500		EMD2	ESC/ TESC	SOD-523	UFP	SC79	SOD523	SOD-523	SOD523	SOD523
3	CFP15 (SOT1289)		5.8 x 4.3 x 0.78	1200							PowerDi5		SMPC TO-277A	
	DFN1006-3 (SOT883)	SC-101	1.0 x 0.6 x 0.48	250		VML1006	SS CSP2	XDFN3		TSLP-3-4	X1-DFN1006-3			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	
	D2PAK (SOT404)		11.0 x 11.0 x 4.3			LPDS/ LPTS	TO-220SM D2PAK	D2PAK D2PAK 3 TO-263-2L	TO-220S / SMD TO-263 LDPAK(S)-(1) MP-25Z	D2PAK, PG- T0263-3	T0263 (D2PAK)	D2PAK, H2PAK-2	TO-263 3-lead TO-263AB / D2PAK 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

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	
3	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		
	I2PAK (SOT226)		11 x 10 x 4.3					I2PAK, TO-262-2L, TO-262-3L	MP-25SK, TO-262	PG- TO262-3, TO262		I2PAK	TO-262		
4	LFPAK56 (SOT669)	Power- S08	4.9 x 4.45 x 1.0	3950		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK56, HSOP-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	LFPAK56, HSOP-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					To-LL		To-LL				PowerPAK 8x8L		
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	
	DFN1616-6 (SOT1189)	HXSON6	1.6 x 1.6 x 0.48					UDFN 1.6 x 1.6						LLP75-/L	SLP1616P6
	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	HSOP-8 dual	PG-TD- SON-8	Power Di5060-8	Power FLAT 5x6 Dual	PowerPAK SO-8L Dual		
	SOT96	S08	4.9 x 3.9 x 1.75	1500		SOP8	FM8	SOIC-8 NB	SOP-8				S08		
	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	

Types in brackets (...) show footprint compatibility only

Package cross reference

Package cross reference matrix

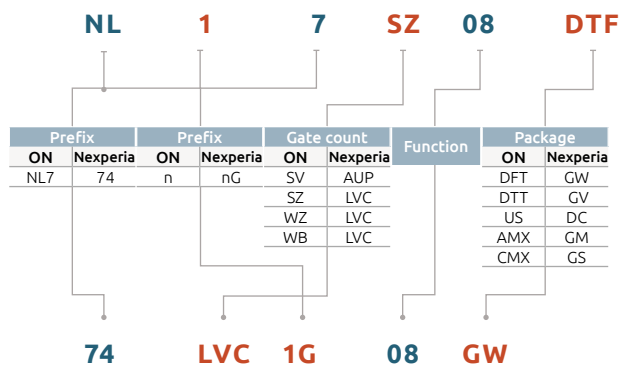
Pins/leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
12	DFN2512-12 (SOT 1158)	HXSON12	2.5 x 1.2 x 0.48					UDFN12, 2.5 x 1.2, 0.4P						
	DFN2514-12 (SOT 1167)	HUSON12	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

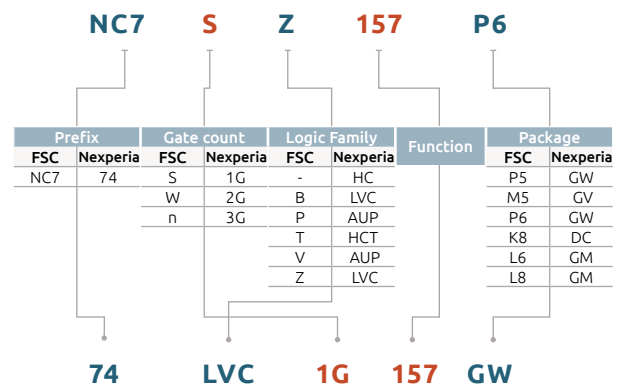
Competitive cross reference - Logic

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.

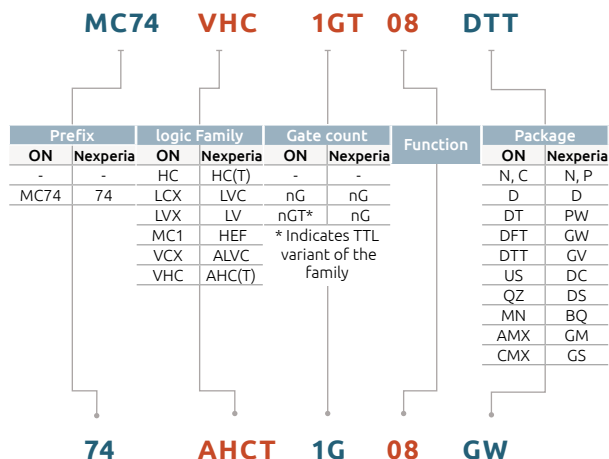
On semiconductor low pin count logic



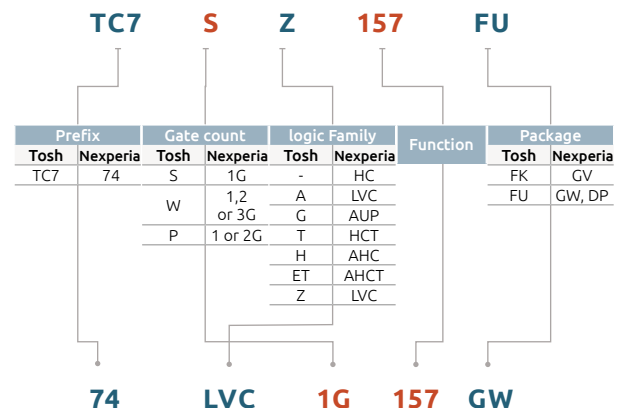
Fairchild semiconductor tiny logic



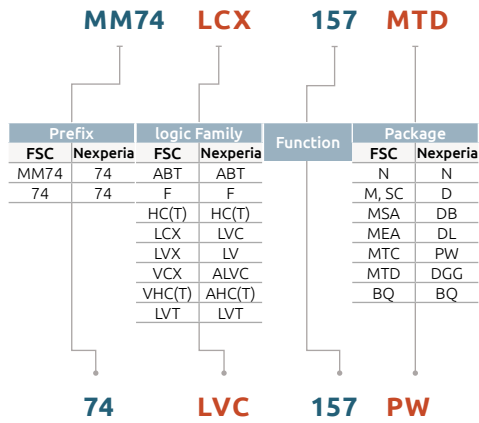
On semiconductors logic



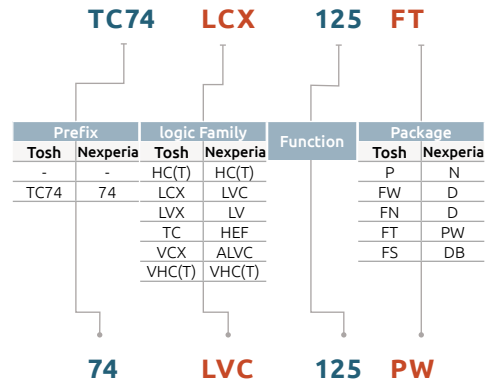
Toshiba one gate



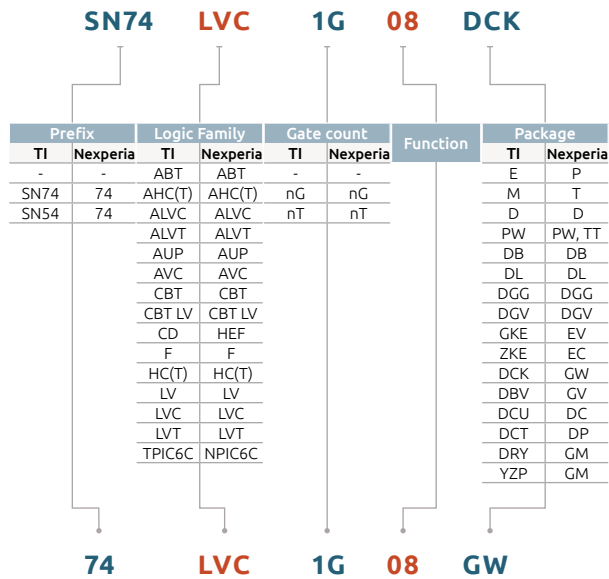
Fairchild semiconductor standard logic



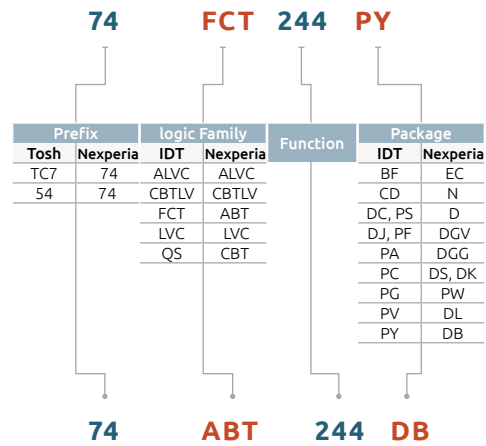
Toshiba standard logic



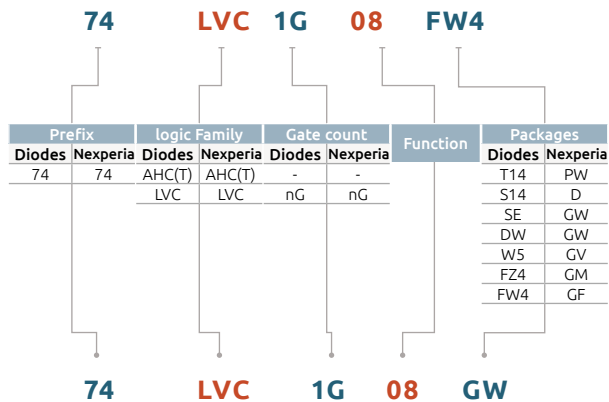
Texas instruments logic



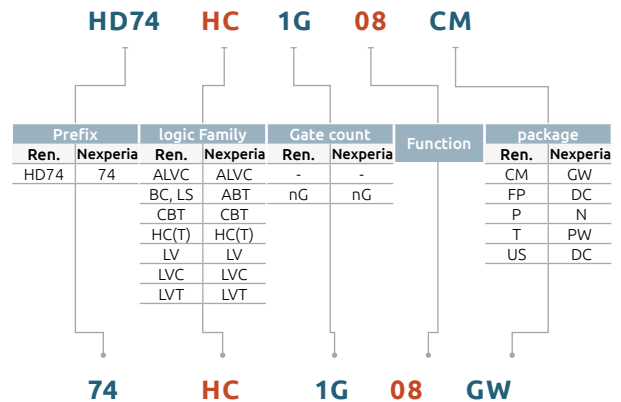
IDT logic



Diodes Inc. logic



Renesas logic



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
			DSN0603-2 (SOD962)	315
			DFN0603-2 (SOD972E)	317
			DSN0402-2 (SOD992)	315
			DSN0402B-2 (SOD992B)	315
			DSN1006-2 (SOD993)	315
			DSN1006U-2 (SOD995)	315
			DSN1608-2 (SOD963&964)	315
			SOD80	115, 135
			SOD123F	115
			CFP3 (SOD123W)	115
		SOD123	115,118	
		CFP5 (SOD128)	115	
		SOD323	115, 135	
	SOD323F	115		
	SOD523	115, 135, 315, 335		

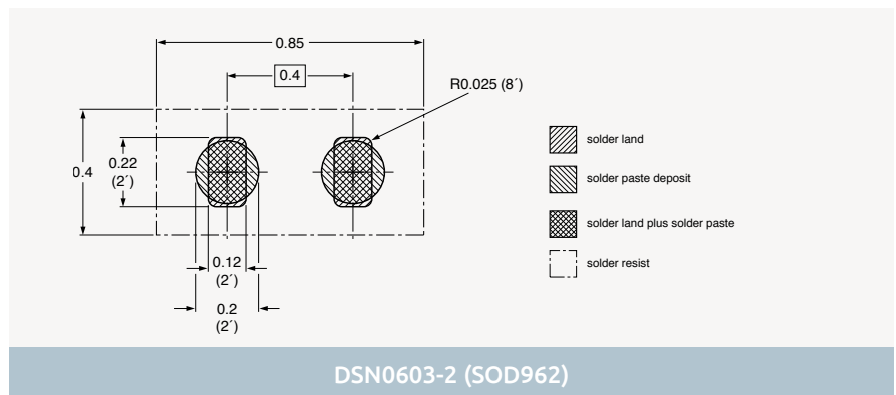
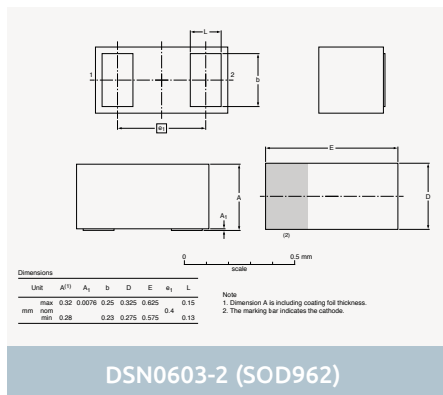
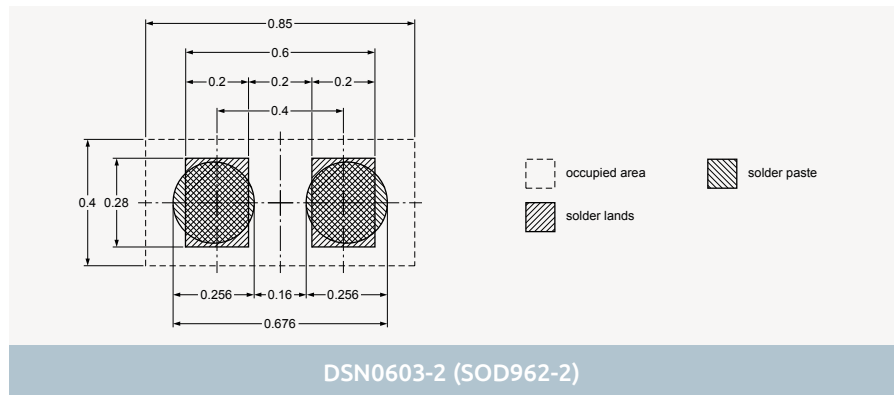
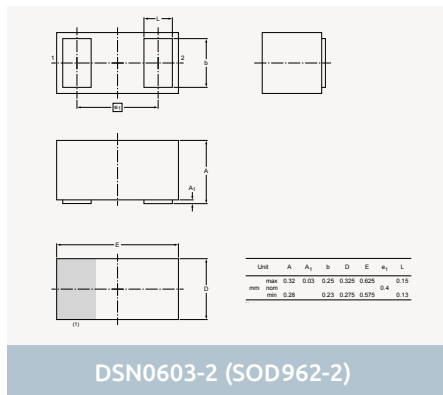
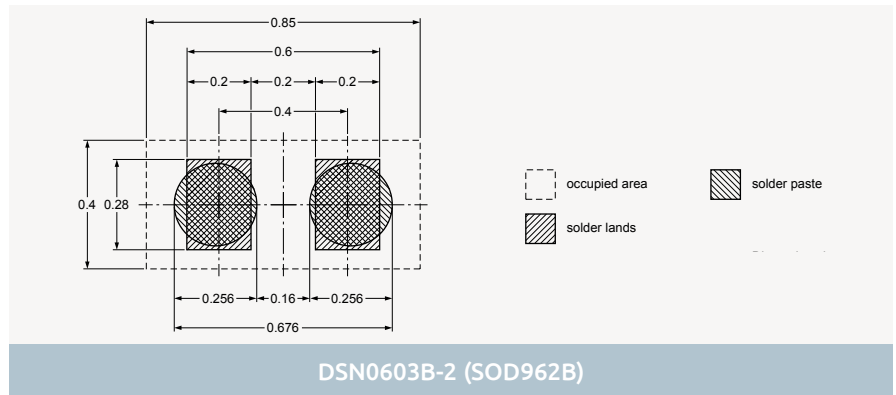
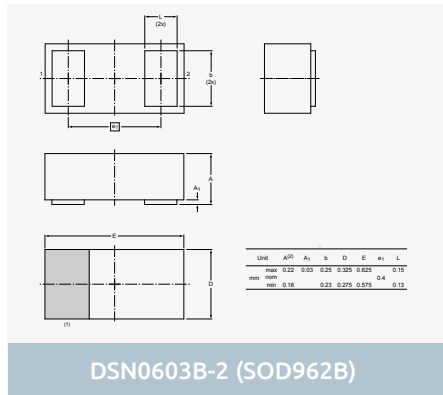
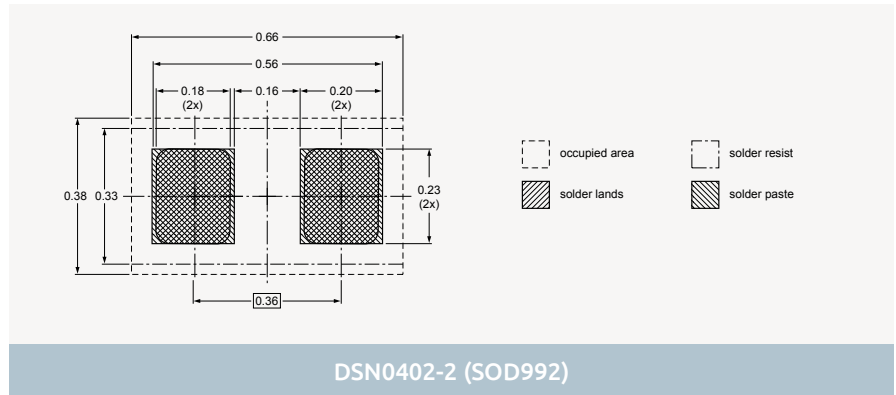
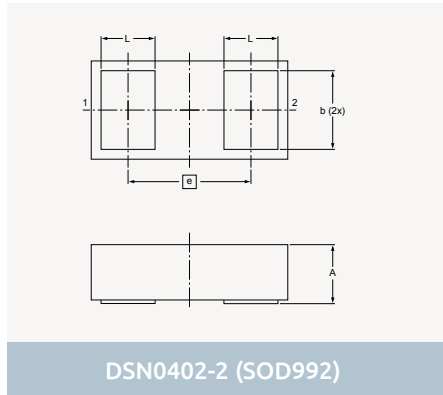
3 pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
			SOT89	146		DFN1010D-3 (SOT1215)	147
						DFN2020-3 (SOT1061)	115, 135
						DFN2020D-3 (SOT1061D)	115,135
						SOT89	115,135
						SOT89	115, 135
				D2PAK (SOT404)	118		
	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
			DFN1006-3 (SOT883)	315		SOT89	147
			DFN1006B-3 (SOT883B)	315		CFP15 (SOT1289)	139, 146
		SOT23	185, 215, 235				
		SOT323	115, 135				
		SOT416	115, 135				

