

Selection guide 2018.

Discretes, Logic and MOSFETs



nexperia

EFFICIENCY WINS.

Introduction

Welcome to the 2018 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 (85 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

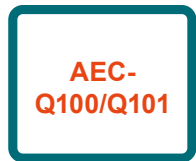
- › Comprehensive portfolio operating from 0.7 V to 15.0 V
- › Unrivalled package innovation and lowest power logic solutions

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

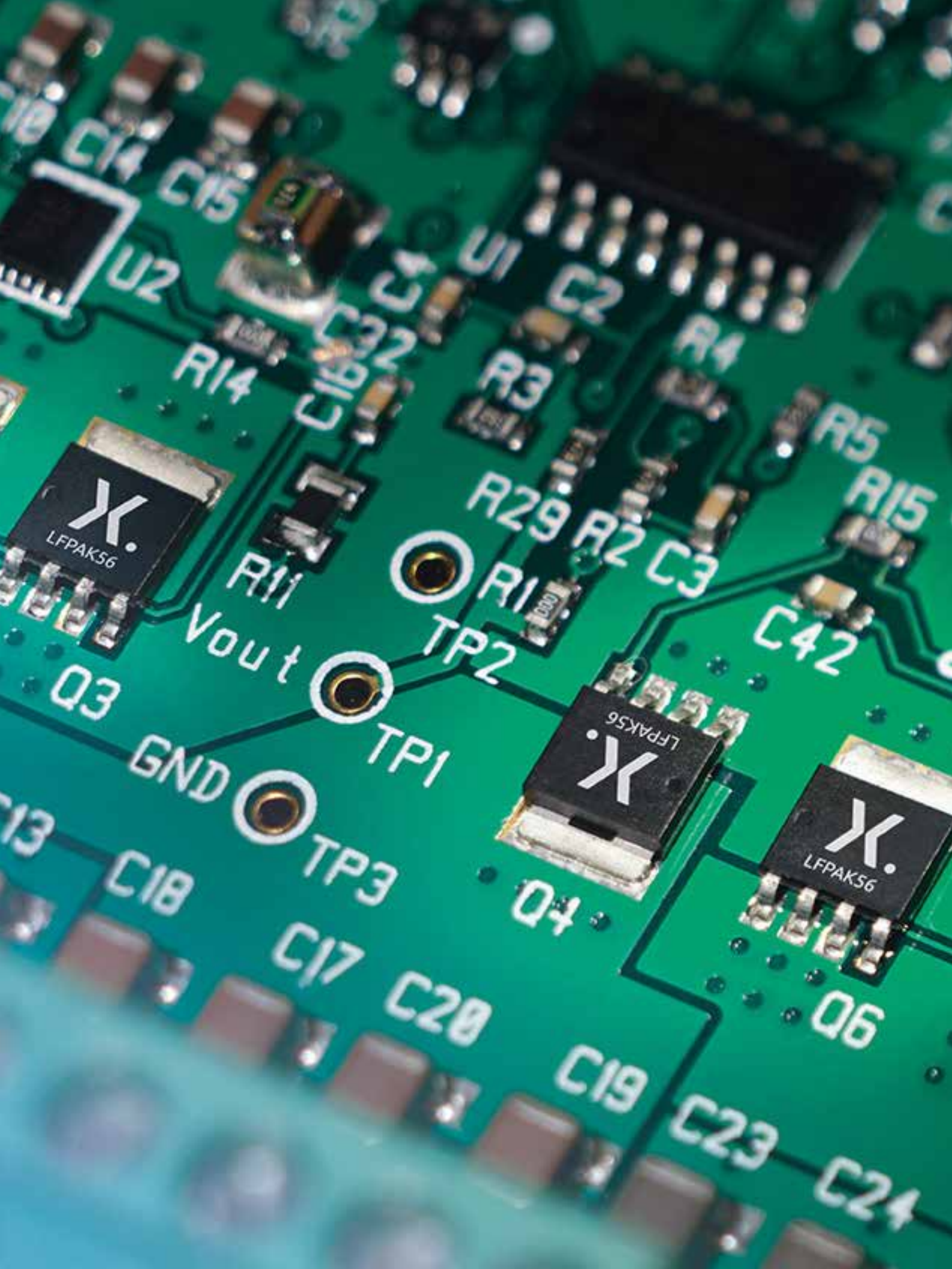
Nexperia's Design for Excellence (DfX) program ensures that each new development builds on past learning and that best practices are always employed. The result is continual product improvement.



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 2018.

Discretes, Logic and MOSFETs

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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	BC817K-16	45 V, 500 mA NPN general-purpose transistors in SOT23	15
	BC817K-25	45 V, 500 mA NPN general-purpose transistors in SOT23	15
	BC817K-40	45 V, 500 mA NPN general-purpose transistors in SOT23	15
	BC807K-16	45 V, 500 mA PNP general-purpose transistors in SOT23	15
	BC807K-25	45 V, 500 mA PNP general-purpose transistors in SOT23	15
	BC807K-40	45 V, 500 mA PNP general-purpose transistors in SOT23	15
	BCP56H	80 V, 1 A NPN medium power transistor in SOT223	17
	BCP56-10H	80 V, 1 A NPN medium power transistor in SOT223	17
	BCP56-16H	80 V, 1 A NPN medium power transistor in SOT223	17
	BCP53H	80 V, 1 A PNP medium power transistors in SOT223	17
	BCP53-10H	80 V, 1 A PNP medium power transistors in SOT223	17
	BCP53-16H	80 V, 1 A PNP medium power transistors in SOT223	17
	BC817K-16H	45 V, 500 mA NPN general-purpose transistors in SOT23	17
	BC817K-25H	45 V, 500 mA NPN general-purpose transistors in SOT23	17
	BC817K-40H	45 V, 500 mA NPN general-purpose transistors in SOT23	17
	BCM56DS	NPN/NPN matched double transistors in SOT457	20
	BCM53DS	PNP/PNP matched double transistors in SOT457	20
	BCM847QAS	NPN/NPN matched double transistors in SOT1216	20
	BCM857QAS	PNP/PNP matched double transistors in SOT1216	20
	PMP4501QAS	NPN/NPN matched double transistors in SOT1216	20
	PMP5501QAS	PNP/PNP matched double transistors in SOT1216	20
Low VCEsat (BISS) transistors	PBSS4160X	60 V, 1 A NPN low VCEsat BISS transistor in SOT89	22
	PBSS4360X	60 V, 3 A NPN low VCEsat BISS transistor in SOT89	22
	PBSS5360X	60 V, 3 A PNP low VCEsat (BISS) transistor in SOT89	24
	PBSS5250TH	50 V, 2 A PNP low VCEsat (BISS) transistor in SOT23	25
	PBSS5350TH	50 V, 3 A PNP low VCEsat (BISS) transistor in SOT23	25
	PBHV9540X	400 V, 0.5 A PNP high-voltage low VCEsat (BISS) transistor in SOT89	28
	PHPT61002NYCLH	100 V, 2 A NPN high power bipolar transistor in LFPAK56	29
	PHPT61002PYCLH	100 V, 2 A PNP high power bipolar transistor in LFPAK56	29
Resistor equipped transistors (RETs)	PRMH11	50 V, 100 mA NPN/NPN Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMD3	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMB11	50 V, 100 mA PNP/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMD2	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMH2	50 V, 100 mA NPN/NPN Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMD12	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMH10	50 V, 100 mA NPN/NPN Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMD10	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMH13	50 V, 100 mA NPN/NPN Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMD13	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMH9	50 V, 100 mA NPN/NPN Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31
	PRMD16	50 V, 100 mA NPN/PNP Resistor-Equipped double Transistors (RET) in ultra-small DFN1412-6	31

Diodes

Category	Device	Description	Page
Switching Diodes	BAS321J	General purpose diode, planar technology, encapsulated in a very small plastic SOD323F (SC-90) package	39
PN Rectifiers	ES1DVR	200V, 1A Hyperfast PN Rectifier in CFP3 (low VF)	40
	ES1DR	200V, 1A Hyperfast PN Rectifier in CFP3	40
	ES2DVR	200V, 2A Hyperfast PN Rectifier in CFP3 (low VF)	40
	ES2DR	200V, 2A Hyperfast PN Rectifier in CFP3	40
	ES2DP	200V, 2A Hyperfast PN Rectifier in CFP5	40
	ES3DP	200V, 3A Hyperfast PN Rectifier in CFP5	40
	ES1GR	400V, 1A Hyperfast PN Rectifier in CFP3	40
PN Rectifiers - Automotive	PNE20030EP	200V, 3A Hyperfast PN Rectifier in CFP5 (Automotive grade)	41
	PNE20020EP	200V, 2A Hyperfast PN Rectifier in CFP5 (Automotive grade)	41
	PNE20020ER	200V, 2A Hyperfast PN Rectifier in CFP3 (Automotive grade)	41
	PNE20010ER	200V, 1A Hyperfast PN Rectifier in CFP3 (Automotive grade)	41
Schottky rectifiers	PMEG60T20ELR	60 V, 2 A low leakage current Trench MEGA Schottky barrier rectifier in CFP3	45
	PMEG40T10ER	40V, 1A Trench Schottky Rectifier in CFP3	46
	PMEG40T20EP	40V, 2A Trench Schottky Rectifier in CFP5	46
	PMEG40T20ER	40V, 2A Trench Schottky Rectifier in CFP3	46
	PMEG045T030EPD	45V, 3A Trench Schottky Rectifier in CFP15	46
	PMEG40T30EP	40V, 3A Trench Schottky Rectifier in CFP5	46
	PMEG40T30ER	40V, 3A Trench Schottky Rectifier in CFP3	46
	PMEG40T50EP	40V, 5A Trench Schottky Rectifier in CFP5	46
	PMEG045T050EPD	45V, 5A Trench Schottky Rectifier in CFP15	46
	PMEG045T100EPD	45V, 10A Trench Schottky Rectifier in CFP15	46
	PMEG045T150EIPD	45V, 15A Trench Schottky Rectifier in CFP15	46