4 pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
			WL CSP4 (0808)	084			
			LFPK56 (SOT669)	115			
			LFPK56E (SOT1023)	115			
			LFPK56-UL2595 (SOT1023A)	115			
			LFPK88 (SOT1235)	118			
	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
			SOT143B	215, 235			
			SOT223	115, 135			
			DFN1010-4 (SOT1194)	115			

5 pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending
			WLCSP5 (1208)	087		SOT353
Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
		SOT753	125			
		X2SON5 (SOT1226)	125			
		UMTS (SOT353-1)	125			
		SOS (SOT753)	125			

6 pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending
			DFN1410-6 (SOT886)	115		DFN1412-6 (SOT1268)
		DFN1616-6 (SOT1189)	115		DFN2020-6 (SOT1118)	115
		DFN2020MD-6 (SOT1220)	184		DFN2020D-6 (SOT1118D)	115
		LFPK33 (SOT1210)	115		DFN2020MD-6 (SOT1220)	115
		LFPK56D (SOT1205)	115		SOT363	115, 135
		WLCSP6 (1510)	023		SOT457	115, 135
		XSON6 (SOT1202)	125		X2SON6 (SOT1255)	147
		XSON6 (SOT886)	125		DFN0606B-6	147
Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
		DFN1010-6 (SOT891)	132		DFN0606 (SOT8001)	147
		DFN1010E-6 (SOT1202)	132			
		DFN1410-6 (SOT886)	132			
		DFN2020MD-6 (SOT1220)	125			
		SOT363	125, 165			
		SOT457	125, 165			
		XSON6 (SOT891)	125			
		SC-88 (SOT363)	125			
		SC-74 (SOT457)	125			

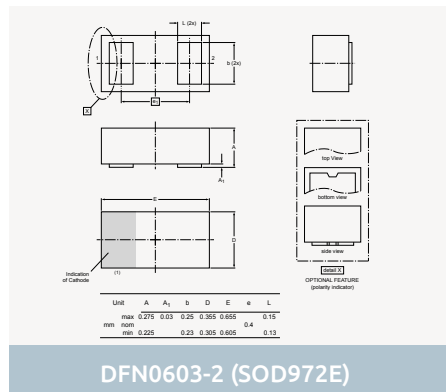
2-pin SMD packages



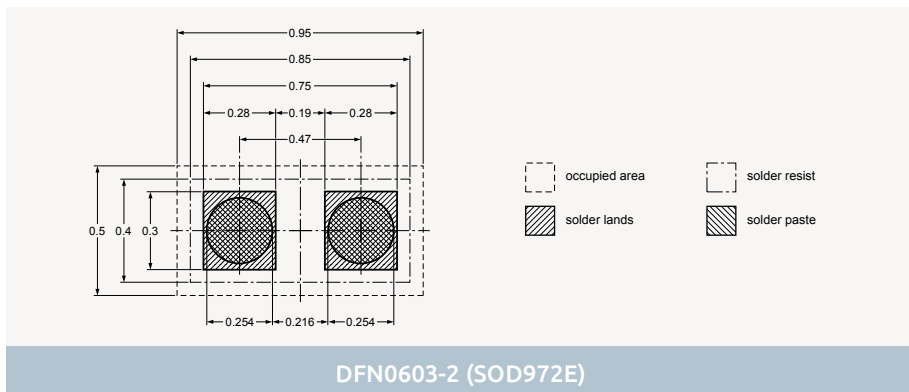
Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

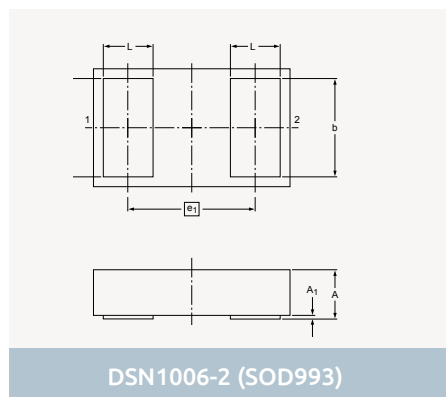
2-pin SMD packages



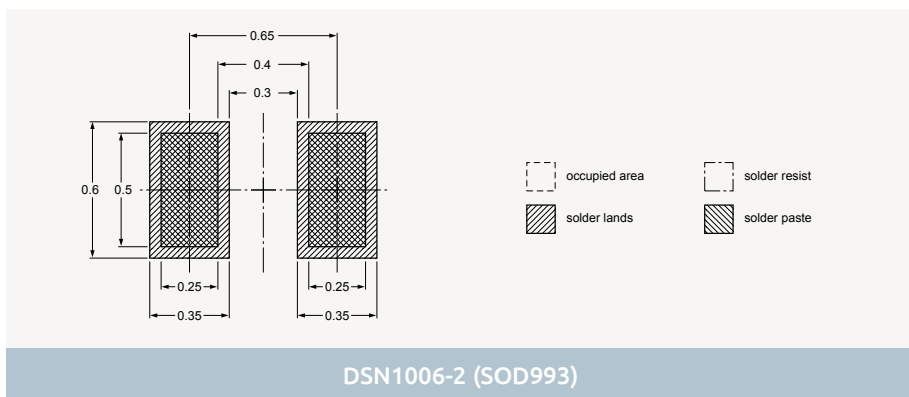
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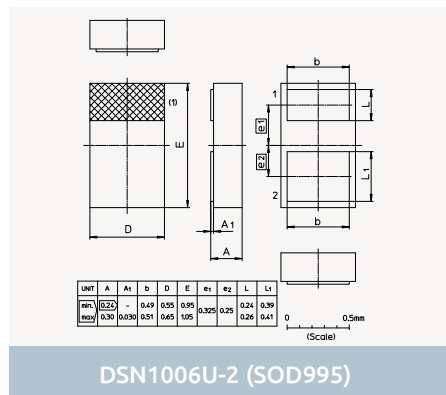
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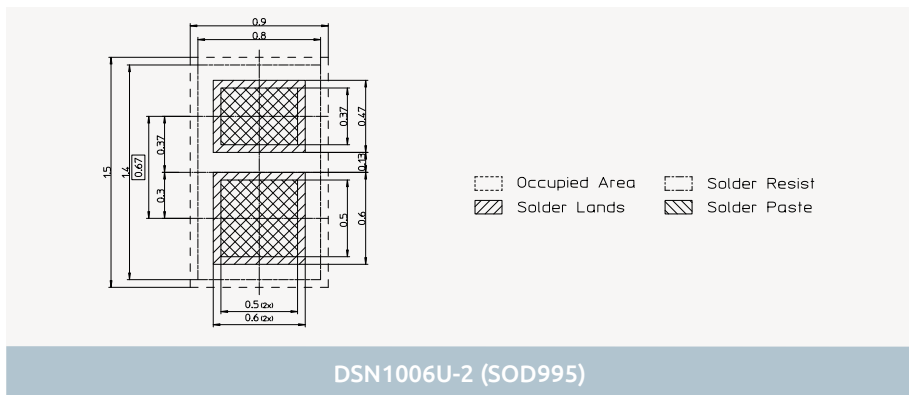
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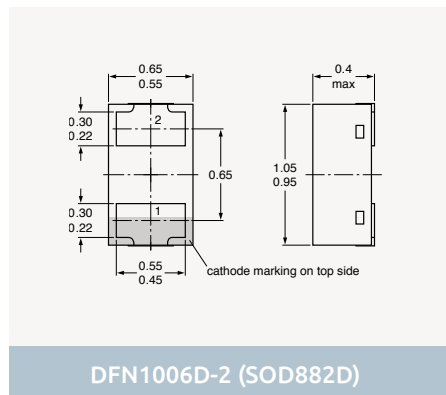
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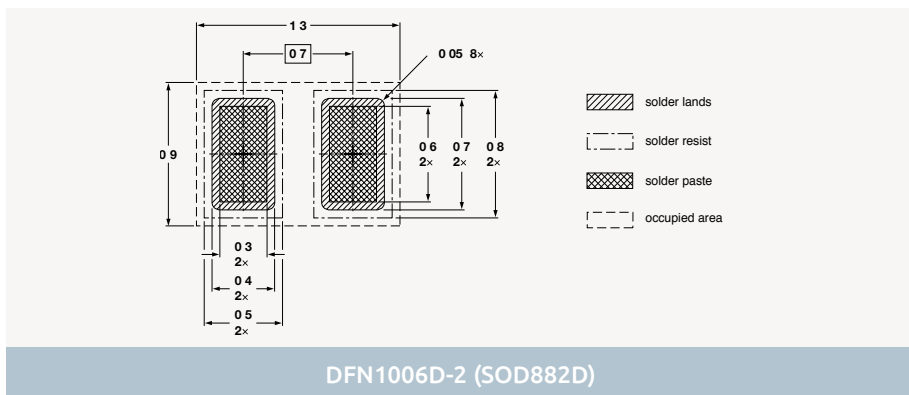
DSN1006U-2 (SOD995)



DSN1006U-2 (SOD995)



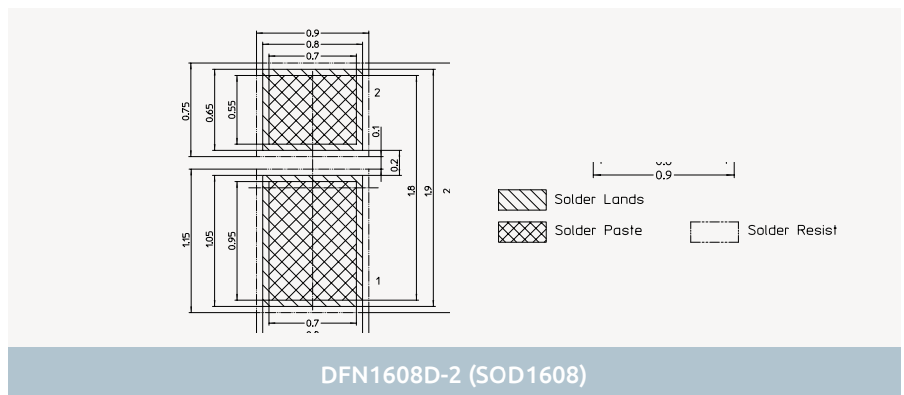
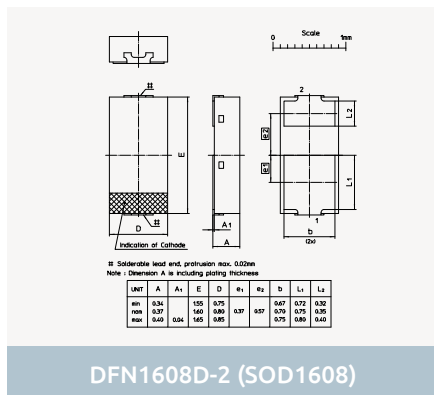
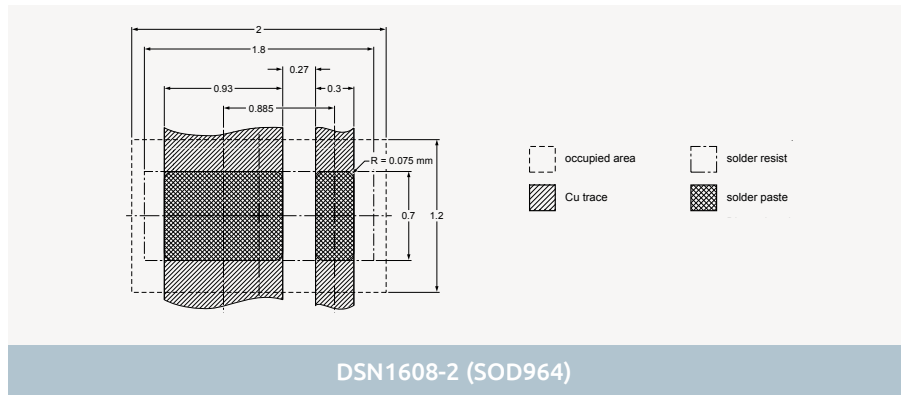
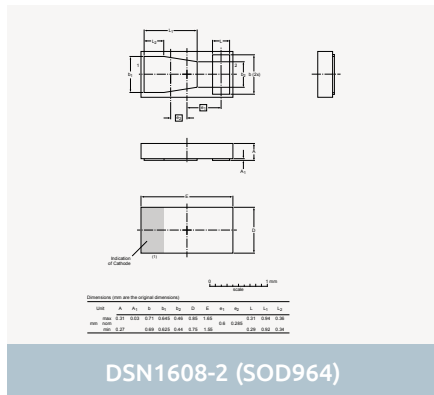
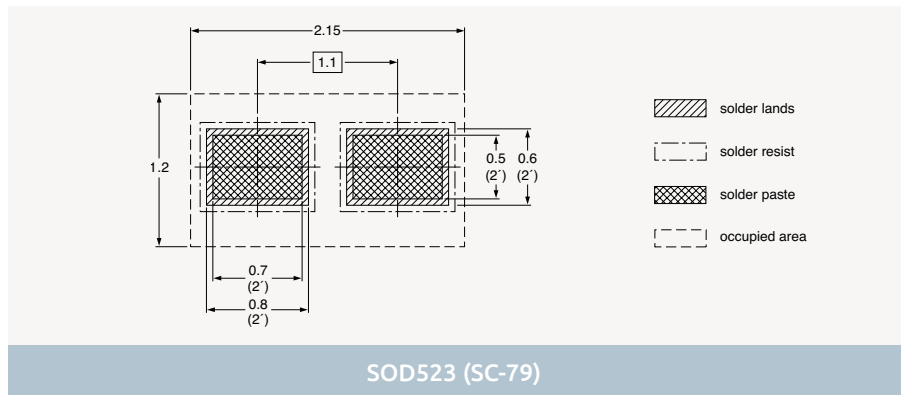
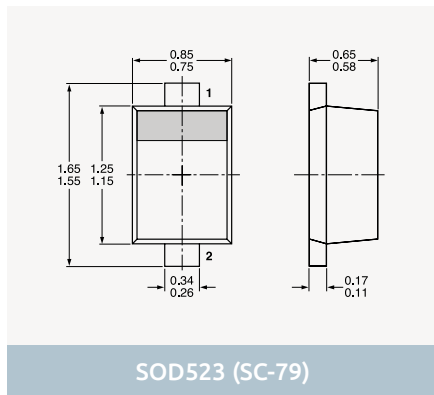
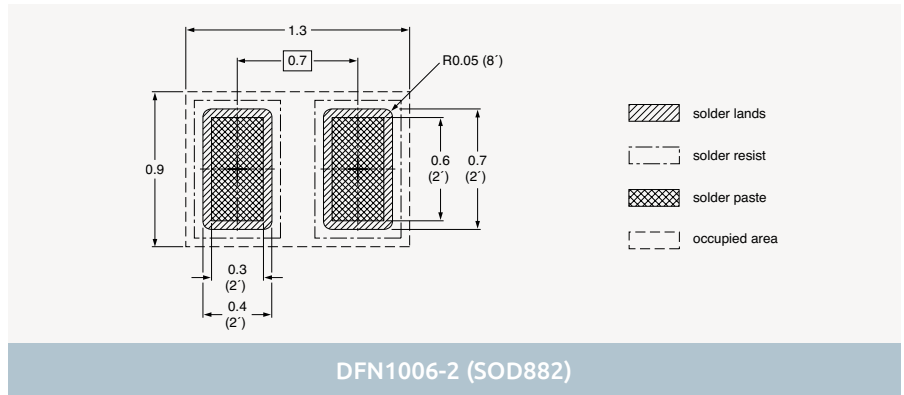
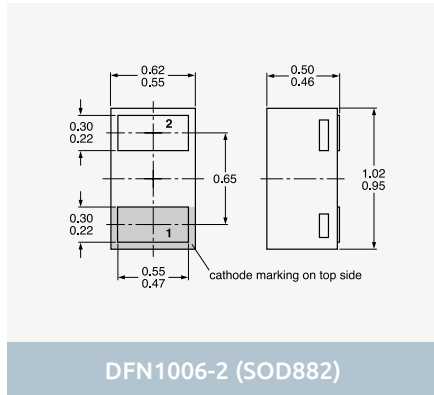
DFN1006D-2 (SOD882D)