ESD protection, TVS, filtering and signal conditioning

Category	Device	Description	Page
Low capacitance ESD protection for high-speed interfaces	PHDMI2FR4	Very low-clamping ESD protection for HDMI	55
	PHDMI2AB4	Very low capacitance ESD protection for HDMI	55
General ESD protection devices	PESD3V3T1BL	Ultra compact Transient Voltage Suppressor in DFN1006-2	57
Application-specific ESD solutions	PESD2ETH-D	ESD protection for in-vehicle ultra high-speed interfaces, in SOT457 package	61
	PESD2ETH-AD	ESD protection for in-vehicle ultra high-speed interfaces, in SOT457 package	61
EMI solutions with integrated protection	PCMF1HDMI2S	Common Mode Filter with ESD protection for HDMI2.0	64
	PCMF2HDMI2S	Common Mode Filter with ESD protection for HDMI2.0	64
	PCMF3HDMI2S	Common Mode Filter with ESD protection for HDMI2.0	64
	PUSB3FR6	Very low-clamping ESD protection for six data lines	66
	PUSB3AB6	Very low-capacitance ESD protection for six data lines	66
	PUSB3F97	Very low-clamping ESD protection for USB3.2@ 10 Gbps	66
	PESD3V3W1BSF	Extremely low-clamping, high robustness ESD protection for USB3.2	66
	PESD4V0W1BSF	Extremely low-clamping, high robustness ESD protection for USB3.2	66
	PESD7V0R1BSF	Extremely low-capacitance ESD-protection with 7 V V _{RWM}	66
	PESD7V0H1BSF	Very low-capacitance ESD-protection with 7 V V _{RWM}	66
	PESD7V0C1BSF	Extremely low-clamping ESD-protection with 7 V V _{RWM}	66
	PESD6V5C1USF	Extremely low-clamping unidirectional ESD-protection with 6.5 V V _{RWM}	66

ESD protection, TVS, filtering and signal conditioning

Category	Device	Description	Page
Transient voltage surge suppressor (TVS)	PTVS4V5D1BL	Ultra compact Transient Voltage Suppressor in ultra-small DFN1006-2	67
	MMBZ16VAL	High surge current unidirectional double ESD protection diodes in SOT23 (automotive grade)	67
	MMBZ16VTAL	High surge current unidirectional double ESD protection diodes in SOT23 (automotive grade)	67
	PTVS20VU1UPA	300 W unidirectional Transient Voltage Suppressor (TVS) in DFN2020-3	67
	PTVS22VU1UPA	300 W unidirectional Transient Voltage Suppressor (TVS) in DFN2020-3	67
	PTVS24VU1UPA	300 W unidirectional Transient Voltage Suppressor (TVS) in DFN2020-3	67
	PTVS5V0Z1USKP	Transient voltage suppressor in DSN1608-2 for mobile applications	67

MOSFETs

Category	Device	Description	Page
Automotive MOSFETs	BUK7J1R4-40H	N-channel 40 V, 1.4 mΩ standard level Q101 MOSFET in LFPAK56E	75
	BUK7Y1R7-40H	N-channel 40 V, 1.7 mΩ standard level Q101 MOSFET in LFPAK56	75
	BUK7Y2R0-40H	N-channel 40 V, 2 mΩ standard level Q101 MOSFET in LFPAK56	75
	BUK7Y2R5-40H	N-channel 40 V, 2.5 mΩ standard level Q101 MOSFET in LFPAK56	75
	BUK7Y3R0-40H	N-channel 40 V, 3 mΩ standard level Q101 MOSFET in LFPAK56	75
Power MOSFETs	PSMN8R5-100PSF	NextPower 100 V, 8.7 mΩ N-channel MOSFET in TO220 package	90
	PSMN018-100PSF	NextPower 100 V, 18 mΩ N-channel MOSFET in TO220 package	90
	PSMN8R5-100ESF	NextPower 100 V, 8.8 mΩ N-channel MOSFET in I2PAK package	91
	PSMN018-100ESF	NextPower 100 V, 18 mΩ N-channel MOSFET in I2PAK package	91
	PSMN5R6-100YSF	NextPower 100 V, 6 mΩ N-channel MOSFET in LFPAK56 package	92
	PSMN6R9-100YSF	NextPower 100 V, 7 mΩ N-channel MOSFET in LFPAK56 package	92
	PSMN8R7-100YSF	NextPower 100 V, 9 mΩ N-channel MOSFET in LFPAK56 package	92
Small-signal MOSFETs	PMCM4401UNE	20 V, N-channel Trench MOSFET in 4 bumps Wafer Level Chip-Size Package (WLCSP)	97
	PMCM4402UPE	20 V, P-channel Trench MOSFET in 4 bumps Wafer Level Chip-Size Package (WLCSP)	97
	PMCM6501UNE	20 V, N-channel Trench MOSFET in 6 bumps Wafer Level Chip-Size Package (WLCSP)	97
	PMCM6501UPE	20 V, P-channel Trench MOSFET in 6 bumps Wafer Level Chip-Size Package (WLCSP)	97
	PMCM6501CUNE	20 V, N-channel Trench MOSFET in 6 bumps Wafer Level Chip-Size Package (WLCSP)	97
	PMV280ENEA	100 V N-channel Trench MOSFET in SOT23 SMD package	99
	PMN70EPE	30 V, P-channel Trench MOSFET in SOT457 SMD package	101

Logic

Category	Device	Description	Page
Automotive Logic	74CBTLV3125-Q100	Quad bus switch	110
	74HC161-Q100	Presetable synchronous 4-bit binary counter; asynchronous reset	109
	74LVC4T3144-Q100	4-bit dual-supply buffer/line driver; 3-state	116
	HEF4528B-Q100	Dual monostable multivibrator	116
	74LVC1G19-Q100	1-to-2 decoder/demultiplexer	124
Buffers/inverters/drivers	74AHC9541A	Octal buffer/line driver; Schmitt-trigger (3-state)	129
	74AHCT07A	Hex buffer with open-drain; TTL-enabled	129
	74AHCT244A	Octal buffer/line driver (3-state)	130
	74AHCT541A	Octal buffer/line driver; TTL-enabled (3-state)	130
	74LV04AT	Hex inverter with TTL inputs	133
	74LV05A	Hex inverter; open-drain	133
	74LV07AT	Hex buffer with open-drain; TTL-enabled	133
	74LV244A	Octal buffer/line driver (3-state)	133
	74LV244AT	Octal buffer/line driver; TTL-enabled (3-state)	133
	74LV540A	Octal buffer/line driver (3-state); inverting	133
Schmitt-triggers	74AHCV07A	Hex buffer with open-drain outputs; Schmitt-trigger	130
	74AHCV244A	Octal buffer/line driver; Schmitt-trigger (3-state)	130
	74AHCV541A	Octal buffer/line driver; Schmitt-trigger (3-state)	130
	74LV17A	Hex buffer; Schmitt-trigger	133
	74AHCT17A	Hex buffer; Schmitt-trigger	138
Gates	74AUP2G132	Low-power dual 2-input NAND gate; Schmitt-trigger	139
Logic voltage translators	74LVC8T595	Dual-supply 8-bit serial-in/serial-out or parallel out translating shift register (3-state)	154
Bus switches	74CB3Q3253	Dual 1-of-4 FET multiplexer/demultiplexer with charge pump	157
	74CB3Q3257	Quad 1-of-2 FET multiplexer/demultiplexer with charge pump	157



Bipolar transistors

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Transistors single NPN

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
Size (mm)									
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					
30	100	110 - 200	450 - 800	100	BC848B	PMST5089			
		350	900	100		BC848W			
32	100	110 - 420	220 - 800	100	BCW31 / 32 / 33	PMST5088			
		180 - 380	310 - 630	250	BCW60B / C / D				
45	100	110 - 420	220 - 800	100	BC847 / A / B / C	BC847W / AW / BW / CW	BC847QA / BQA / CQA	BC847AM / BM / CM	BC847AMB / BMB / CMB
		120 - 380	220 - 630	100	BCX70G / H / J / K				
		110 - 200	220 - 450	100	BCW71 / 72				
50	100	500	1250	100	PMBT6429	PMST6429			
		210 - 290	340 - 460	100 - 150	2PD601ART 2PD601ARL 2PD601ASL	2PD601ARW / SW			
60	100	250	650	100	PMBT6428	PMST6428			
65	100	110 - 200	220 - 450	100	BCV71 / 72				
50	100	110 - 200	220 - 450	100	BC846 / A / B	BC846W / AW / BW		BC846BM	BC846BMB
	150	120 - 200	240 - 400	80	NXP3875Y / G				
	150	120 - 270	270 - 560	100		2PC4081Q / R / S		2PC4617QM / RM	2PC4617QMB / RMB
50	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			
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)									
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	BC857QA / 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
	200	210	340	100	2PB709BRL				
		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	PMBTA06	PMSTA06			
		100	-	50	PMBTA56	PMSTA56			
45	800	100-250	250-600	80	BCW68F/G/H				

High performance transistors (superior power dissipation)

Types in **bold** represent new products

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)	SOT666	DFN1412-6 (SOT1268)	DFN1010B-6 (SOT1216)
Size (mm)						2.9 x 1.5 x 1.0	2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.4 x 1.2 x 0.5	1.0 x 1.0 x 0.37
P _{tot} (mW)						750	300	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	PEMX1		
	45	100	200	450	100	BC847DS	BC847BS	BC847BV	BC847RA	BC847QAS
	65	100	110	-	100		BC846S			
			200	450	100	BC846DS	BC846BS			
	50	150	120	560	100		PUMX2			
PNP	45	500	160	400	80	BC817DS			BC817RA	
	40	100	120	450	100	PIMT1	PUMT1	PEMT1		
	45	100	200	450	100		BC857BS	BC857BV	BC857RA	BC857QAS
	65	100	110	-	100		BC856S			
			200	450	100		BC856BS			
NPN / PNP	45	500	160	400	80	BC807DS			BC807RA	
	40	100	120	450	100		PUMZ1	PEMZ1		
	45	100	200	450	100		BC847BPN	BC847BVN	BC847RAPN	BC847QAPN
	50	100	120	560	100	PIMZ2	PUMZ2			
	65	100	200	450	100		BC846BPN			
	12	500	200	-	250 / 100			PEMZ7		
	45	500	160	160	100 / 800	BC817DPN			BC817RAPN	