DFN1006D-2 (SOD882D)

Dimensions in mm

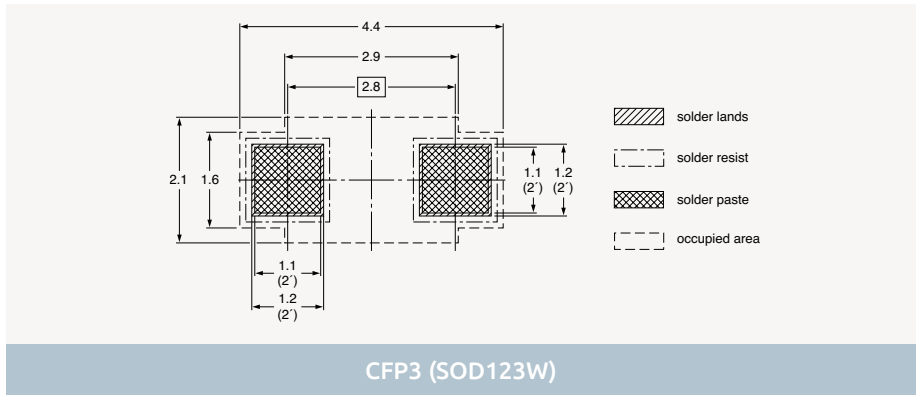
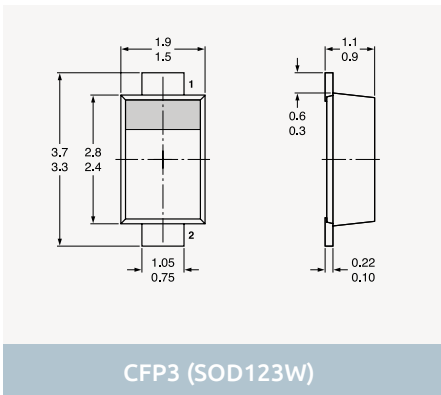
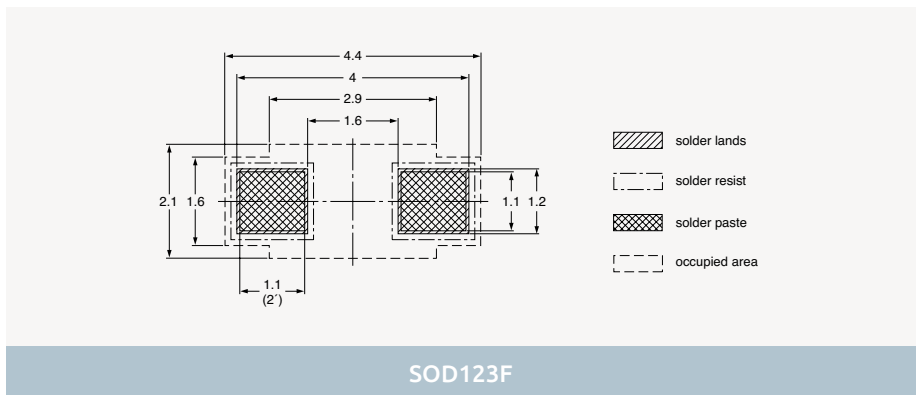
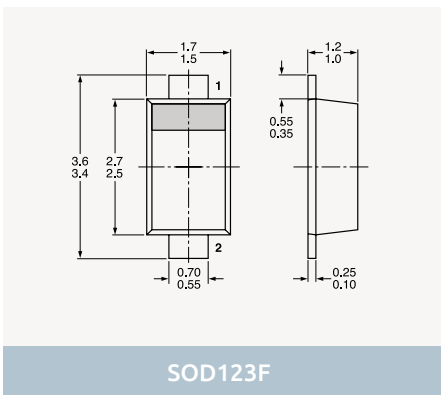
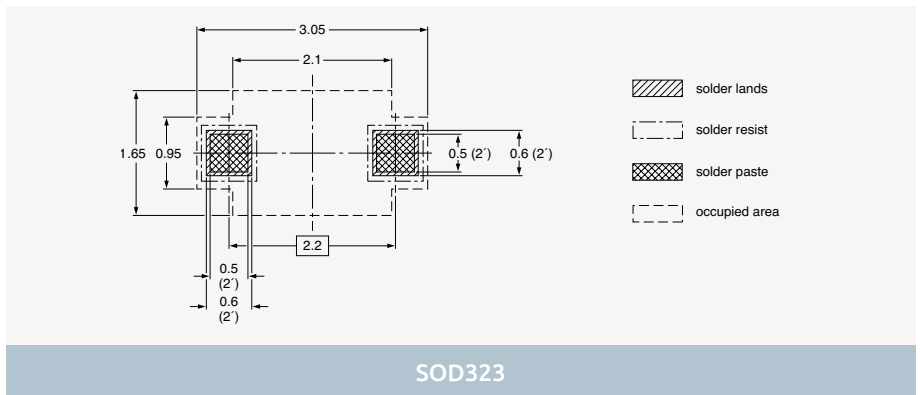
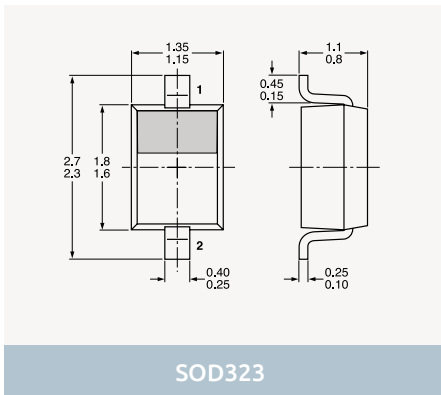
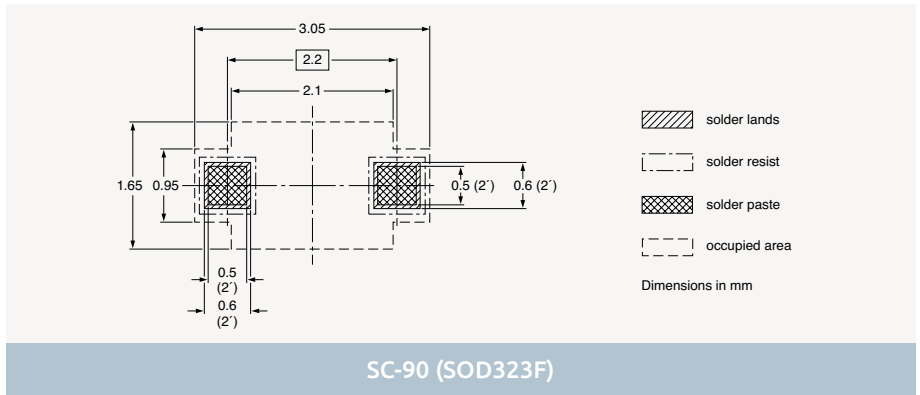
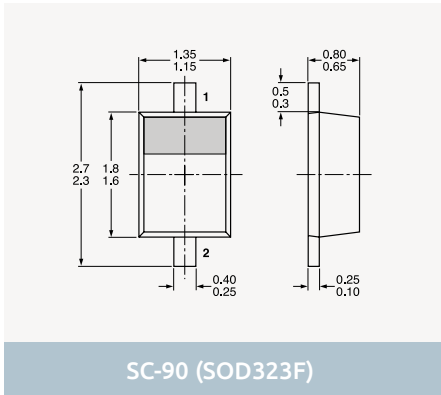
2-pin SMD packages



Dimensions in mm

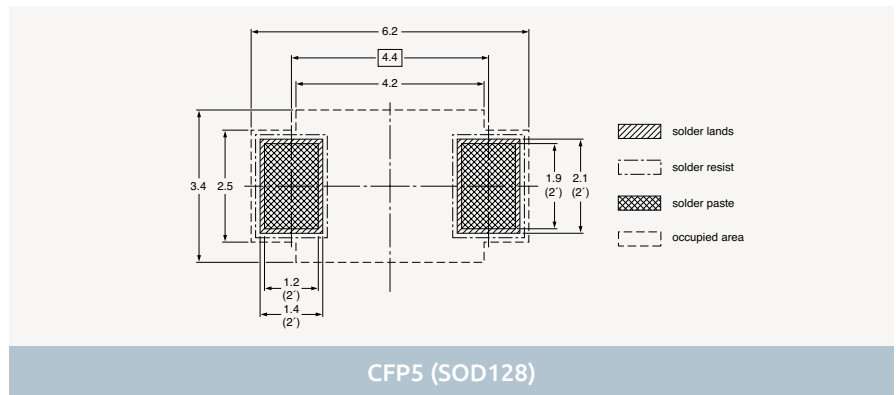
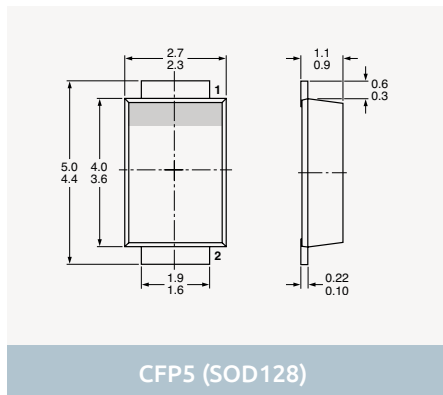
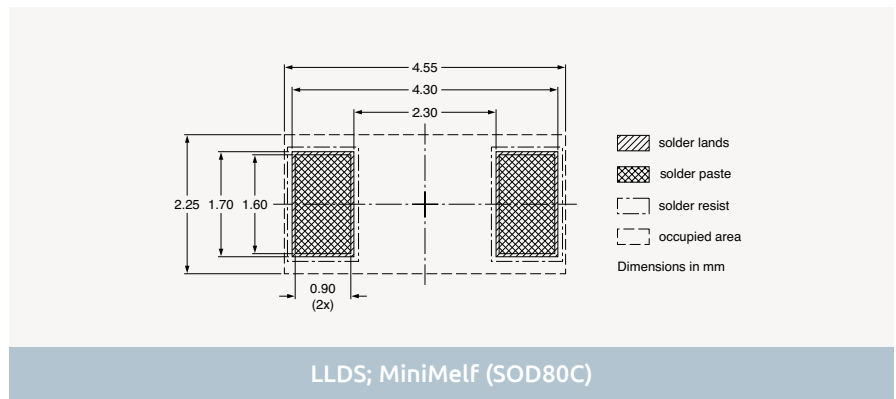
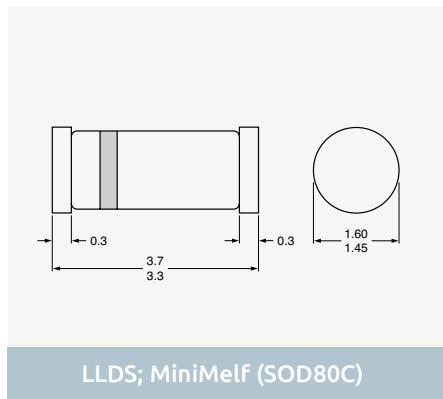
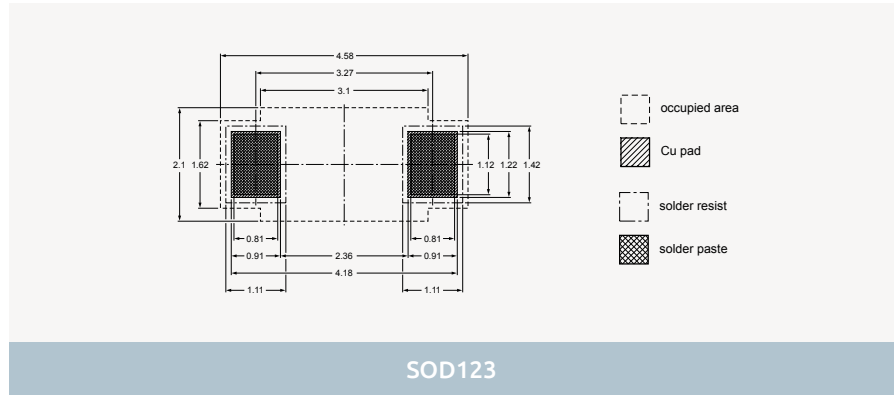
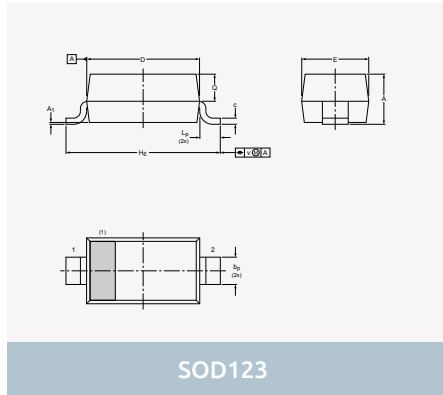
Images are for reference only, for detailed drawings please visit nexperia.com/packages

2-pin SMD packages

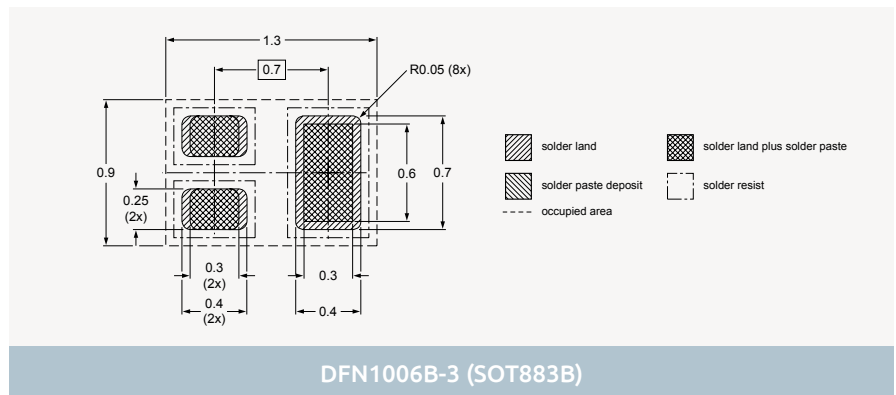
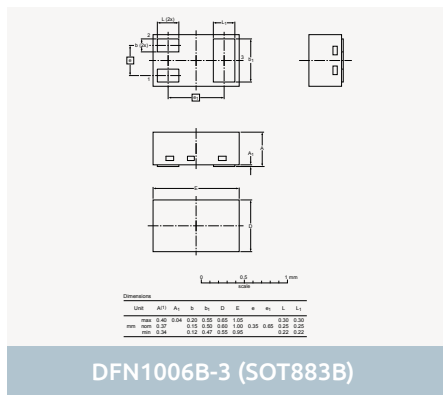


Dimensions in mm

2-pin SMD packages



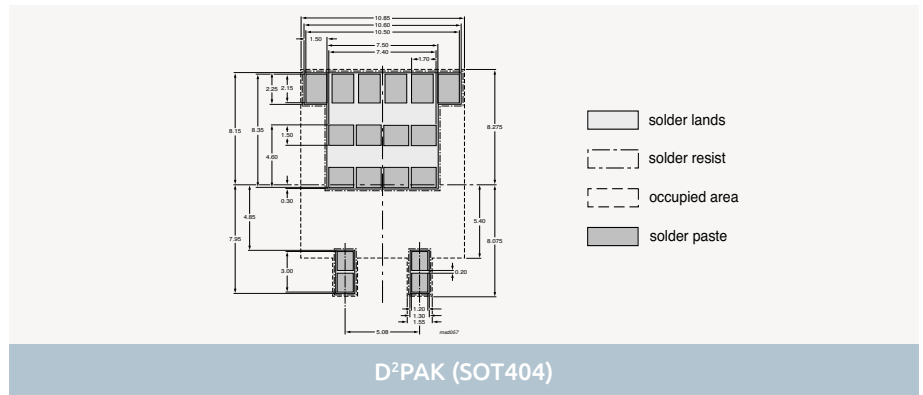
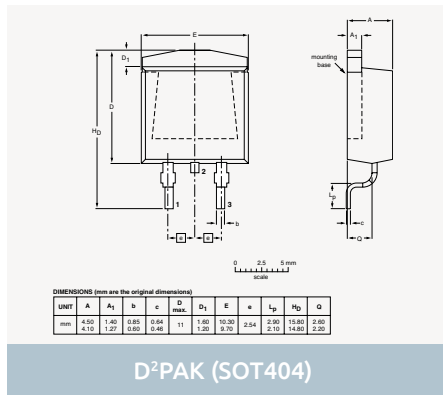
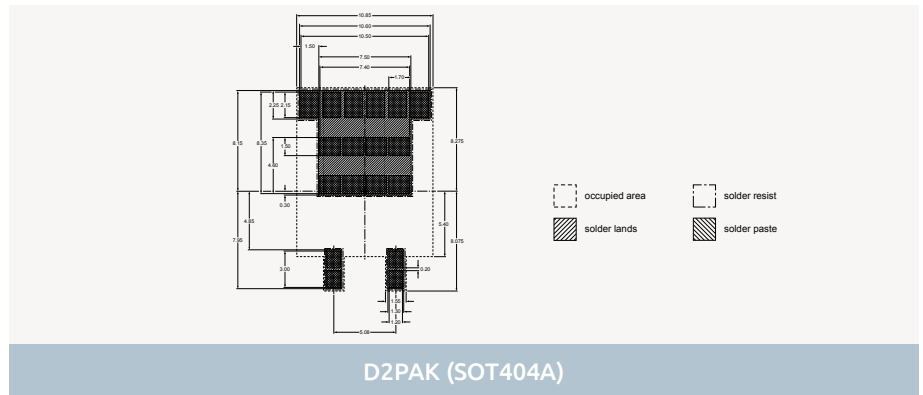
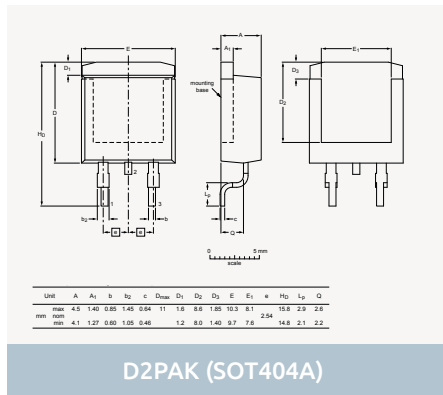
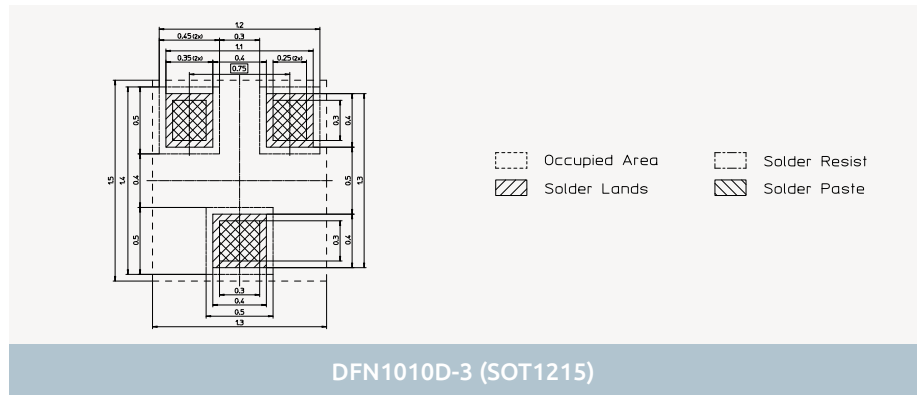
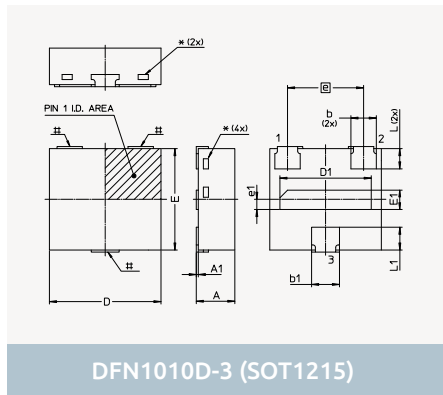
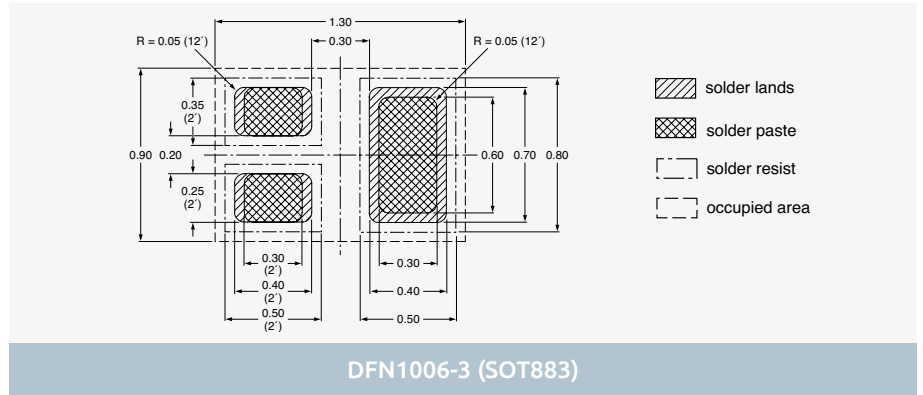
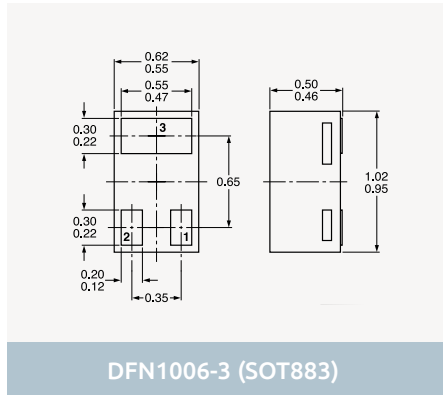
3-pin SMD packages



Dimensions in mm

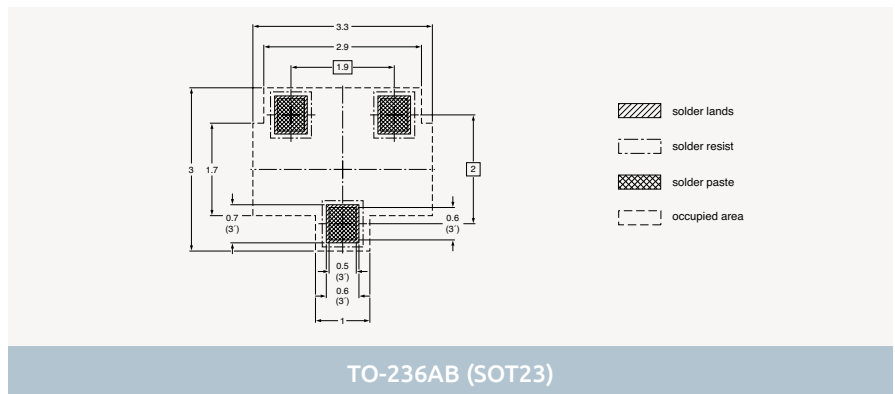
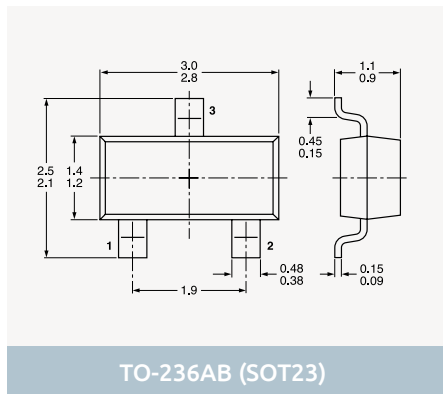
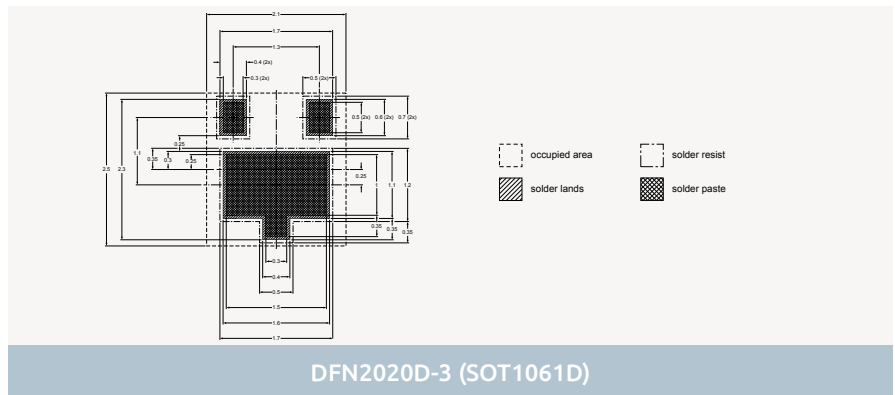
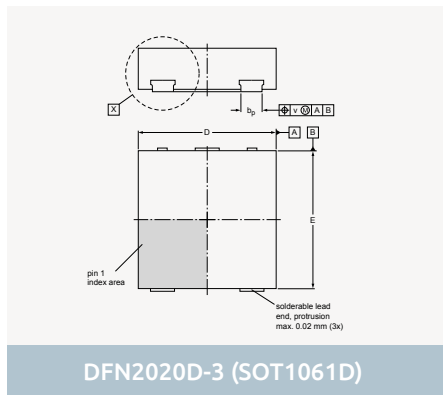
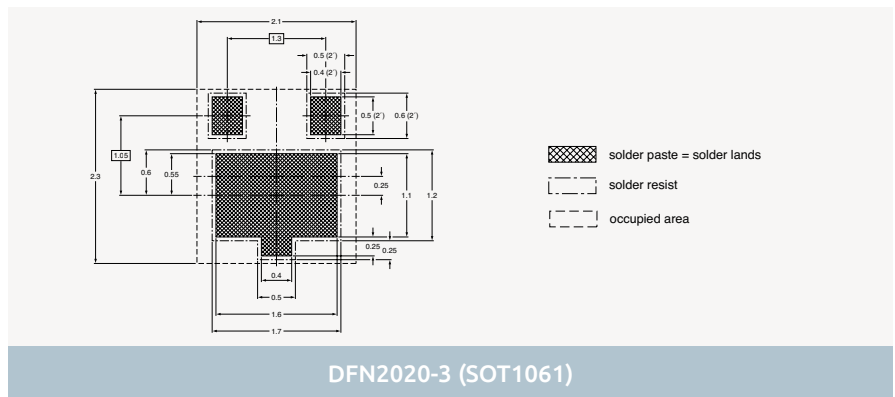
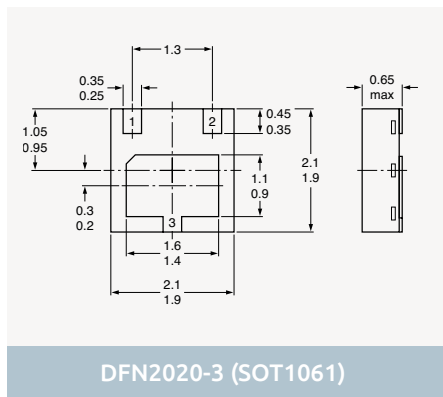
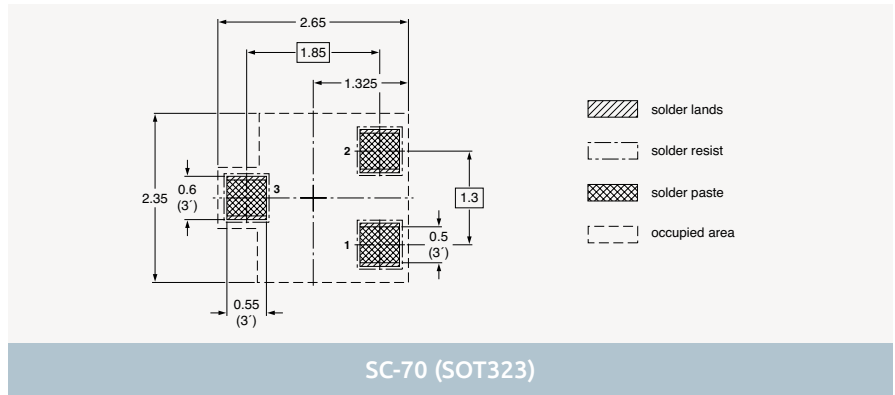
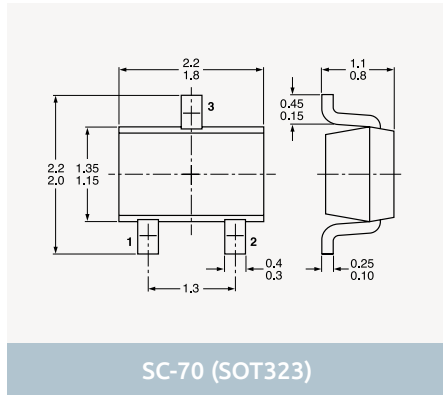
Images are for reference only, for detailed drawings please visit nexperia.com/packages

3-pin SMD packages



Dimensions in mm

3-pin SMD packages



Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

4-pin SMD packages

Dimensions

UNIT	A	A ₁	b	b ₁	b ₂	c	c ₂	D ⁽¹⁾	D ⁽¹⁾ _{max}	E ⁽¹⁾	E ⁽¹⁾ ₁	e	H	L	L ₁	L ₂	w	y	θ
mm	1.10	0.15	0.50	0.41	0.50	0.25	0.30	4.70	4.41	5.30	3.7	1.27	0.2	1.3	0.85	1.3	0.25	0.1	8°
mm	0.95	0.00	0.35	0.35	0.15	0.24	4.45	4.05	3.1	5.9	0.9	0.90	0.25	0.1	0.7				

LFPAK56E; Power-SO8 (SOT1023)

solder lands solder paste
 solder resist occupied area

LFPAK56E; Power-SO8 (SOT1023)

Dimensions

UNIT	A	A ₁	A ₂	b	b ₁	b ₂	c	c ₂	D ⁽¹⁾	D ⁽¹⁾ _{max}	E ⁽¹⁾	E ⁽¹⁾ ₁	e	H	L	L ₁	L ₂	w	y	θ
mm	1.10	0.15	0.20	0.41	0.15	0.25	0.30	4.70	3.9	5.30	3.7	1.27	0.2	1.3	0.85	1.3	0.25	0.1	8°	
mm	0.95	0.00	0.05	0.35	0.15	0.24	4.45	3.5	4.95	3.5	5.9	0.9	0.90	0.25	0.1	0.7				

LFPAK56-UL2595 (SOT1023A)

occupied area solder resist
 solder lands solder paste

LFPAK56-UL2595 (SOT1023A)

Dimensions

UNIT	A	A ₁	A ₂	A ₃	b	b ₂	b ₃	b ₄	c	c ₂	D ⁽¹⁾	D ⁽¹⁾ _{max}	E ⁽¹⁾	E ⁽¹⁾ ₁	e	H	L	L ₁	L ₂	w	y	θ
mm	1.20	0.15	1.10	1.10	0.50	4.41	2.2	0.9	0.25	0.30	4.10	4.20	5.0	3.3	1.27	6.2	0.85	1.3	1.3	0.25	0.1	8°
mm	1.01	0.00	0.95	0.25	0.35	3.62	2.0	0.7	0.19	0.24	3.80	3.80	4.8	3.1	1.27	5.8	0.40	0.8	0.8			

LFPAK56; Power-SO8 (SOT669)

solder lands solder paste
 solder resist occupied area

DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁	A ₂	A ₃	b	b ₂	b ₃	b ₄	c	c ₂	D ⁽¹⁾	D ⁽¹⁾ _{max}	E ⁽¹⁾	E ⁽¹⁾ ₁	e	H	L	L ₁	L ₂	w	y	θ
mm	1.20	0.15	1.10	1.10	0.50	4.41	2.2	0.9	0.25	0.30	4.10	4.20	5.0	3.3	1.27	6.2	0.85	1.3	1.3	0.25	0.1	8°
mm	1.01	0.00	0.95	0.25	0.35	3.62	2.0	0.7	0.19	0.24	3.80	3.80	4.8	3.1	1.27	5.8	0.40	0.8	0.8			

LFPAK56; Power-SO8 (SOT669)

Dimensions

UNIT	A	A ₁	A ₂	A ₃	b	b ₂	b ₃	b ₄	c	c ₂	D ⁽¹⁾	D ⁽¹⁾ _{max}	E ⁽¹⁾	E ⁽¹⁾ ₁	e	H	L	L ₁	L ₂	w	y	θ
mm	6.7	6.3	3.1	2.9	4	1.8	1.5	1.1	0.7	0.32	0.22											

SC-73 (SOT223)

solder lands solder paste
 solder resist occupied area

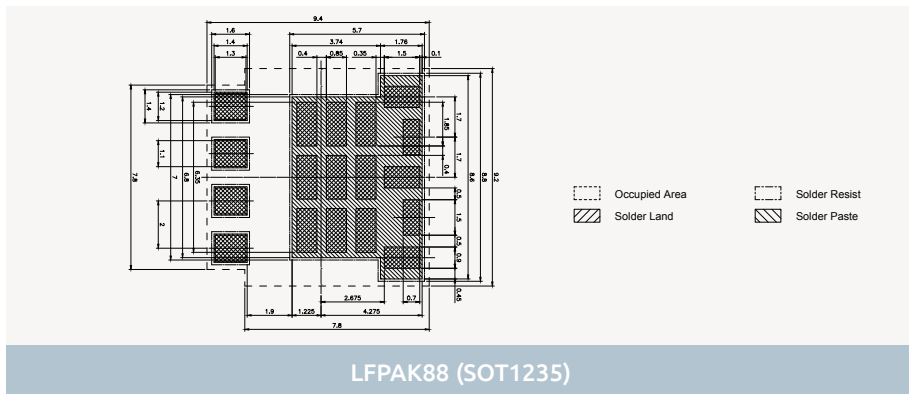
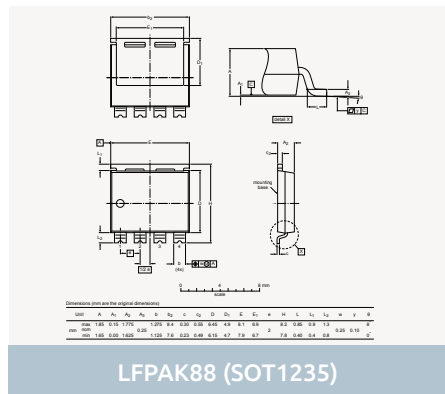
SC-73 (SOT223)