Switching transistors single

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT23	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
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
P _{tot} (mW)							1700	1300	250	200	250	250
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
	40	600	100	300	250	250	PZT4401	PXT4401	PMBT4401	PMST4401		
					300	250			MMBT2222A			
	40	600	100	300	300	250	PZT2222A	PXT2222A	PMBT2222A	PMST2222A		
PNP	40	800	100	300	300	250			BSR14			
	40	100	100	300	150	700			PMBS3906	PMSS3906		
	40	200	100	300	250	300			MMBT3906			
									PMBT3906	PMST3906	PMBT3906M	PMBT3906MB
	40	600	100	300	200	350	PZT4403	PXT4403	PMBT4403	PMST4403		
						365			PMBT2907			
	60	600	100	300	200	300				PMST2907A		
						365	PZT2907A	PXT2907A	PMBT2907A			

Switching transistors double

Package							SOT363 (SC-88)	SOT666	SOT457 (SC-74)
Size (mm)							2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.9 x 1.5 x 1.0
P _{tot} (mW)							300	300	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	300	250	PMBT3904YS	PMBT3904VS	
	40	600	100	300	250	250	PMBT4401YS		
					300	250	PMBT2222AYS		
PNP	40	200	100	300	250	300	PMBT3906YS	PMBT3906VS	
	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	PMBT3946VPN	
					300 / 200	250 / 365			NMB2227A

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 (A)	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

Medium power transistors high performance (175 °C capable)

Types in **bold** represent new products

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

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)							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

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
	350	100	40	-	50	PZTA42	PXTA42		PMBTA42	PMSTA42
	400	100	40	-	70	BSP19	BST39			
PNP	400	300	50	200	20	PZTA44			PMBTA44	
	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 VCEsat (BISS) transistor portfolio on page 19.

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

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 _{CE0} (V)	I _C (mA)	h _{FE} min	f _T min (MHz)			
NPN	30	500	10000	125			PMBTA13
			20000		PZTA14	PXTA14	PMBTA14
				220		BCV29	BCV27
	45	1000	2000	200	BSP50	BST50	
	60	500	10000	220		BCV49	BCV47
		80	1000	2000	200	BSP51	BST51
BSP52	BST52						
PNP	30	500	20000	125			PMBTA64
				220		BCV28	BCV26
	45	1000	2000	200	BSP60	BST60	
	60	500	10000	220		BCV48	BCV46
		80	1000	2000	200	BSP61	BST61
	BSP62					BST62	

Schmitt triggers

Package							SOT143B
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							250
Polarity	V_{CE0} (V) TR1	V_{CE0} (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_{CE0} (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

Types in **bold** represent new products

Package							SOT143B	SOT457 (SC-74)		LFP4K56D (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

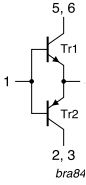
Types in **bold** represent new products

Package							SOT353 (SC-88A)	SOT363 (SC-88)		SOT666	SOT1216 (DFN1010B-6)		
													
Size (mm)							2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95		1.6 x 1.2 x 0.55	1.1x 1.0 x 0.37		
P _{tot} (mW)							300	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		BCM847BV			
					0.95	2	PMP4501G		PMP4501Y		PMP4501V	BCM847QAS	PMP4501QAS
					0.98	2	PMP4201G		PMP4201Y		PMP4201V		
	65	100	200	450	0.9	2		BCM846BS					
	Configuration												
PNP	45	100	200	450	0.9 ¹⁾	2		BCM857BS		BCM857BV			
					0.95	2	PMP5501G		PMP5501Y		PMP5501V	BCM857QAS	PMP5501QAS
					0.98	2	PMP5201G		PMP5201Y		PMP5201V		
	65	100	200	450	0.9	2		BCM856BS					
	Configuration												

¹⁾ I_{C1} / I_{E2}

MOSFET driver

Types in **bold** represent new products

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						2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
Size (mm)						250	200
P_{tot} (mW)							
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

Types in **bold** represent new products

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_{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					
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			
80	7	15	300 / 500	0.5	2	13	PBSS4041NZ				
	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 mWTypes in **bold** represent new products

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
Size (mm)												
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 / 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	
	1	2	300 / 440	0.5	5	130		PBSS4140U				
			300 / 510	0.5	5	120	PMMT491A					
			300 / 420	0.5	5	130	PBSS4140T					
	2	3	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
		2	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

Types in **bold** represent new products

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_{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					
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			
	6.6	20	250/400	0.5	2	16	PBSS4021PZ				
30	2.7	5	200/350	0.5	2	87			PBSS4032PD ³⁾		
	3	5	200/380	0.5	2	50		PBSS5330X			
			200/320	0.5	2	45				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				
40	2	3	215/-	0.5	5	170		PBSS5240X			
	4	15	200/310	0.5	2	46			PBSS302PD		
		10	250/370	0.5	2	33		PBSS5540X			
	5		250/350	0.5	2	40 ¹⁾	PBSS5540Z				
50	2	5	200/-	0.5	2	90 ²⁾		PBSS5250X			
	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				PBSS560PA	
	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				PBSS560PA	
	4	10	200/300	0.5	2	35		PBSS5480X			
		8	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 mWTypes 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 _{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
		3	260 / 350	0.5	2	110	PBSS5130T					
	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	2	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⁾ $I_C / I_B = 20$ ²⁾ V_{CEsat} (max) ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors double

Package										SOT96 (SO8)	SOT457 (SC-74)	SOT666	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)
Size (mm)										4.9 x 3.9 x 1.75	2.9 x 1.5 x 1.0	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)										2000 ²⁾	750	500	1300	1300
V_{CE0} (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			PBSS2515VS		
		2 x PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05			PBSS3515VS		
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05			PBSS2515VPN		
		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_{CE0} (V)	I_C (A)	V_{CEsat} max (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	R1, R2 (k Ω)		
15	0.5	250	2.2		PBLS1501Y
			4.7		PBLS1502Y
			10		PBLS1503Y
			22		PBLS1504Y
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 footprint²⁾ 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

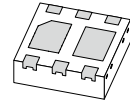
Package				SOT223 (SC-73)	SOT89 (SC-62)	SOT1215	SOT23
							
Size (mm)				6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	1.1 x 1.0 x 0.37	2.9 x 1.3 x 1.0
P_{tot} (mW)				1700	1300	750	250
Polarity	V_{CEO} [max] (V)	I_C (A)	hFE [min]				
NPN	150	0.5	100			PBHV8515QA	
		1	70				PBHV8115TLH
			100				PBHV8115T
					PBHV8115X		
				PBHV8115Z			
		2	100	PBHV8215Z			
	180	1	100				PBHV8118T
	400	0.5	100	PBHV8540Z	PBHV8540X		PBHV8540T
		1	100	PBHV8140Z			
	500	0.15	50				PMBTA45
PNP	150	0.1	70	PBHV2160Z			
		0.5	70	PBHV8560Z			
		4	100	PBHV9414Z			
		0.5	100			PBHV9515QA	
		1	70				PBHV9115TLH
			100				PBHV9115T
					PBHV9115X		
				PBHV9115Z			
		2	100	PBHV9215Z			
	400	0.25	100				PBHV9040T
					PBHV9040X		
		0.5	100	PBHV9040Z			
	500	0.15	100	PBHV9540Z	PBHV9540X		
		0.25	100				PBHV9050T
	600	0.1	70	PBHV9050Z			
		0.5	70	PBHV3160Z			
				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 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 (mΩ)	V_{DS} (V)	V_{GS} (V)	I_D (A)	R_{Dson} typ (mΩ)	
40	2	300	800	100	5	240	30	0.7	0.66	390	PBSM5240PF
		100	-	100	5	240	30	0.7	0.66	390	PBSM5240PFH

Low V_{CEsat} (BISS) power transistors singleTypes in **bold** represent new products

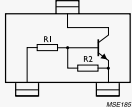
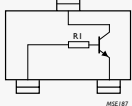
Package						LFPAK56 (SOT669)
Size (mm)						
P _{tot} (mW)						5 x 6 x 1.1
						1250
V _{CE0} (V)	I _C (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	Polarity	
40	6	200 / 400	0.5	2	NPN	PHPT60406NY
			0.5	2	PNP	PHPT60406PY
	10	200 / 400	0.5	2	NPN	PHPT60410NY
			0.5	2	PNP	PHPT60410PY
	15	200 / 400	0.5	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
		150 / 250	0.5	2	PNP	PHPT60606PY
	10	200 / 400	0.5	2	NPN	PHPT60610NY
		150 / 250	0.5	2	PNP	PHPT60610PY
100	2	150 / 250	0.5	10	NPN	PHPT61002NYC
		150 / 220	0.5	10	PNP	PHPT61002PYC
		120/220	0.5	10	NPN	PHPT61002NYCLH
		100/180	0.5	10	PNP	PHPT61002PYCLH
		150 / 250	0.5	10	NPN	PHPT61003NY
	3	150 / 220	0.5	10	PNP	PHPT61003PY
		150 / 250	0.5	10	NPN	PHPT61006NY
	6	150 / 220	0.5	10	PNP	PHPT61006PY
		150 / 250	0.5	10	NPN	PHPT61010NY
	150 / 220	0.5	10	PNP	PHPT61010PY	

Low V_{CEsat} (BISS) power transistors double

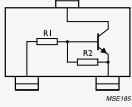
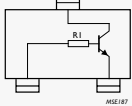
Package												LFPAK56D (SOT1205)
Size (mm)												5 x 6 x 1.1
P_{tot} (mW)												1250
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)	Polarity	h_{FE1}/h_{FE2}	
100	3	6	150	0.5	10	50	300	3	0.2	2XNPN	-	PHPT610030NK
						70	400	3	0.2	2XPNP	-	PHPT610030PK
						50 / 70	300 / 400	3	0.2	NPN/PNP	-	PHPT61003NPK
						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	
50	100		1	1			PDTA113ET	PDTA113EU
			2.2	2.2	PDTC123ET		PDTA123ET	PDTC123EU
			4.7	4.7	PDTC143ET		PDTA143ET	PDTC143EU
			10	10	PDTC114ET		PDTA114ET	PDTC114EU
			22	22	PDTC124ET		PDTA124ET	PDTC124EU
			47	47	PDTC144ET		PDTA144ET	PDTC144EU
			100	100	PDTC115ET		PDTA115ET	PDTC115EU
			1	10			PDTA113ZT	PDTA113ZU
			2.2	10	PDTC123YT		PDTA123YT	PDTC123YU
			2.2	47	PDTC123JT		PDTA123JT	PDTC123JU
			4.7	10	PDTC143XT		PDTA143XT	PDTC143XU
			4.7	47	PDTC143ZT		PDTA143ZT	PDTC143ZU
			10	47	PDTC114YT		PDTA114YT	PDTC114YU
			22	47	PDTC124XT		PDTA124XT	PDTC124XU
			47	10	PDTC144VT		PDTA144VT	PDTC144VU
			47	22	PDTC144WT		PDTA144WT	PDTC144WU
			2.2	-	PDTC123TT		PDTA123TT	PDTC123TU
			4.7	-	PDTC143TT		PDTA143TT	PDTC143TU
			10	-	PDTC114TT		PDTA114TT	PDTC114TU
			22	-	PDTC124TT		PDTA124TT	PDTC124TU
			47	-	PDTC144TT		PDTA144TT	PDTC144TU
			100	-	PDTC115TT		PDTA115TT	PDTC115TU

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	
50	100		1	1			PDTA113EM	PDTA113EMB		
			2.2	2.2	PDTC123EM		PDTA123EM	PDTC123EMB	PDTA123EMB	
			4.7	4.7	PDTC143EM		PDTA143EM	PDTC143EMB	PDTA143EMB	PDTC143EQA
			10	10	PDTC114EM		PDTA114EM	PDTC114EMB	PDTA114EMB	PDTC114EQA
			22	22	PDTC124EM		PDTA124EM	PDTC124EMB	PDTA124EMB	PDTC124EQA
			47	47	PDTC144EM		PDTA144EM	PDTC144EMB	PDTA144EMB	PDTC144EQA
			100	100	PDTC115EM		PDTA115EM	PDTC115EMB	PDTA115EMB	
			1	10			PDTA113ZM	PDTA113ZMB		
			2.2	10	PDTC123YM		PDTA123YM	PDTC123YMB	PDTA123YMB	
			2.2	47	PDTC123JM		PDTA123JM	PDTC123JMB	PDTA123JMB	PDTC123XQA
			4.7	10	PDTC143XM		PDTA143XM	PDTC143XMB	PDTA143XMB	PDTC143XQA
			4.7	47	PDTC143ZM		PDTA143ZM	PDTC143ZMB	PDTA143ZMB	PDTC143ZQA
			10	47	PDTC114YM		PDTA114YM	PDTC114YMB	PDTA114YMB	PDTC114YQA
			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	

RETs 100 mA double

Types in **bold** represent new products

Package					DFN1010B-6 (SOT1216)			DFN1412-6 (SOT1268)			SOT363 (SC-88)			SOT666		
																
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			1.6 x 1.2 x 0.55		
P _{tot} (mW)					350			480			300			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	NPN / NPN	NPN / PNP	PNP / PNP
50	100	R1 = R2	2.2	2.2							PUMH20	PUMD20	PUMB20	PEMH20	PEMD20	PEMB20
			4.7	4.7							PUMH15	PUMD15	PUMB15	PEMH15	PEMD15	PEMB15
			10	10	PQMH11	PQMD3	PQMB11	PRMH11	PRMD3	PRMB11	PUMH11	PUMD3	PUMB11	PEMH11	PEMD3	PEMB11
			22	22		PQMD2			PRMD2		PUMH1	PUMD2	PUMB1	PEMH1	PEMD2	PEMB1
			47	47	PQMH2	PQMD12		PRMH2	PRMD12		PUMH2	PUMD12	PUMB2	PEMH2	PEMD12	PEMB2
			100	100							PUMH24	PUMD24	PUMB24	PEMH24	PEMD24	PEMB24
		R1 ≠ R2	2.2	47	PQMH10	PQMD10		PRMH10	PRMD10		PUMH10	PUMD10	PUMB10	PEMH10	PEMD10	PEMB10
			4.7	10							PUMH18	PUMD18	PUMB18	PEMH18	PEMD18	PEMB18
			4.7	47	PQMH13	PQMD13		PRMH13	PRMD13		PUMH13	PUMD13	PUMB13	PEMH13	PEMD13	PEMB13
			10	47	PQMH9			PRMH9			PUMH9	PUMD9	PUMB9	PEMH9	PEMD9	PEMB9
			22	47		PQMD16			PRMD16		PUMH16	PUMD16	PUMB16	PEMH16	PEMD16	PEMB16
			47	22							PUMH17	PUMD17	PUMB17	PEMH17	PEMD17	PEMB17
			47 / 2.2	47 / 47								PUMD48			PEMD48	
		Only R1	2.2	-							PUMH30	PUMD30	PUMB30	PEMH30	PEMD30	PEMB30
			4.7	-							PUMH7	PUMD6	PUMB3	PEMH7	PEMD6	PEMB3
			10	-							PUMH4	PUMD4	PUMB4	PEMH4	PEMD4	PEMB4
			22	-							PUMH19	PUMD19	PUMB19	PEMH19	PEMD19	PEMB19
			47	-							PUMH14	PUMD14	PUMB14	PEMH14	PEMD14	PEMB14

RETs 500mA 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

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		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																
TLVH431NACDBZR	Normal pinning	0 to 70	1%							2,495	580	36	100				
TLVH431NAIDBZR	Normal pinning	-40 to 85															
TLVH431NAQDBZR	Normal pinning	-40 to 125															
TLVH431NAMQDBZR	Mirrored pinning																
TL431CDBZR	Normal pinning	0 to 70	2%	2,495			580	36	100								
TL431IDBZR	Normal pinning	-40 to 85															
TL431QDBZR	Normal pinning	-40 to 125															
TL431FDT	Normal pinning																
TL431MFD	Mirrored pinning																
TL431ACDBZR	Normal pinning	0 to 70	1%							2,495				580	36	100	
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																

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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	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			BZX384 series				
200	40	2.4~36	B, B1, B2, B3	Japan			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			PZUxB series				
250	40	2.4~75	B, C	Europe			BZX84J series				
200	40	2.4~15	C	Europe	Dual c.a.		BZB984 series	SOT663		1.6 x 1.2 x 0.55	350
200	40	2.4~75	B, C	Europe	Single		BZX585 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

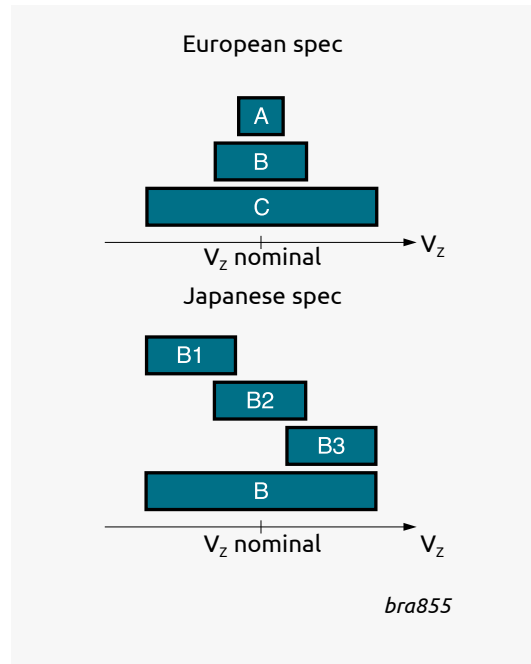
Notes:

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



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

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	-	-	-

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)	@ V_R (V)	t_{rr} max (ns)	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				BAS28					
		100	5000	75	4		BAS32L							
80	1	50	500	80	4					1PS300				
										1PS301				
										1PS302				
90	1	50	500	80	4			BAW56		BAW56W			BAW56QA	BAW56M
											BAW56S	BAW56SRA		
												BAV756S		

General purpose, high speed switching diodes 100V

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOT666	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	1.6 x 1.2 x 0.55	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	180	480	250	325	250	250	250
100	1	50	500	80	4			BAS16GW	BAS16H			BAS316	BAS16J			BAS516		BAS16L		BAS16LD
							BAS16		BAS16W					BAS16QA						
									BAS-16VY		BAS-16VV									
							BAV70		BAV70W				BAV70QA		BAV70M					
									BAV70S		BAV70SRA									
							BAV99		BAV99W				BAV99QA							
									BAV99S											

General purpose, switching diodes $\geq 100V$ 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))
																			
						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)
						P_{tot} (mW)	400	250	250	250	380	375	200	255	300	300	300	250	250
100	1	100	100	100	50				BAS19										
150	1	100	100	150	50	 	BAV102												
				150	50		BAV103				BAS21GW	BAS21H				BAS321	BAS321J		BAS21L(D)
≥ 200	1	100	100	200	50				BAS21				BAS21W						
										BAV23									
														BAS21PG					
									BAV23A				BAS21AW						
									BAV23C										
									BAV23S				BAS21SW						
								BA-S21AVD											
								BAS21VD											
300	1.1	100	150	250	50												BAS21J	BAS521	
									BAS101										
									BAS101S										
										BAW101									
															BAW101S				

Controlled avalanche switching diodes

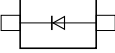
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_d max (pF)	t_{rr} max (ns)	Package	SOT23	SOT143B
										
								Size (mm)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
								P_{tot} (mW)	250	250
60	1	200	100	9	600	2.5	6			BAS56
90	1	200	100	10	600	35	50		BAS29	
	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

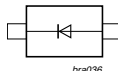
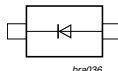
PN rectifiers