Dimensions in mm

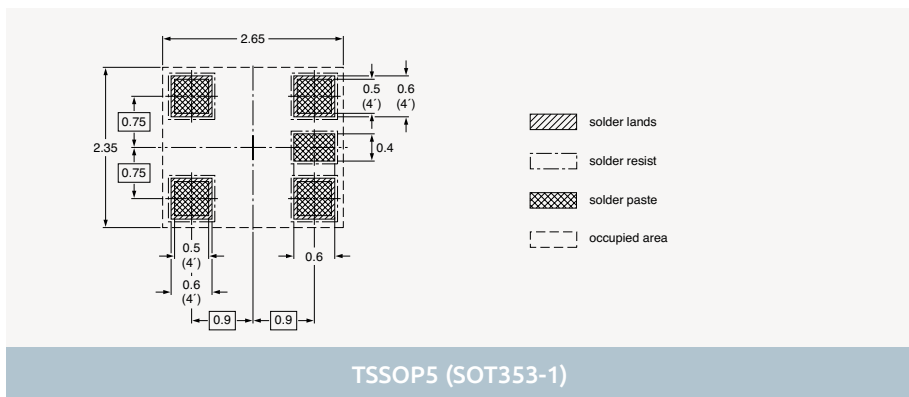
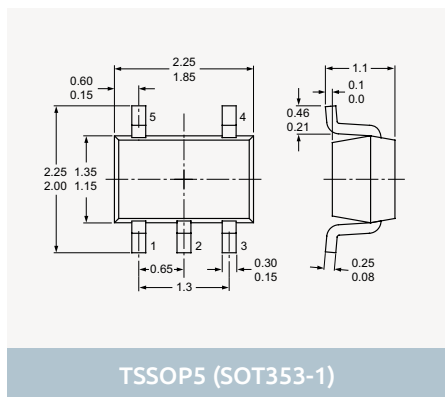
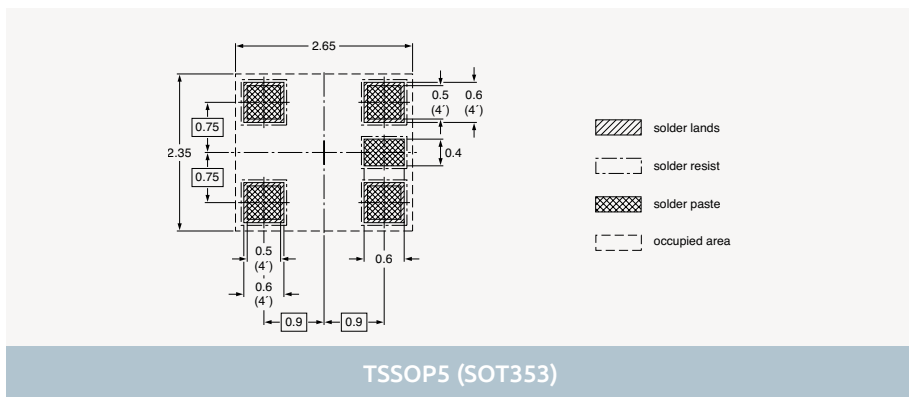
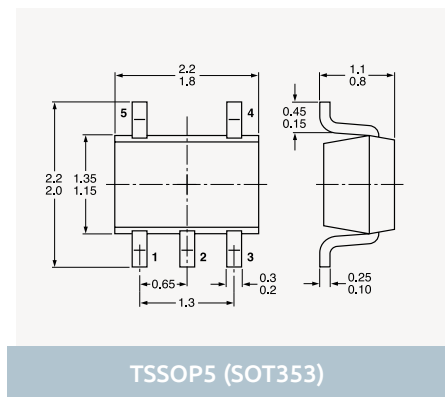
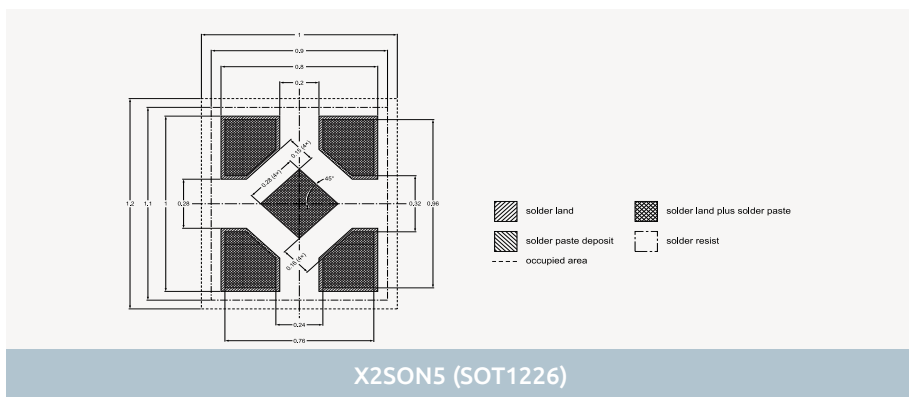
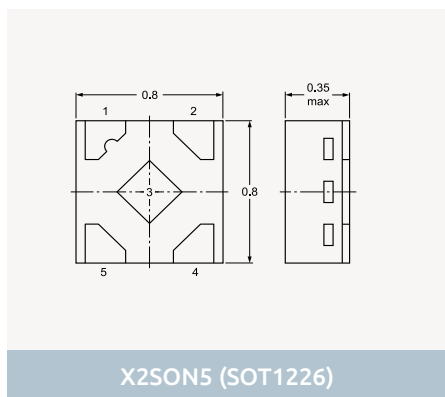
Images are for reference only, for detailed drawings please visit nexperia.com/packages

Minimized outline drawings and reflow soldering footprint

4-pin SMD packages



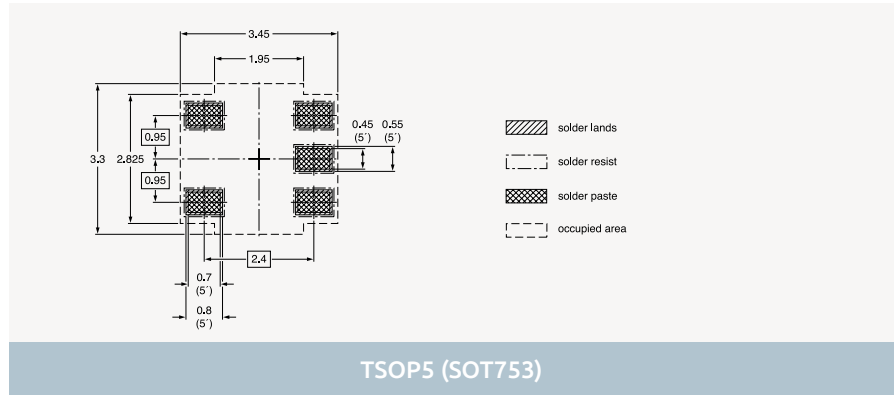
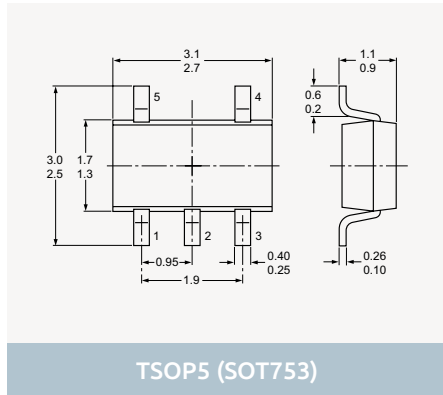
5-pin SMD packages



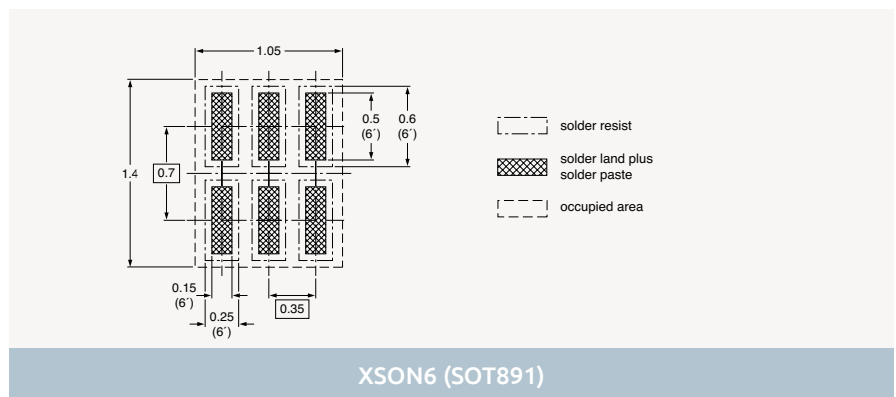
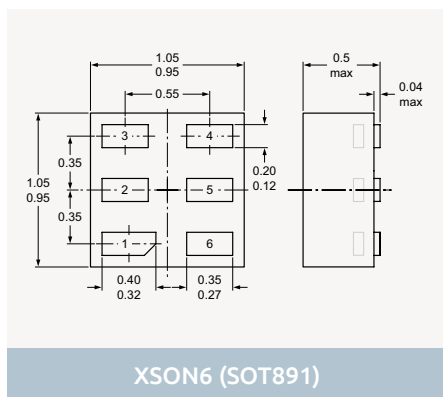
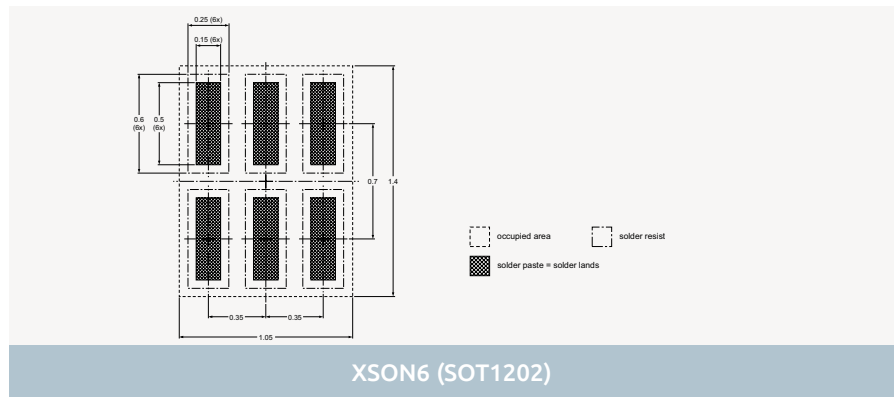
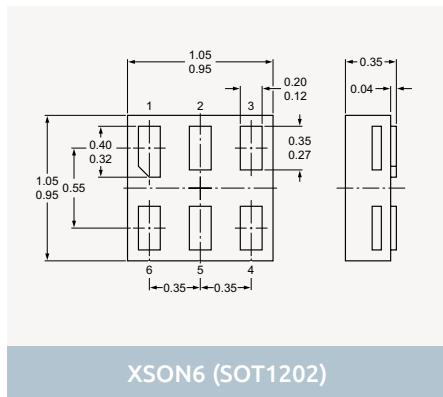
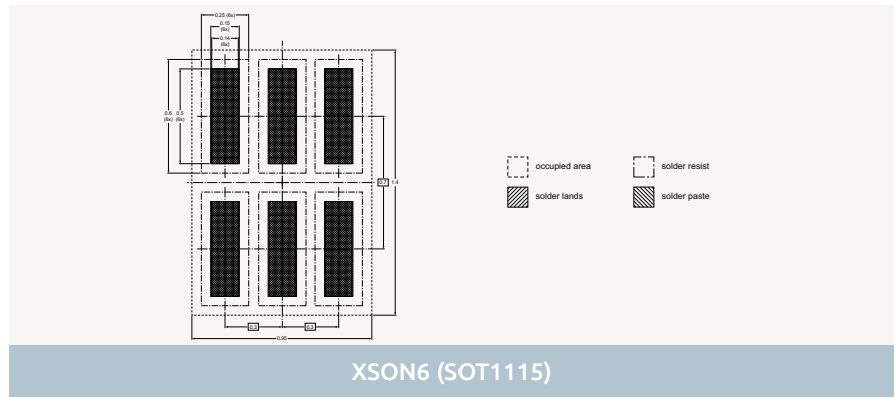
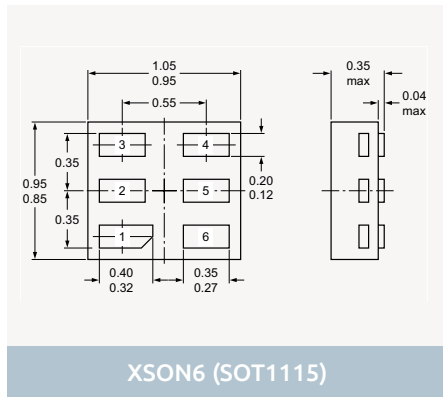
Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

5-pin SMD packages



6-pin SMD packages

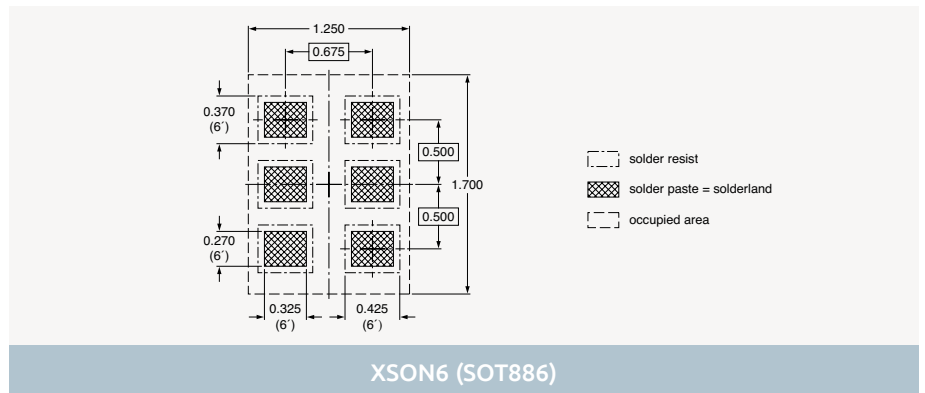
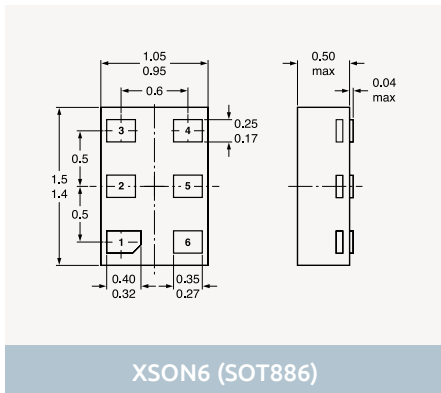
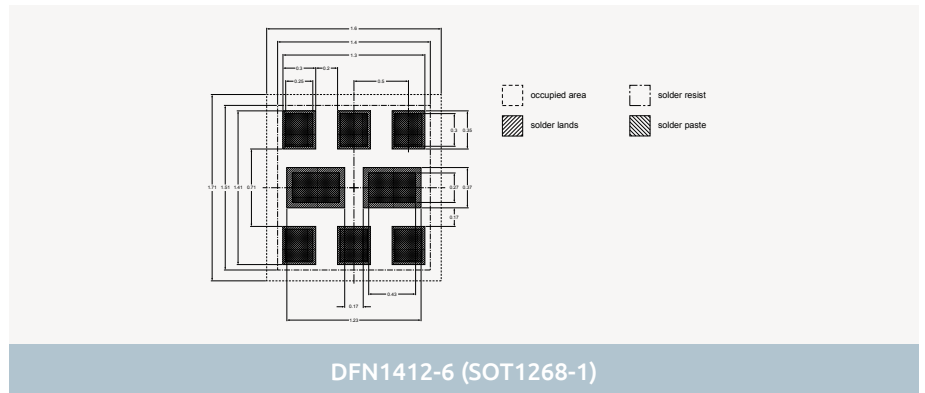
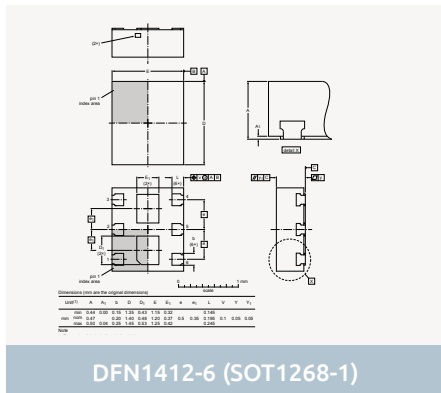
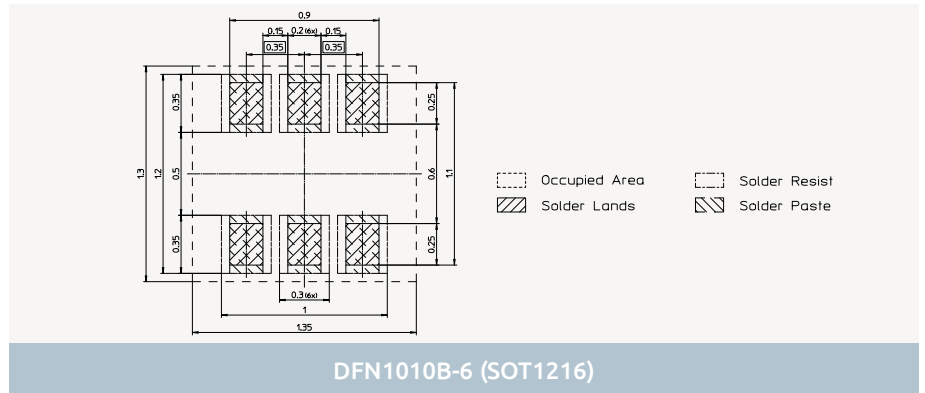
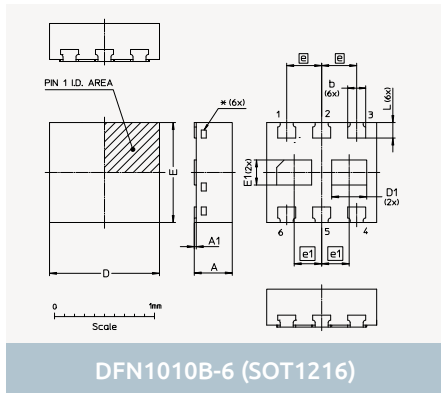
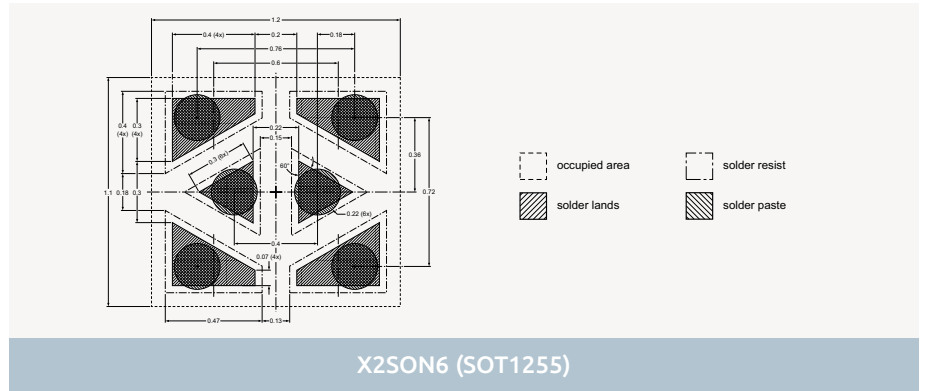
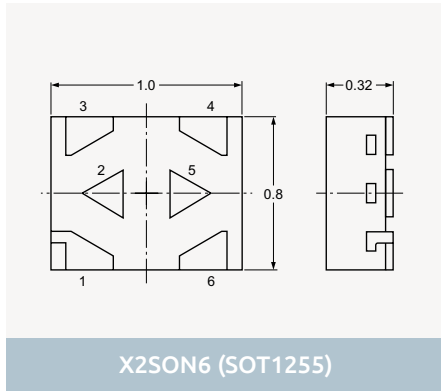