Types in **bold** represent new products

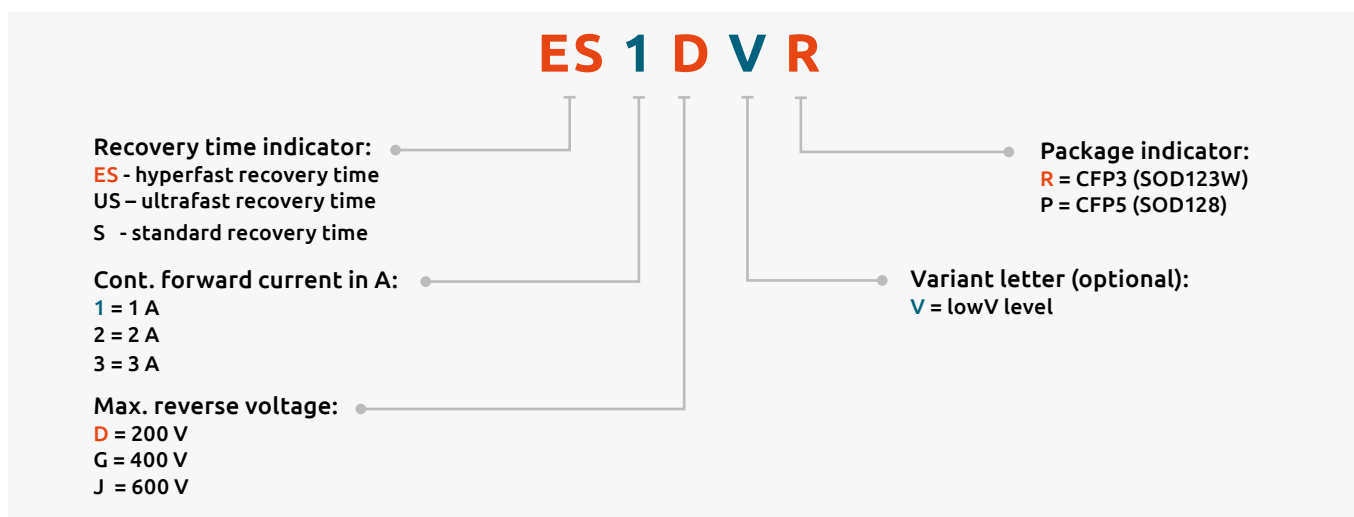
V_R max (V)	V_F max (V)	(@) I_F (A)	I_R max (μA)	(@) V_R (V)	t_{rr} max (ns)	Package	CFP5 (SOD128)	CFP3 (SOD123W)
								
						Size (mm)	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
						P_{tot} (mW) @ 1cm ²	1050	950
200	0.875	1	0.2	200	25	 bra036		ES1DVR
	0.93	1	0.2	200	25			ES1DR
	0.95	2	0.2	200	25			ES2DVR
	0.98	2	0.2	200	25			ES2DR
	0.95	2	0.2	200	25		ES2DP	
	0.98	3	0.2	200	30		ES3DP	
	1.1	1	3	200	3000		S1DR	
400	1.25	1	0.4	400	25			ES1GR

PN rectifiers - Automotive qualified

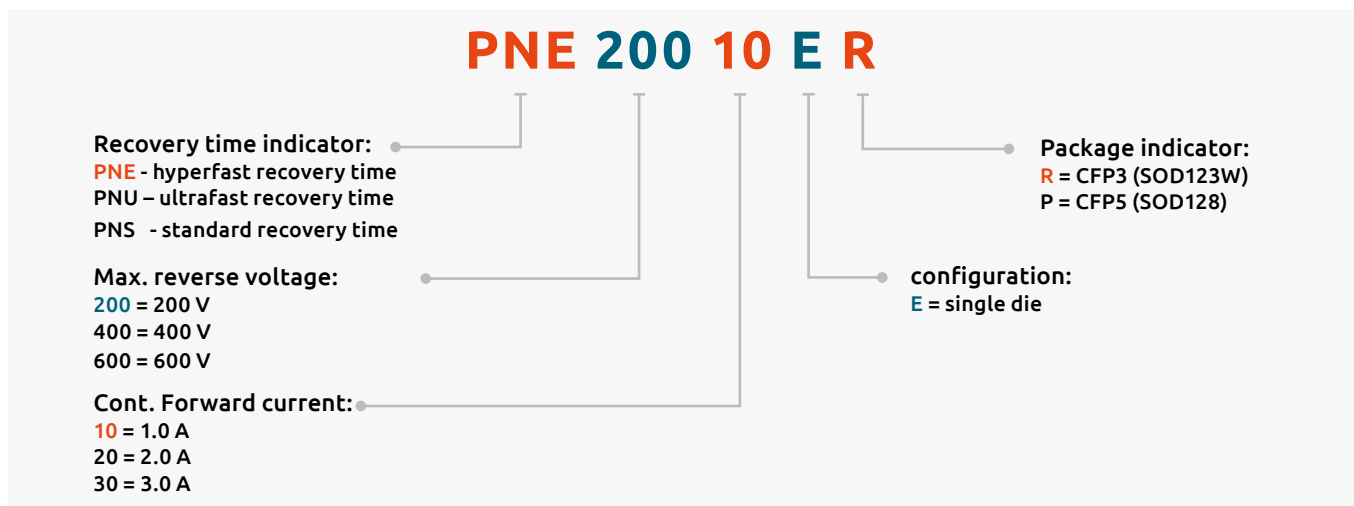
Types in **bold** represent new products

V_R max (V)	V_F max (V)	(@) I_F (A)	I_R max (μ A)	(@) V_R (V)	t_{rr} max (ns)	Package  <i>bra036</i>	CFP5 (SOD128)	CFP3 (SOD123W)	
									
							Size (mm)	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
							P_{tot} (mW) @ 1 cm ²	1050	950
200	0.93	1	0.2	200	25	 <i>bra036</i>		PNE20010ER	
	0.98	2	0.2	200	25			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	

Nomenclature pn-rectifier consumer grade types

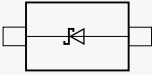
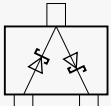
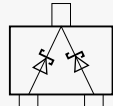
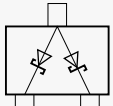
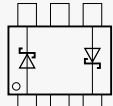
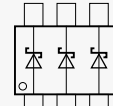
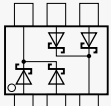
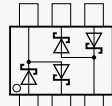
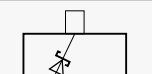
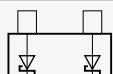
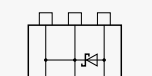


Nomenclature pn-rectifier automotive grade types



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						
120	40	500	10	1	30	Quad 2x series						
						Single						
						Single			BAS40			
						Dual series			BAS40-04			
						Dual c.c.			BAS40-05			
						Dual c.a.			BAS40-06			
200	30	340	10	2	25	Dual isolated				BAS40-07		
						Quad c.c./c.c.						
						Quad 2x series						
						Single						
						Single			BAT754			
		Dual series			BAT754S							
		Dual c.c.			BAT754C							
		Dual c.a.			BAT754A							
		Triple isolated										
		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	30	10	Single							
	600	200	1	10	Single							
	40	300	10	15	30	Single			BAT721			
						Dual series			BAT721S			
						Dual c.c.			BAT721C			
						Dual c.a .			BAT721A			
		360	10	0.5	25	Single						
		Single										
		Dual series										
		Dual c.c.										
420	30	0.5	25	Dual c.a.								
Dual c.c.												
50	450	10	5	40	Single	BAS86	BAT86					
250	100	850	250	4	75	Single					BAT46GW	

Single	Dual series	Dual c.c.	Dual c.a.	Dual isolated	Triple isolated	Quad c.c./c.c.	Quad 2x series
 brb122	 brb124	 brb125	 brb126	 brb127	 brb129	 brb130	 brb131
 brb123				 brb128			
 aaa-001765							

SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOT666	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	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
375	250	300	385	400	300	275	250
BAS70H	BAS70W			1PS76SB70		1PS79SB70	BAS70L
	BAS70-04W						
	BAS70-05W						
	BAS70-06W						
		BAS70-07S			BAS70-07V		
		BAS70XY			BAS70VV		
				RB751V40		RB751S40	RB751CS40
BAS40H	BAS40W			1PS76SB40		1PS79SB40	BAS40L
	BAS40-04W						
	BAS40-05W						
	BAS40-06W						
		1PS88SB48			BAS40-07V		
		BAS40XY			BAS40-05V		
						1PS79SB31	
		BAT754L					
BAT54H	BAT54W		BAT54J	1PS76SB10		1PS79SB10	BAT54L
	BAT54SW						
	BAT54CW						BAT54CM
	BAT54AW						
		BAT74S			BAT74V		
					BAT54VV		
		BAT54XY			BAT54CV		
						RB521S30	RB521CS30L
				1PS76SB21		RB520S30	RB520CS30L
						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)	SOT666	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	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
30	4	450	1	P _{tot} (mW)	250	250	300	400	300	500	250
				Single	BAT17			1PS76SB17		1PS79SB17	
				Triple isolated					1PS66SB17		
				Dual series	PMBD353 PMBD354 ¹⁾						
	15	340	1	Single		1PS70SB82					1PS10SB82
				Triple isolated			1PS88SB82		1PS66SB82		
				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)		
									
					Size (mm)	0.6 x 0.3 x 0.3	0.6 x 0.3 x 0.2		1.0 x 0.6 x 0.28
					P _{tot} (mW) @ 1 cm²	525	525		1.000
					Optimization				
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					
		535	0.009	Low I _R	PMEG3002ESF				
	40	525	0.08	Low V _F	PMEG4002AESF				
		600	0.0065	Low I _R	PMEG4002ESF				
		600	0.01	low I _R					
	60	600	0.1	low V _F					
0.5	20	390	0.2	low V _F					
		410	0.3	low V _F					
		440	1.5	low V _F					
		500	0.03	low I _R					
		550	0.045	Low V _F	PMEG2005AESF				
		620	0.0035	Low I _R	PMEG2005ESF				
	30	500	0.5	low V _F					
		630	0.08	Low V _F	PMEG3005AESF				
		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					
		530	0.2	low V _F					
		575	0.25	low V _F					

$$\frac{1.0 \times 0.6 \times 0.37}{660}$$

Medium power low VF schottky rectifiers single ≥ 200 mATypes in **bold** represent new products