Dimensions in mm

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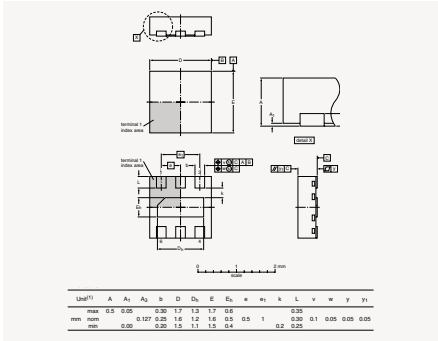
Minimized outline drawings and reflow soldering footprint

6-pin SMD packages

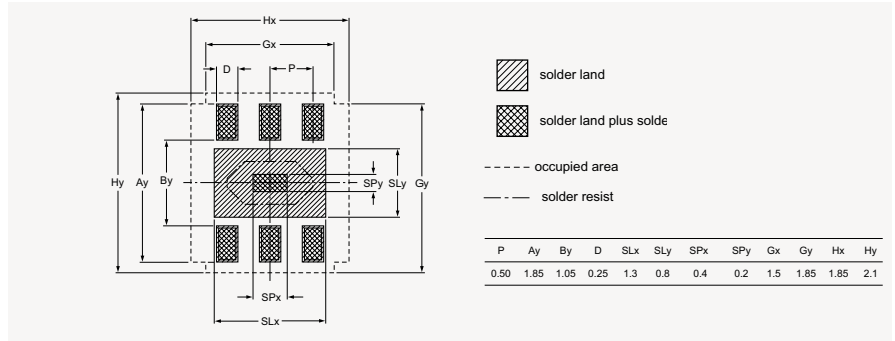


Dimensions in mm

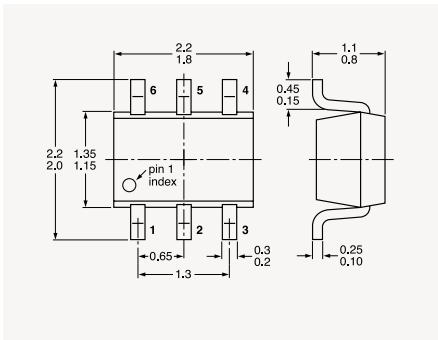
6-pin SMD packages



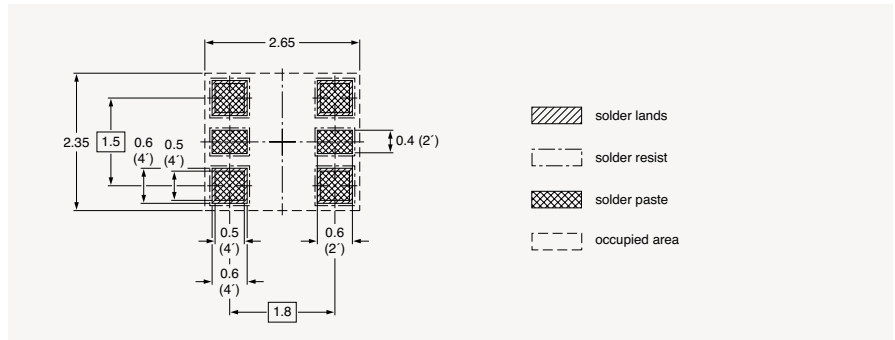
DFN1616-6 (SOT1189-1)



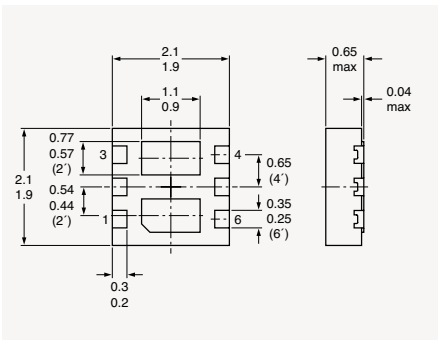
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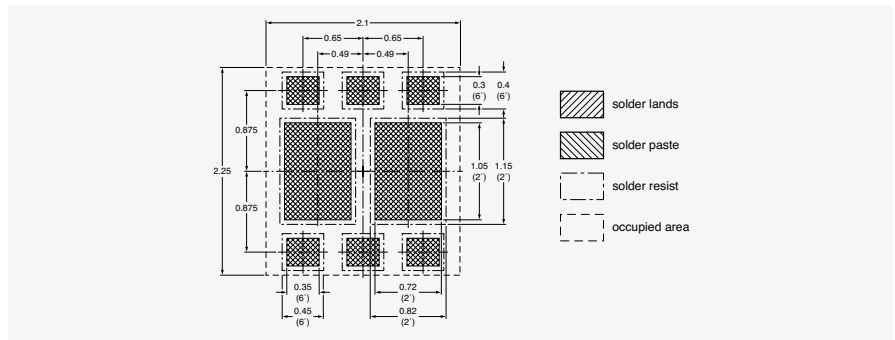
TSSOP6 (SOT363)



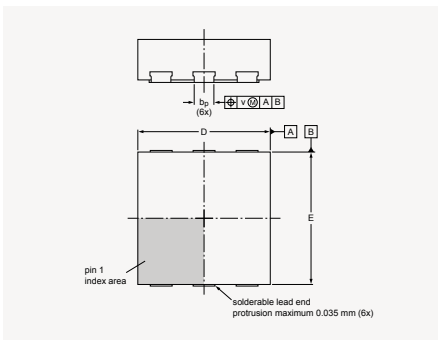
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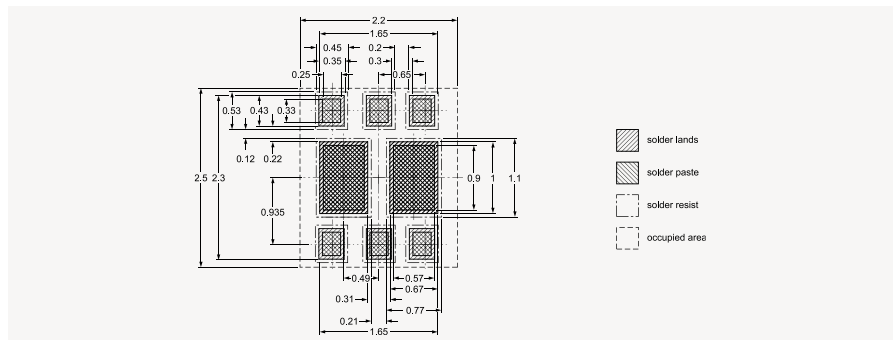
DFN2020-6 (SOT1118)



DFN2020-6 (SOT1118)



DFN2020D-6 (SOT1118D)

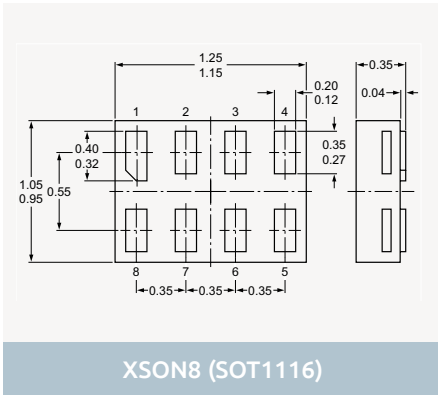


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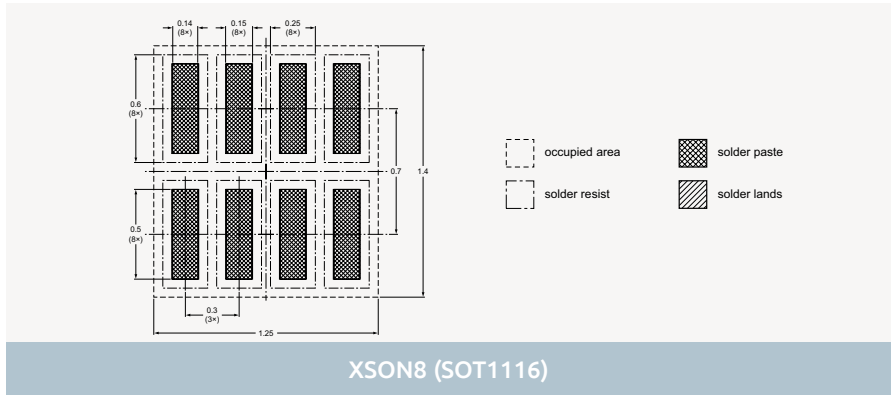
Dimensions in mm

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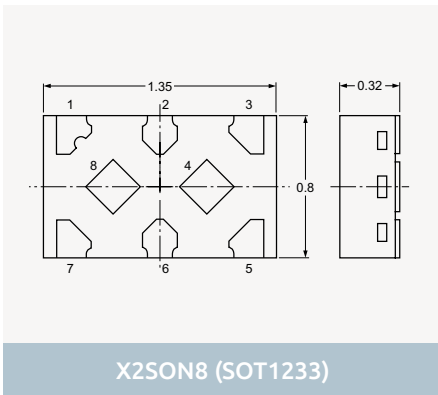
8-pin SMD packages



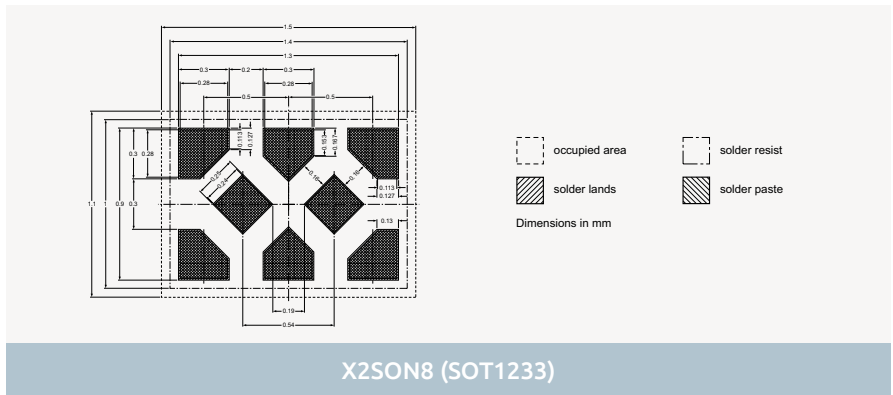
XSON8 (SOT1116)



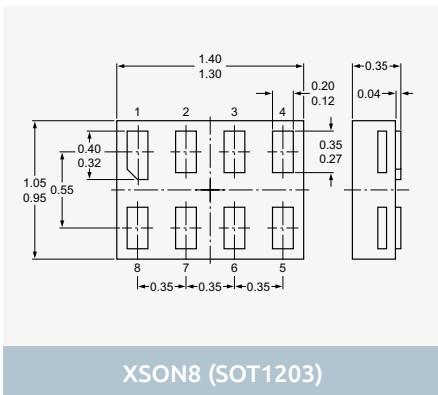
XSON8 (SOT1116)



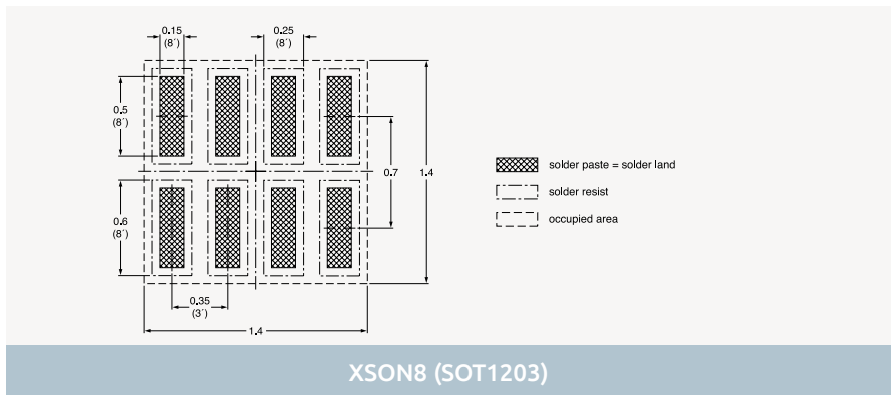
X2SON8 (SOT1233)



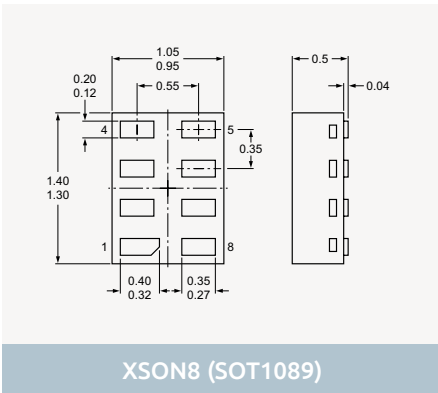
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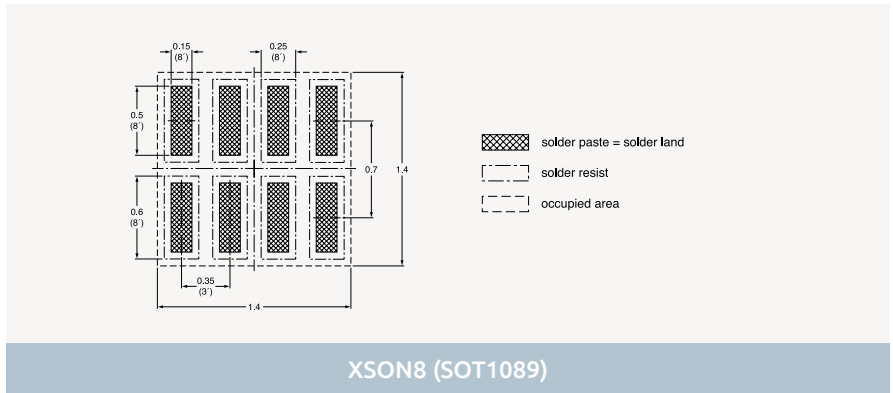
XSON8 (SOT1203)



XSON8 (SOT1203)



XSON8 (SOT1089)

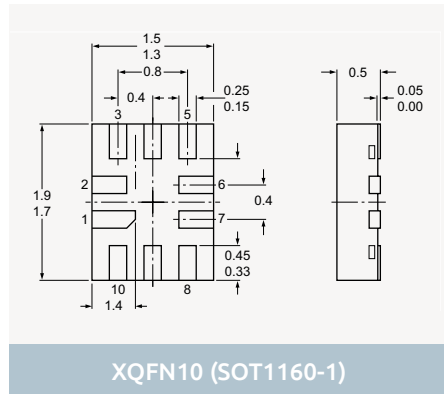


XSON8 (SOT1089)

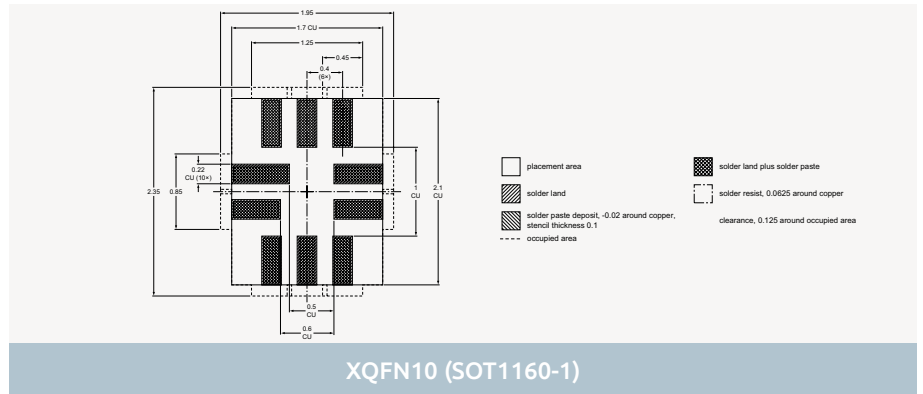
Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

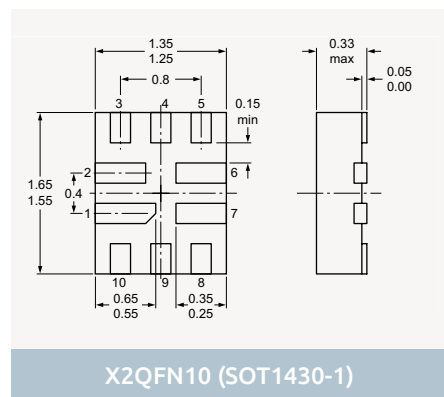
10-pin SMD packages



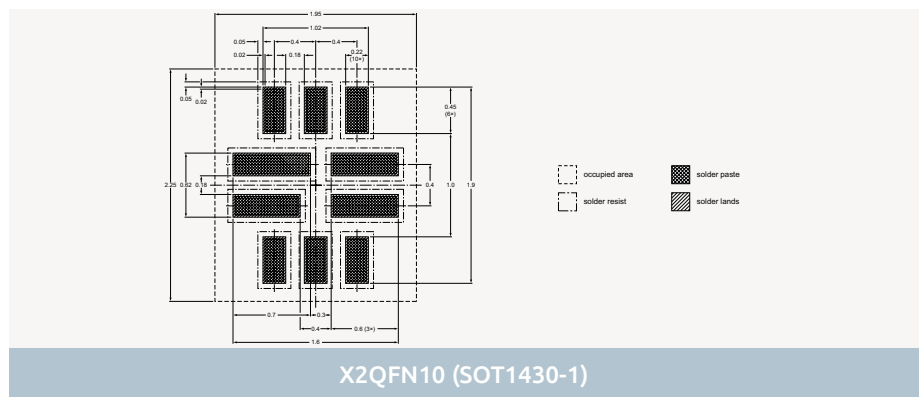
XQFN10 (SOT1160-1)



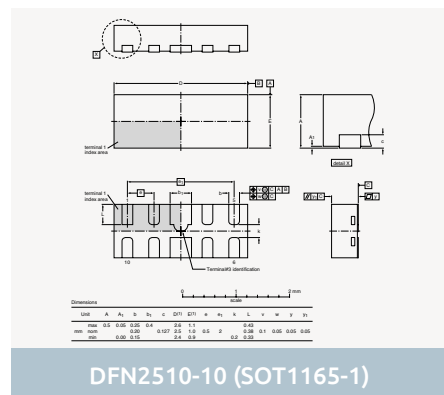
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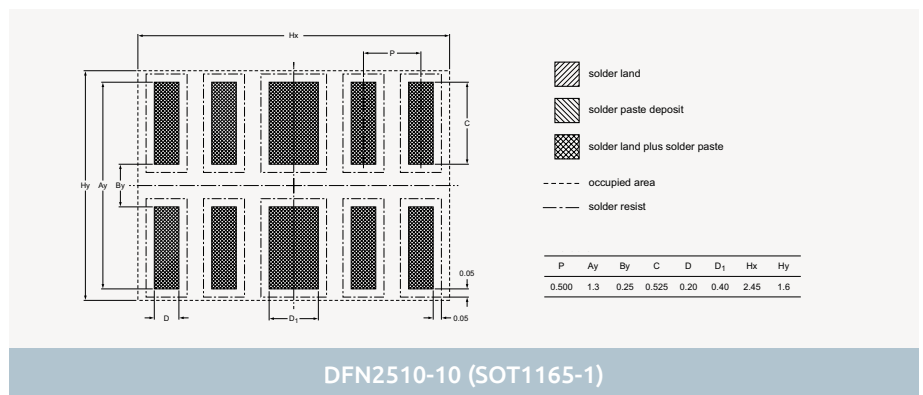
X2QFN10 (SOT1430-1)



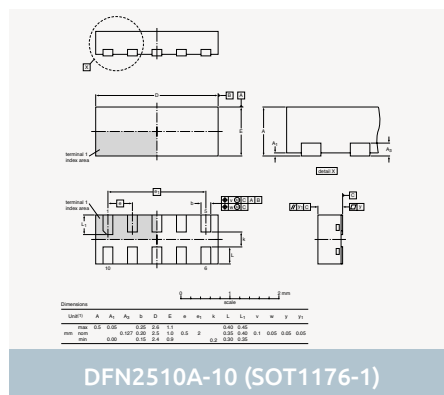
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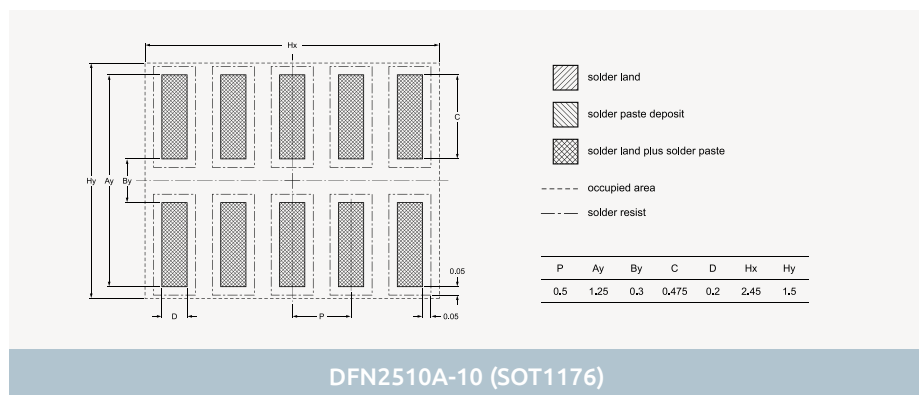
DFN2510-10 (SOT1165-1)



DFN2510-10 (SOT1165-1)



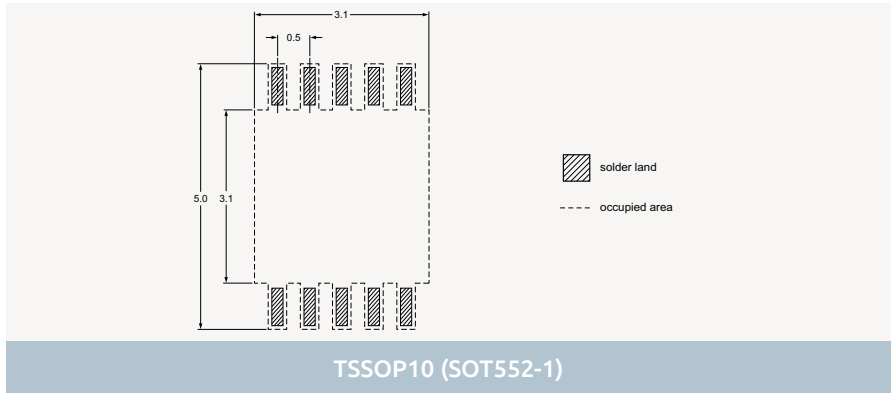
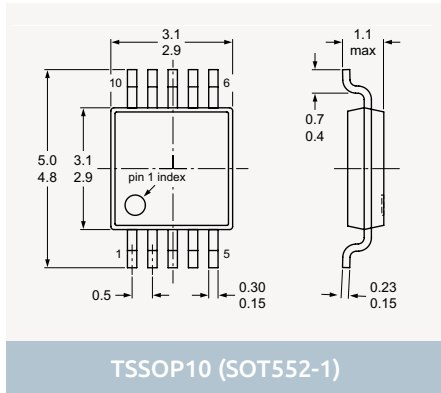
DFN2510A-10 (SOT1176-1)



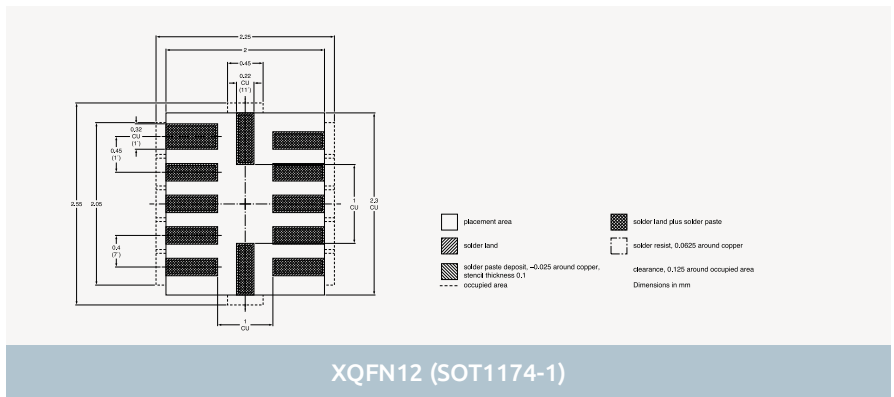
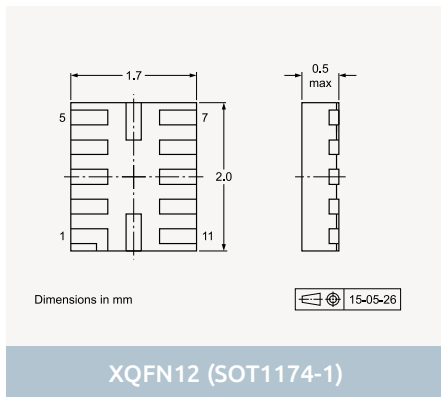
DFN2510A-10 (SOT1176)

Dimensions in mm

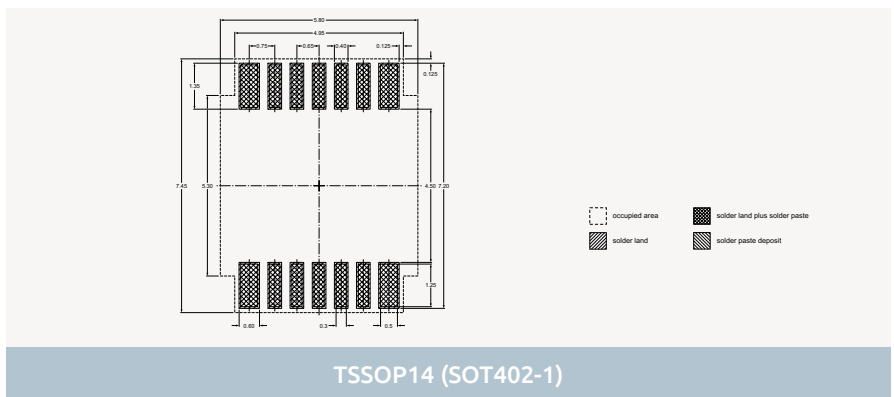
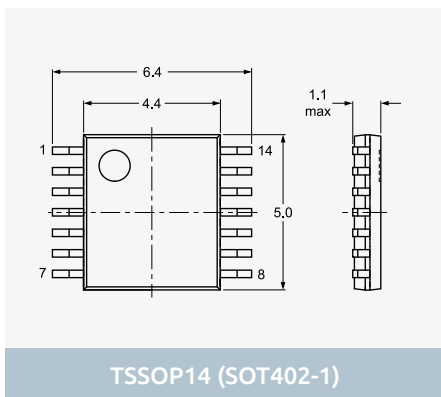
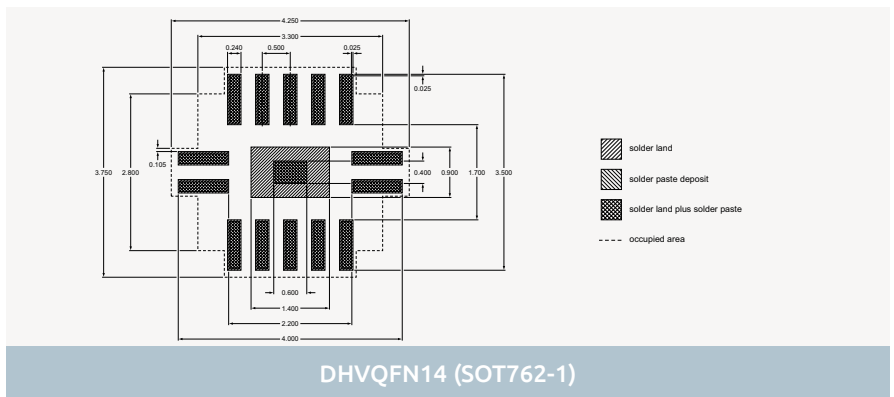
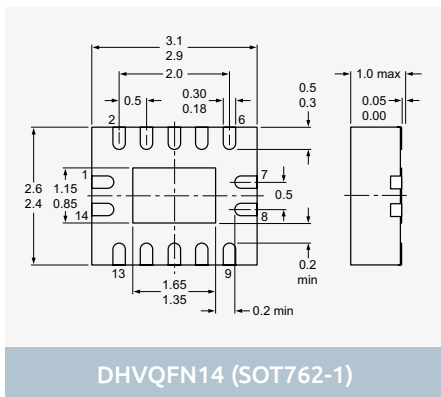
10-pin SMD packages



12-pin SMD packages



14-pin SMD packages

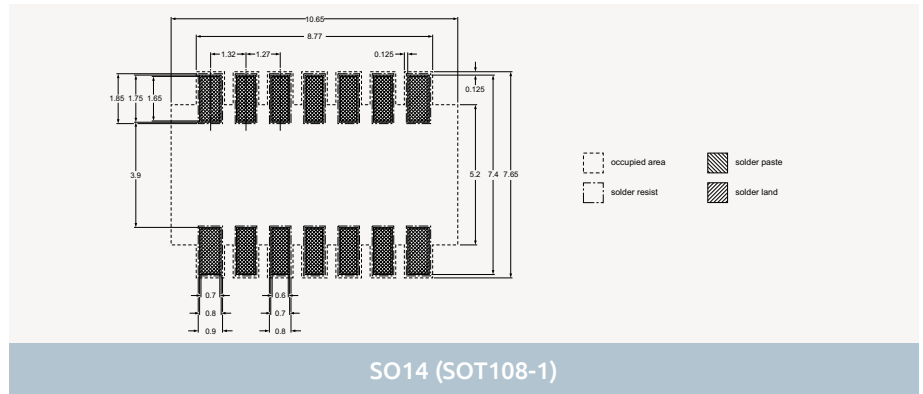
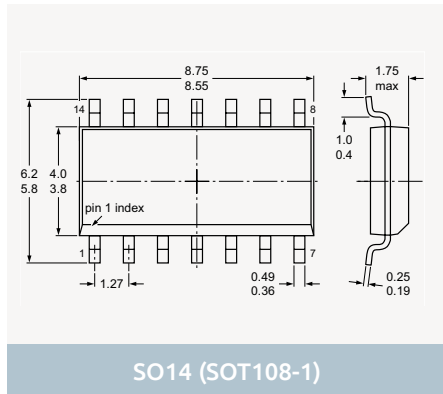