I _F max (A)	V ^R max (V)	V _F max (mV) @ I _F max	I _R max (mA) @ V _R max	Package	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 cm²	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		
		460	0.022	Low V _F /Low I _R			PMEG40T10ER¹⁾	
		530	0.06	Low V _F		PMEG6010EP	PMEG6010ER	
2	60			Low V _F			PMEG6010ETR	
		660	0.0003	Low I _R			PMEG6010ELR	
	100	770	0.00015	Low I _R			PMEG10010ELR	
	30	360	3	Low V _F		PMEG3020EP		
		420	1.5	Low V _F		PMEG3020CEP	PMEG3020ER	
		450	0.1	Low I _R		PMEG3020BEP		
		520	0.05	Low I _R		PMEG3020DEP	PMEG3020BER	
	40	490	0.1	Low V _F		PMEG4020EP	PMEG4020ER	
		Low V _F		PMEG4020ETP	PMEG4020ETR			
60	515	0.022	Low V _F /Low I _R		PMEG40T20EP¹⁾	PMEG40T20ER¹⁾		
		Low V _F		PMEG6020EP	PMEG6020ER			
	530	0.2	Low V _F		PMEG6020ETP	PMEG6020ETR		
	620	0.0012	Low V _F /Low I _R			PMEG60T20ELR¹⁾		
	680	0.0007	Low I _R		PMEG6020AELP	PMEG6020AELR		
	760	0.0003	Low I _R			PMEG6020ELR		
100	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			
			0.2	Low V _F		PMEG4030EP		
			Low V _F		PMEG4030ETP			
		525	0.028	Low V _F /Low I _R		PMEG40T30EP¹⁾	PMEG40T30ER¹⁾	
		540	0.1	Low I _R			PMEG4030ER	
	45	480	0.044	Low V _F /Low I _R	PMEG045T030EPD¹⁾			
	50	530	0.1	Low V _F	PMEG050V030EPD			
	60	475	0.4	Low V _F		PMEG6030EVP		
		530	0.2	Low V _F	PMEG060V030EPD	PMEG6030EP		
				Low V _F		PMEG6030ETP		
		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		
			0.3	Low V _F		PMEG4050ETP		
		520	0.12	Low V _F	PMEG040V050EPD			
		525	0.041	Low V _F /Low I _R		PMEG40T50EP¹⁾		
	45	490	0.3	Low V _F	PMEG045V050EPD			
		525	0.044	Low V _F /Low I _R	PMEG045T050EPD¹⁾			
	60	560	0.4	Low V _F	PMEG060V050EPD			
6	100	840	0.00045	Low I _R	PMEG100V060ELPD			
8	100	850	0.0005	Low I _R	PMEG100V080ELPD			
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	PMEG045T100EPD¹⁾			
		560	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	PMEG045T150EIPD¹⁾			
	50	500	1	Low V _F	PMEG050V150EPD			
		550	0.1	Low I _R	PMEG050T150EPD ¹⁾			

¹⁾ Trench process

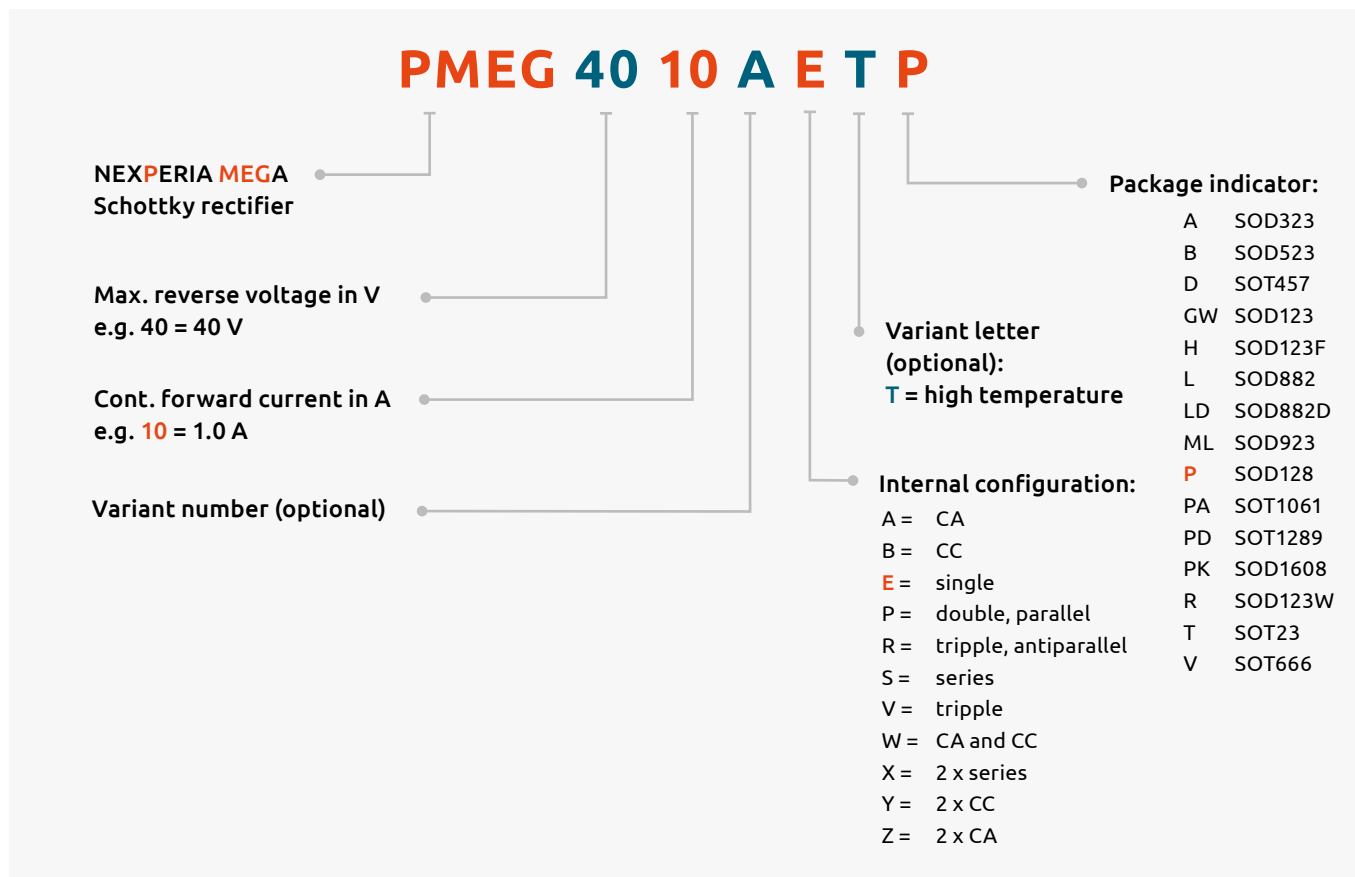
Medium power low VF schottky rectifiers single ≥ 200 mA - leaded packages

I_F max (A)	V_F 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)	SOT666	SOD523 (SC-79)
				Size (mm)									
				P_{tot} (mW) @ 1 cm ²	540	420	660	830	400	830	570	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	PMEG2005AEV	
		480	0.03	Low I_r									PMEG2005EB
	30	430	0.15	Low V_F		PMEG3005ET	PMEG3005EGW	PMEG3005EH		PMEG3005EJ	PMEG3005AEA	PMEG3005AEV	
		500	0.5	Low V_F									PMEG3005EB
	40	470	0.1	Low V_F		PMEG4005ET	PMEG4005EGW	PMEG4005EH		PMEG4005EJ	PMEG4005AEA	PMEG4005AEV	
		550	1.1	Low V_F		BAT720			1PS70SB20				
0.75	40	640	0.008	Low I_r						PMEG4005CEJ	PMEG4005CEA		
		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	PMEG2010BEV	
		550	0.07	Low I_r						PMEG2010AEJ	PMEG2010EA BAT760	PMEG2010EV BAT960	
		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	PMEG3010BEV	
		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	PMEG4010BEV	
		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	PMEG2015EV	
	30	500	1	Low V_F				PMEG3015EH		PMEG3015EJ		PMEG3015EV	
2	10	460	3	Low V_F				PMEG1020EH		PMEG1020EJ	PMEG1020EA	PMEG1020EV	
	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			

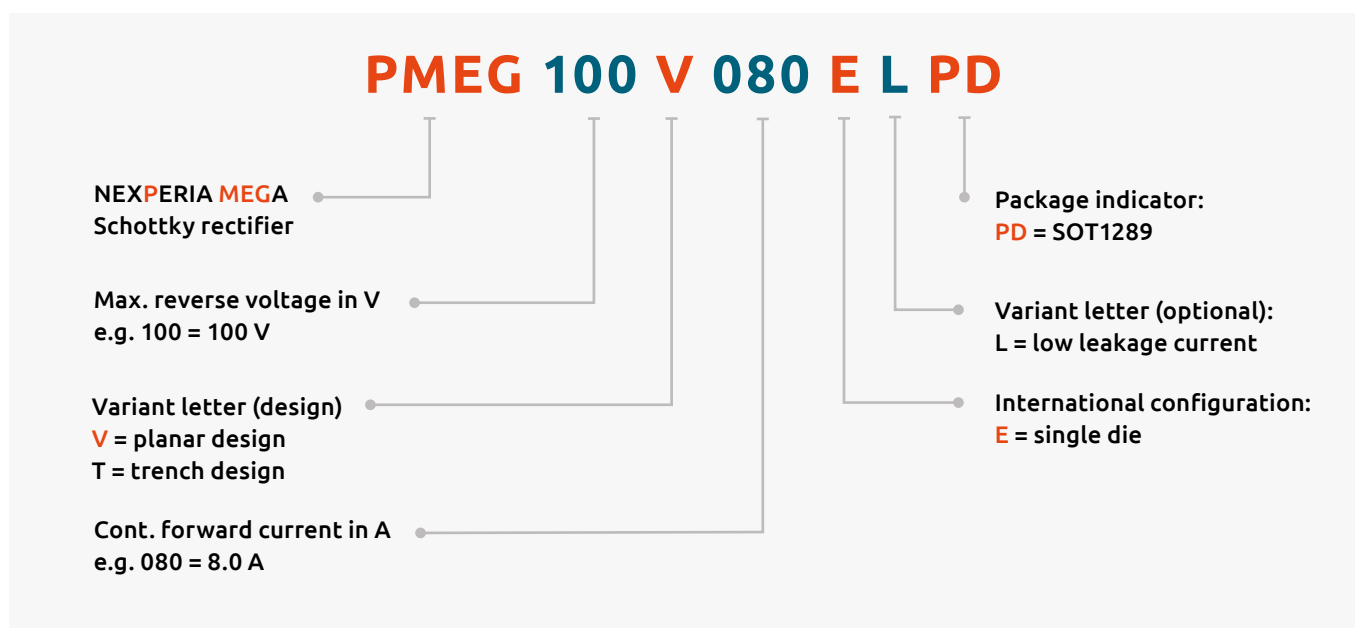
Medium power low VF schottky rectifiers dual ≥ 200 mA