Dimensions in mm

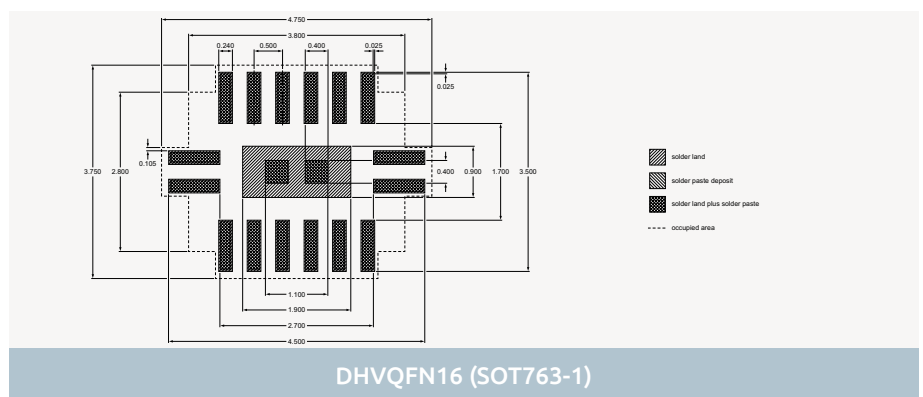
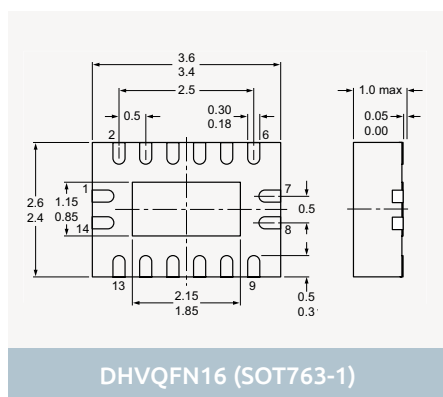
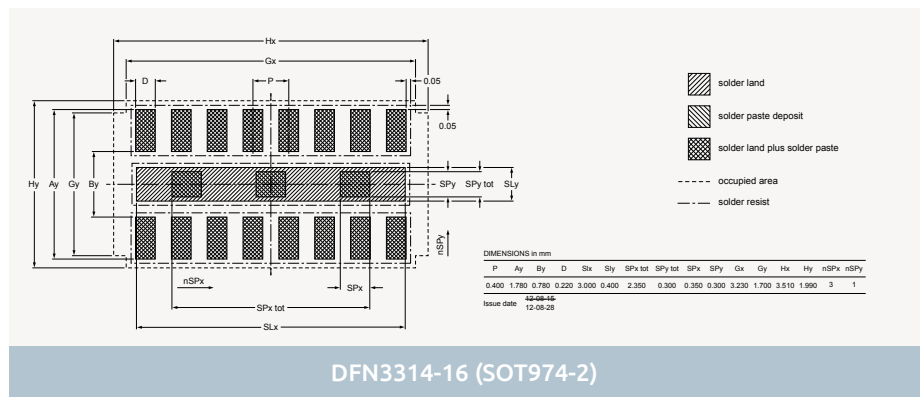
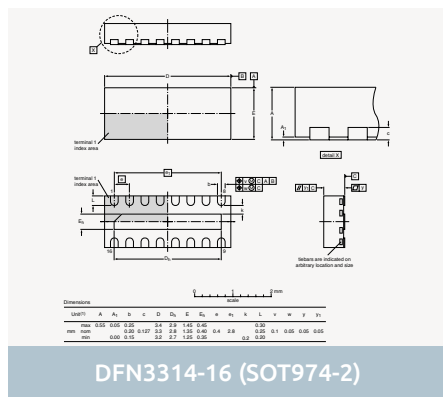
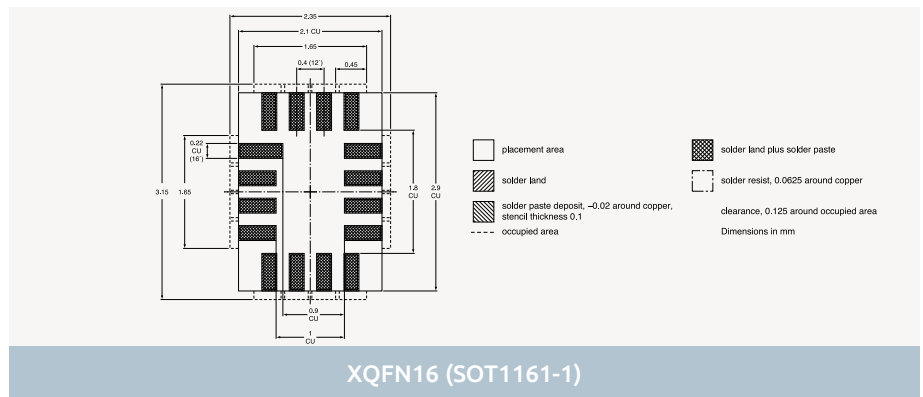
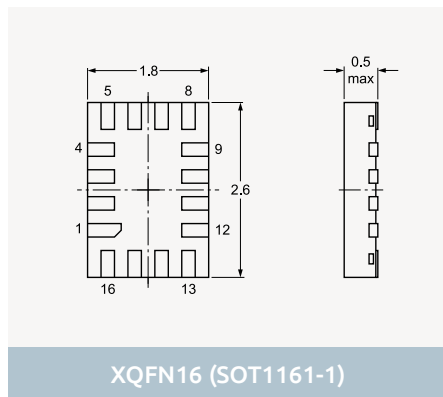
Images are for reference only, for detailed drawings please visit nexperia.com/packages

Minimized outline drawings and reflow soldering footprint

14-pin SMD packages



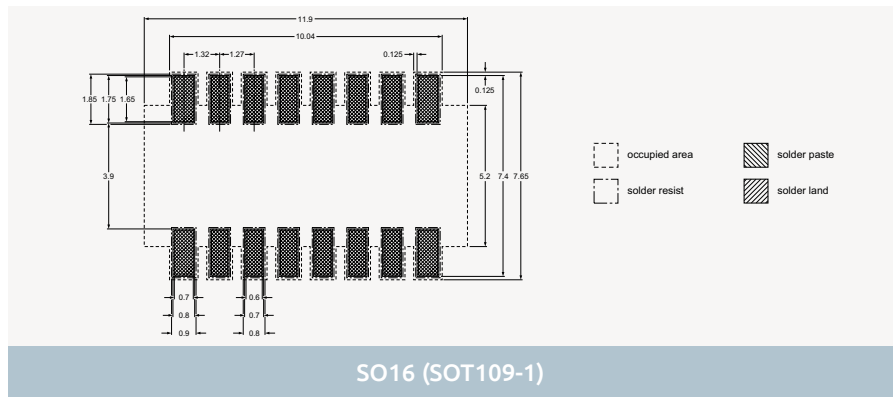
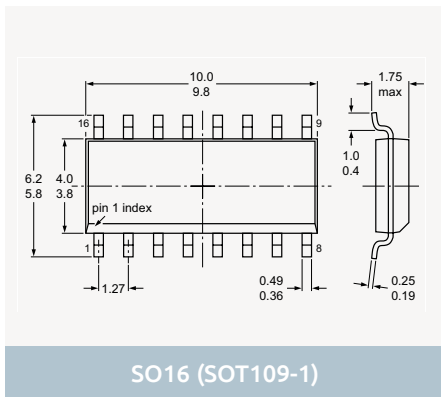
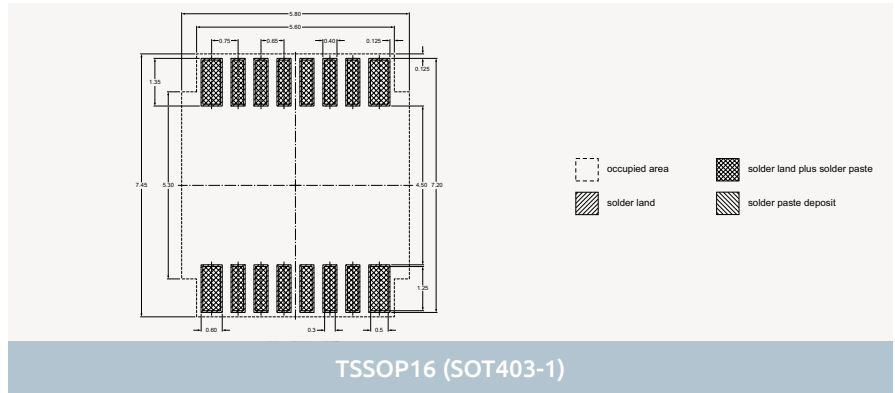
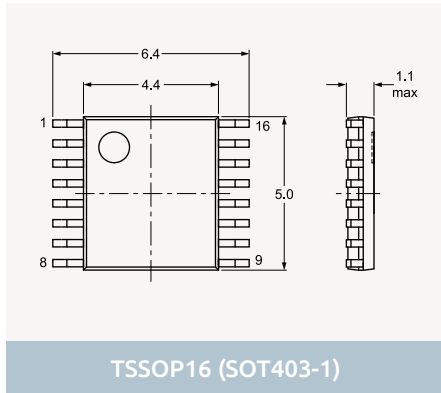
16-pin SMD packages



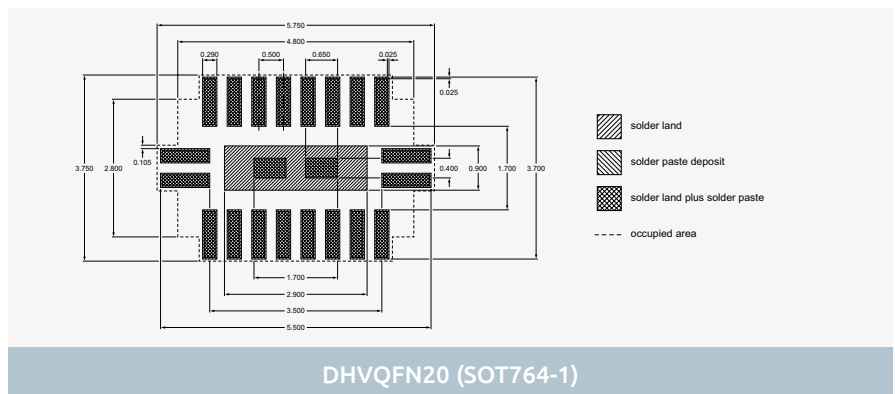
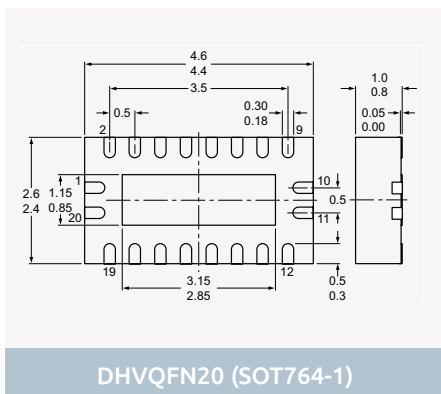
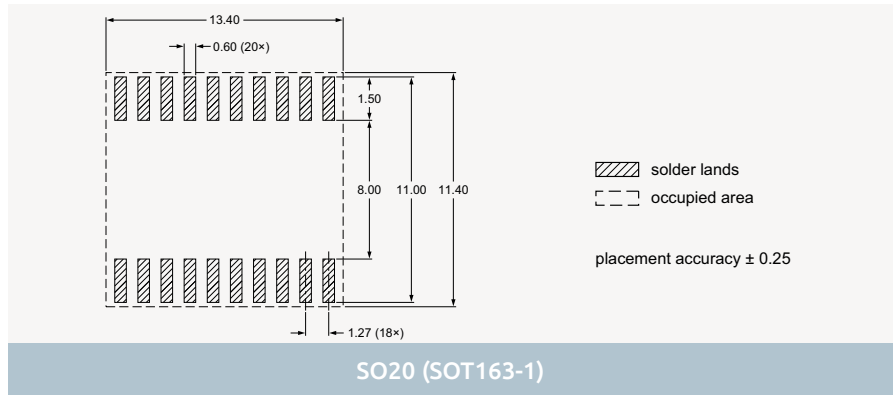
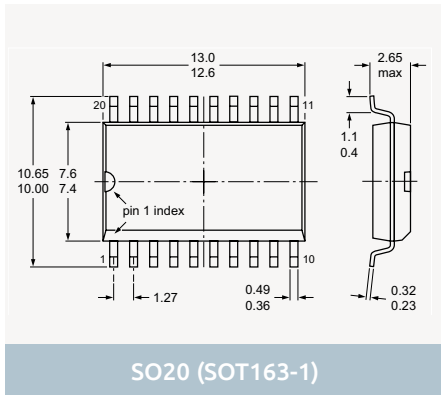
Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

16-pin SMD packages



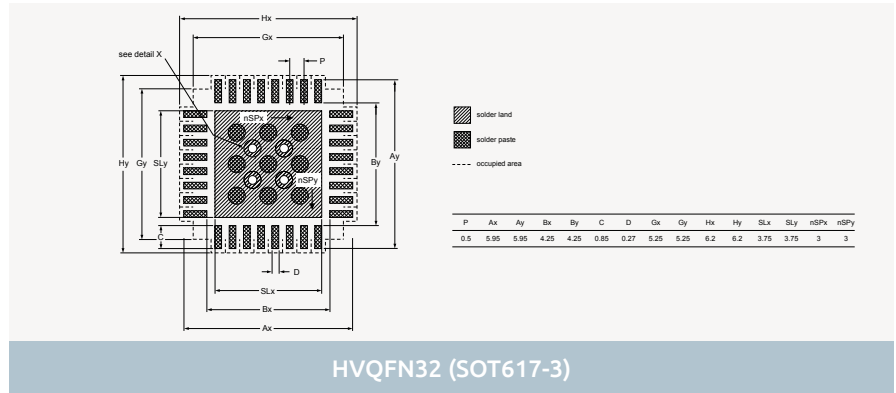
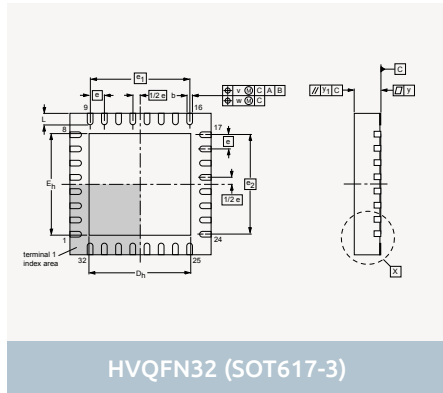
20-pin SMD packages



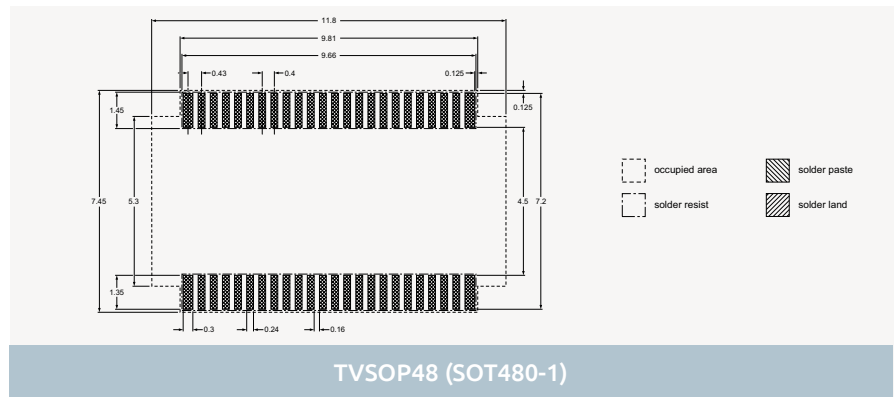
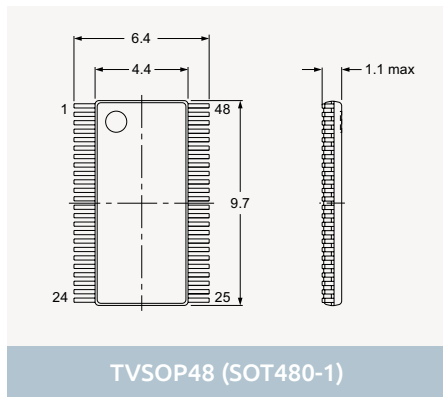
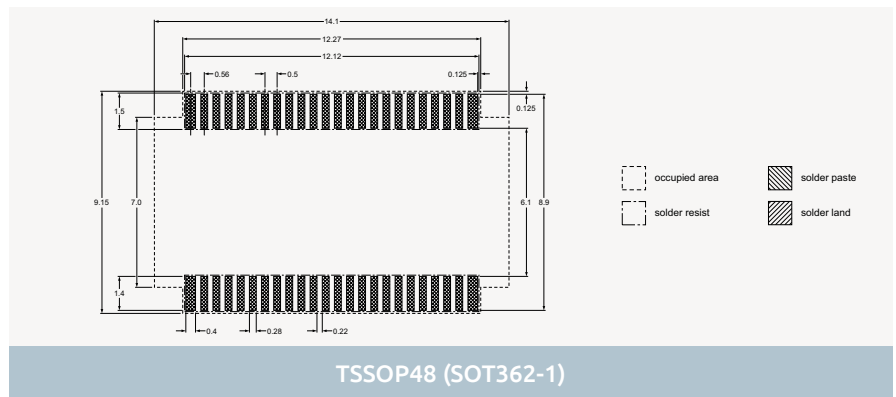
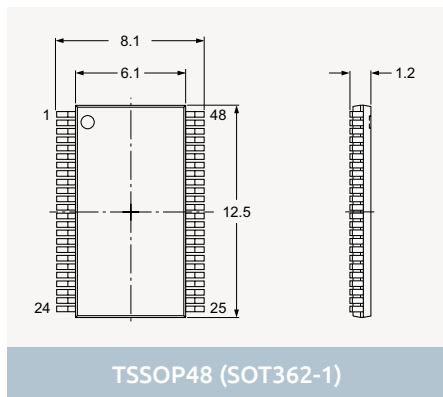
Dimensions in mm

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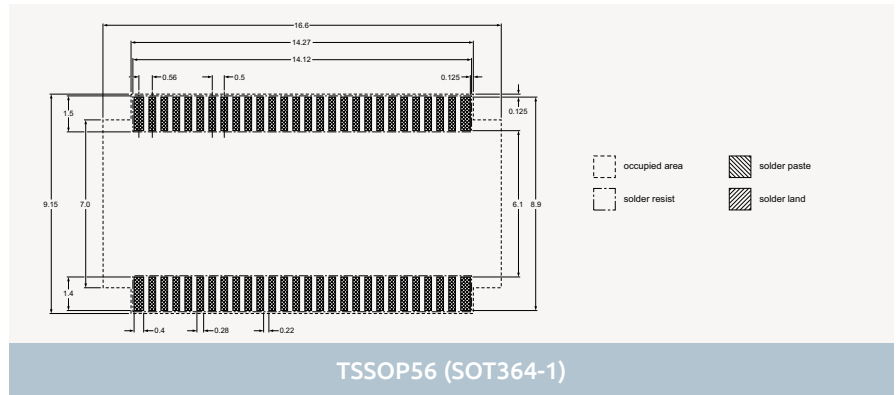
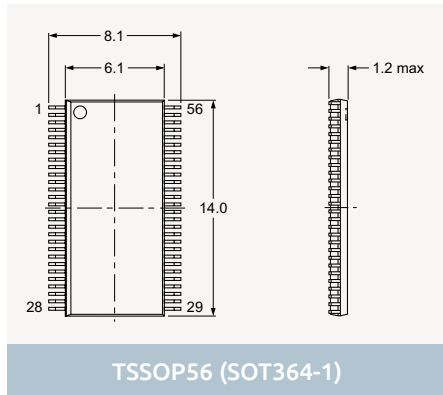
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48-pin SMD packages



56-pin SMD packages



Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

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