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)	SOT666
					Size (mm)					
					P_{tot} (mW) @ 1 cm ²	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	1.6 x 1.2 x 0.55
0.2	30	480	0.03	Low V_F	 BAT122					PMEG3002TV
	60	600	0.1	Low V_F						PMEG6002TV
0.5	20	390	0.2	Low V_F	 BAT125		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	BAT120S				
				Low V_F	 BAT120C	BAT120C				
				Low V_F	 BAT120A	BAT120A				
	40	500	0.05	Low V_F	 BAT125			PMEG4010CPA	PMEG4010CPAS	
	60	540	0.06	Low V_F	 BAT125			PMEG6010CPA	PMEG6010CPAS	
		650	0.35	Low V_F	 BAT160S	BAT160S				
				Low V_F	 BAT160C	BAT160C				
				Low V_F	 BAT160A	BAT160A				
2.0	20	420	1.0	Low V_F	 BAT120S			PMEG2020CPA	PMEG2020CPAS	
	30	440	2.0	Low V_F	 BAT125			PMEG3020CPA	PMEG3020CPAS	

Nomenclature of automotive grade Schottky rectifier in medium-power packages



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

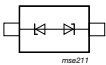




ESD protection, TVS, filtering and signal conditioning

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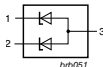
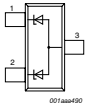
Low capacitance ESD protection for high-speed interfaces

Number of protected lines		V _{RWM} (V)	C _{line} typ (pF)	C _{line} max (pF)	ESD rating max (kV) [1]	Surge robustness 8/20 μs (A)	Configuration	Type	Package	Size (mm)		
Unidirectional	Bidirectional											
1	0	5	0.45	0.5	20	9		PESD5V0C1USF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3		
		6.5	0.45	0.5	20	9		PESD6V5C1USF				
		5	0.6	0.75	10			PESD5V0F1USF				
		5	0.95	1.15	8			PESD5V0X1ULD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37		
			1.55	1.75	15			PESD5V0X1UALD				
		16	0.83	0.98	8			PESD16VX1UL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48		
		5	0.95	1.15	8			PESD5V0X1UB	SOD523 (SC-79) 	1.2 x 0.8 x 0.6		
			1.55	1.75	15			PESD5V0X1UAB				
		3.3	0.6	1.5	30	5		PESD3V3U1UT	SOT23 	2.9 x 1.3 x 1.0		
		5	0.6	1.5	30	5		PESD5V0U1UT				
		12	0.6	1.5	30	5		PESD12VU1UT				
		15	0.6	1.5	30	5		PESD15VU1UT				
		24	0.6	1.5	23	5		PESD24VU1UT				
		0	1	5	0.2	0.3	8			PESD5V0F1BSH	DSN0402-2 (SOD992) 	0.4 x 0.2 x 0.12
				3.3	0.2	0.25	20	9		PESD3V3C1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
0.28	0.35				20	9.5	PESD3V3Z1BSF					
0.45	0.6				25	15	PESD3V3W1BSF					
4.0	0.45				0.6	25	15	PESD4V0W1BSF				
5	0.1			0.15	10	4.5	PESD5V0R1BSF					
	0.15			0.19	15	7	PESD5V0H1BSF					
	0.2			0.25	20	9	PESD5V0C1BSF					
	0.1			0.15	10	4.5	PESD7V0R1BSF					
7	0.15			0.19	15	7	PESD7V0H1BSF					
	0.2			0.25	20	9	PESD7V0C1BSF					
	5.5			0.25	0.3	10		PESD5V0F1BSF				
3.3	–			1.1	20	9		PESD5V0F1BRSF		DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37	
5.0	–			1.1				PESD3V3X1BCSF				
18	0.28			0.45	10		PESD5V0X1BCSF					
24	0.25			0.4			PESD18VF1BSF					
							PESD24VF1BSF					
5	0.4			0.55	10		PESD5V0F1BLD					
3.3	1.3			1.6	9		PESD3V3X1BL	DFN1006-2 (SOD882) 		1.0 x 0.6 x 0.48		
5.5	0.4			0.55	10		PESD5V0F1BL					
5	0.49			0.6	8		PESD5V0X1BCL					
	0.85			0.95	15		PESD5V0X1BCAL					
	0.9			1.3	9		PESD5V0X1BL					
18	0.35			0.5	10		PESD18VF1BL					
24	0.3			0.45	10		PESD24VF1BL					

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

Products in **bold red** are under development

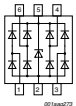
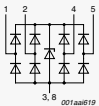
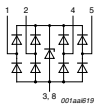
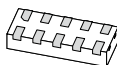
Low capacitance ESD protection for high-speed interfaces

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		PESD5V0X2UMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37	
			0.8	0.95	15		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	80	0.6	0.75	30		PESD5V0X1BQ	SOT663 	1.6 x 1.2 x 0.55	
							PESD5V0X1BT	SOT23 	2.9 x 1.3 x 1.0	
							NUP1301U	SOT323 	2.0 x 1.25 x 0.95	
							NUP1301	SOT23 	2.9 x 1.3 x 1.0	
3	0	5.5	1	1.5	8		PRTR5V0U2X	SOT143B 	2.9 x 1.3 x 1.0	
			1.8	-	12		PRTR5V0U2AX			
			1	1.5	8			PRTR5V0U2F	DFN1410-6 (SOT886) 	1.45 x 1.0 x 0.48

ESD protection, TVS, filtering and signal conditioning

^[1] according to IEC 61000-4-5 (contact discharge)

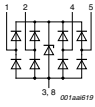
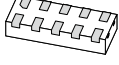
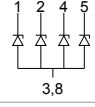
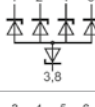
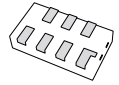
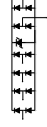
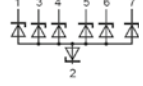
Low capacitance ESD protection for high-speed interfaces

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								
4	0	5.5	1	-	8		IP4220CZ6	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
							PRTR5V0U4D		
			0.7	0.85	12		PUSB2X4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
							PUSB2X4Y	SOT363 (SC-88) 	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 61000-4-5 (contact discharge)

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

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	ESD rating ^[1] max (kV)	$I_R max$ (μA) @ V_{RWM}	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
								PUSB3F96		
		3.3	0.27	0.34	15	0.1		PUSB3FR4		
								PHDMI2FR4		
0	4	3.3	0.17	0.2	15	0.1		PUSB3AB4	PHDMI2AB4	
6	0	3.3	0.35	0.4	15	-		PUSB3FR6	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48
0	6	5.5	0.27	0.35	10	0.1		PUSB3TB6		
		3.3	0.15	0.2	15			PUSB3AB6		

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

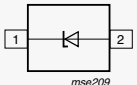
TrEOS protection devices

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

Type	device	V _{RWM} (V)	Uni- or bidirectional	C _d typ (pF)	ESD rating max (kV) (Ω)	R _{dyn} TLP (Ω)	Number of protected lines	Package	Size (mm)	
PUSB3FR4	ESD protection	3.3	uni	0.29	15	0.27	4	DFN2510A-10	2.5 x 1.0 x 0.48	
PUSB3FR6				0.35	15	0.29	6	DFN2111-7	2.1 x 1.1 x 0.48	
PUSB3AB4			bi	0.17	15	0.4	4	DFN2510A-10	2.5 x 1.0 x 0.48	
PUSB3AB6				0.15	15	0.4	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	
PESD3V3Z1BSF	ESD protection	3.3	bi	0.28	20	0.19	1	DSN0603-2	0.6 x 0.3 x 0.3	
PESD3V3W1BSF				0.45	25	0.11				
PESD3V3C1BSF				0.2	20	0.23				
PESD4V0W1BSF		4.0		0.45	25	0.11				
PESD5V0R1BSF		5		0.1	10	0.45				
PESD5V0H1BSF				0.15	15	0.25				
PESD5V0C1BSF				0.2	20	0.23				
PESD5V0C1USF			uni	0.45	20	0.1				

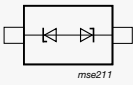
Products in **bold red** are under development

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	P_{pp} max (W) [1]	ESD rating max (kV) [2]	I_{ft} max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
1	0	5	35	42	40	30	0.1		PESD5V0S1USF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		5.5	12	15.4	10	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	45	30	0.3		PESD3V3L1UL		
			207	300	150	30	2		PESD3V3S1UL		
		5	2	2.6	-	9	0.1		PESD5V0U1UL		
			25	30	42	26	0.1		PESD5V0L1UL		
		5	152	200	150	30	1		PESD5V0S1UL		
		12	38	75	150	30	0.05		PESD12VS1UL		
		15	32	70	150	30	0.05		PESD15VS1UL		
		24	23	50	150	23	0.05		PESD24VS1UL		
		36	18	30	150	30	0.01		PESD36VS1UL		
		5	25	30	42	26	0.1		PESD5V0L1ULD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.4
			152	200	150	30	1		PESD5V0S1ULD		
		12	38	75	150	30	0.05		PESD12VS1ULD		
		15	32	70	150	30	0.05		PESD15VS1ULD		
		24	23	50	150	23	0.05		PESD24VS1ULD		
		2.5	229	300	260	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	45	30	0.3		PESD3V3L1UB		
			172	200	260	30	0.05		PESD5Z3.3		
			207	300	330	30	2		PESD3V3S1UB		
		5	2	2.6	-	9	0.1		PESD5V0U1UB		
			25	30	42	26	0.1		PESD5V0L1UB		
			89	150	180	30	0.05		PESD5Z5.0		
			152	200	260	30	1		PESD5V0S1UB		
		6	78	150	180	30	0.01		PESD5Z6.0		
		7	69	150	180	30	0.01		PESD5Z7.0		
		12	35	75	200	30	0.01		PESD5Z12		
			38	75	180	30	0.05		PESD12VS1UB		
		15	32	70	160	30	0.05		PESD15VS1UB		
		24	23	50	160	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	42	26	0.1		PESD5V0L1UA		
			480	530	890	30	4		PESD5V0S1UA		
		12	160	180	600	30	0.1		PESD12VS1UA		
		24	23	50	160	23	0.05		PESD24VS1UA	SOD323F (SC-90) 	1.7 x 1.25 x 0.7
		5	480	530	890	30	4		PESD5V0S1UJ		
		12	160	180	600	30	0.1		PESD12VS1UJ		
		36	18	30	150	30	0.01		PESD36VS1UJ		

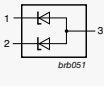
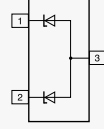
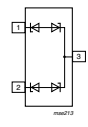
[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 [2] according to IEC 61000-4-5 (contact discharge)

General purpose ESD protection devices

Number of protected lines		V _{RWM} (V)	C _{line typ} (pF)	C _{line max} (pF)	P _{PP} max (W) [1]	ESD rating max (kV) [2]	I _R max (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)					
Unidirectional	Bidirectional															
0	1	3.3	5.5	6	-	20	0.1		PESD3V3U1BCSF	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3					
			8.5	10	-	30	0.1		PESD3V3V1BCSF							
		5.5	5.3	6	5.5	20	0.1		PESD5V0V1BCSF							
					20	20	0.1		PESD5V0V1BDSF							
			12	15.4	8	15	0.1		PESD5V0V1BSF							
									35			45	100	30	0.1	PESD5V0L1BSF
																PESD5V0S1BSF
																PESD5V0S1BSF
		3.3	101	-	500	30	2		PESD3V3L1BA	 SOD323 (SC-76)	1.7 x 1.25 x 0.95					
		5	75	-	500	30	1		PESD5V0L1BA							
		12	19	-	200	30	0.05		PESD12VL1BA							
		15	16	-	200	30	0.05		PESD15VL1BA							
		24	11	-	200	23	0.05		PESD24VL1BA							
		3.3	22	30	-	30	0.05		PESD3V3T1BL			 DFN1006-2 (SOD882)				
		4.5	65	78	-	30	0.05		PTVS4V5D1BL							
		5	11	13	45	30	0.01		PESD5V0V1BL							
									35	45			130	30	0.1	PESD5V0S1BL
																PESD12VV1BL
			11	13	45	30	0.01		PESD5V0V1BLD	 DFN1006D-2 (SOD882D)						
									PESD5V0S1BLD							
									11	13	45	30	0.01	PESD5V0V1BB	 SOD523 (SC-79)	1.2 x 0.8 x 0.6
			PESD5V0S1BB													
			11	13	45	30	0.01		PESD5V0V1BA	 SOD323 (SC-76)	1.7 x 1.25 x 0.95					
									PESD5V0S1BA							
		2.9	3.5	-	10	0.1			PESD5V0U1BL	 DFN1006-2 (SOD882)						
									PESD5V0U1BLD	 DFN1006D-2 (SOD882D)						
									PESD5V0U1BB	 SOD523 (SC-79)						
									PESD5V0U1BA	 SOD323 (SC-76)						

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

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	$P_{PP max}$ (W) ^[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	30	15	0.3		PESD3V3L2UM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.5
		5	16	19	30	15	0.025		PESD5V0L2UM		
					-	15	0.025		PESD5V0L2UMB	DFN1006B-3 (SOT883B) 	1 x 0.6 x 0.37
		3.3	200	275	150	30	3		PESD3V3S2UQ	SOT663 	1.6 x 1.2 x 0.55
		5	150	215	150	30	0.3		PESD5V0S2UQ		
		12	38	100	150	30	0.03		PESD12VS2UQ		
		15	32	70	150	30	0.05		PESD15VS2UQ		
		24	23	50	150	23	0.05		PESD24VS2UQ		
		3.3	207	300	330	30	2		PESD3V3S2UT	SOT23 	2.9 x 1.3 x 1
		5.2	152	200	260	30	1		PESD5V2S2UT		
		12	38	75	180	30	1		PESD12VS2UT		
		15	32	70	160	30	1		PESD15VS2UT		
		24	23	50	160	23	1		PESD24VS2UT		
		36	17	35	160	30	1 (@ 30 V)		PESD36VS2UT		
		3.3	207	300	330	30	2		PESD3V3S2UAT		
		5	152	200	260	30	1		PESD5V0S2UAT		
		15	32	70	160	30	0.05		PESD15VS2UAT		
		24	23	50	160	23	0.05		PESD24VS2UAT		
		5	38	46	70	30	0.09 (@ 4 V)		PESD5V0L2UU	SOT323 (SC-70) 	2 x 1.25 x 0.95
		6	34	40	60	30	0.018 (@ 4.3 V)		PESD6V0L2UU		
0	2	3.3	101	-	350	30	2		PESD3V3L2BT	SOT23 	2.9 x 1.3 x 1
		5	75	-		30	1		PESD5V0L2BT		
		12	19	-		30	0.05		PESD12VL2BT		
		15	16	-	200	30	0.05		PESD15VL2BT		
		24	11	-		23	0.05		PESD24VL2BT		
		5	35	45	130	30	0.1		PESD5V0S2BT	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.5
			2.9	3.5	-	10	0.1		PESD5V0U2BT		
			18	20	110	30	0.01		PESD5V0U2BM	DFN1006B-3 (SOT883B) 	1 x 0.6 x 0.37
			2.9	3.5	-	10	0.1		PESD5V0U2BMB		
			18	20	110	30	0.01		PESD5V0V2BMB	DFN1010D-3 (SOT1215) 	1.1 x 1.0 x 0.37
			35	45	130	30	0.1		PESD5V0S2BQA		

^[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)	$P_{PP max}$ (W) ^[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	30	20	0.3	 006aaa156	PESD3V3L4UF	DFN1410-6 (SOT886) 	1.45 x 1 x 0.5
			110	300	110	30	1 (@ 3 V)		PESD3V3S4UF		
		5	16	19	30	20	0.025		PESD5V0L4UF		
			85	220	110	30	0.1 (@ 4.3 V)		PESD5V0S4UF		
		3.3	22	28	30	20	0.3	 mao215	PESD3V3L4UW	SOT665 	1.6 x 1.2 x 0.55
		5	16	19	30	20	0.025		PESD5V0L4UW		
		3.3	15	18	16	12	0.3		PESD3V3V4UW		
		5	12	15	16	12	0.025		PESD5V0V4UW		
		3	200	240	-	8	2		BZA856A	SOT353 (SC-88A) 	2 x 1.25 x 0.95
		3.3	22	28	30	20	0.3		PESD3V3L4UG		
		5	16	19	30	20	0.025		PESD5V0L4UG		
		3	200	240	-	8	2		BZA456A	SOT457 (SC-74) 	2.9 x 1.5 x 1
		3.3	215	300	200	30	0.8	PESD3V3S4UD			
		5	165	220	200	30	0.2	PESD5V0S4UD			
		15	37	48	-	8	0.1	BZA420A			
		24	40	70	200	23	0.01	PESD24VS4UD			
0	4	5	2.9	3.5	-	10	0.1	 006179	PESD5V0U4BF	DFN1410-6 (SOT886) 	1.45 x 1 x 0.5
			45	75	-	15	0.1	 mao1	BZA408B	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
			2.9	3.5	-	10	0.1	 006180	PESD5V0U4BW	SOT665 	1.6 x 1.2 x 0.55
5	4	3.3	20	24	28	15	2	 006aaa159	PESD3V3L5UK	DFN1010-6 (SOT891) 	1 x 1 x 0.5
		5	18.5	22	30	20	0.5		PESD5V0L5UK		
		3.3	22	28	25	20	0.3		PESD3V3L5UF	DFN1410-6 (SOT886) 	1.45 x 1 x 0.5
		5	16	19	25	20	0.025		PESD5V0L5UF		
		3.3	22	28	25	20	0.3	 mao217	PESD3V3L5UV	SOT666 	1.6 x 1.2 x 0.55
		5	16	19	25	20	0.025		PESD5V0L5UV		
		3.3	22	28	25	20	0.3		PESD3V3L5UY	SOT363 (SC-88) 	2 x 1.25 x 0.95
		5	16	19	25	20	0.025		PESD5V0L5UY		
		3.3	215	300	200	30	0.8	PESD3V3S5UD	SOT457 (SC-74) 	2.9 x 1.5 x 1.0	
		5	165	220	200	30	0.2				PESD5V0S5UD
		24	45	70	200	23	0.015				PESD24VS5UD
0	5	5	2.9	3.5	-	10	0.1	 006180	PESD5V0U5BF	DFN1410-6 (SOT886) 	1.45 x 1 x 0.5
								 006183	PESD5V0U5BV	SOT666 	1.6 x 1.2 x 0.55

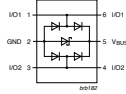
^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 ^[2] according to IEC 61000-4-5 (contact discharge)

Audio interface protection

Types in **bold** represent new products

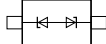
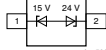
Lines	$V_{RWM}(V)$	$V_{BR\ min}(V)$	$V_{BR\ max}(V)$	$C_D\ typ(pF)$	$C_D\ max(pF)$	$I_{PPM}\ 8/20\mu s(A)$	$V_{CL}\ 8/20\mu s @ I_{PPM}(V)$	$V_{ESD}(hV)$	Configuration	Type	Package
1	3.3	4.7		22	30	-	-	30		PESD3V3T1BL	DFN1006-2 (SOD882)
	4.5	4.7		65	78	34	13.2	30		PTVS4V5D1BL	
	5	5.5	9.5	35	45	12	14	30		PESD5V0S1BL	DFN1010D-3 (SOT1215)
				70	90	28	11.5	30		PESD5V0S2BQA	DFN1006D-2 (SOD882D)
				35	45	12	14	30		PESD5V0S1BLD	DFN1006-2 (SOD882)
		5.8	7.8	11	13	4.8	12.5	30		PESD5V0V1BL	DFN1006D-2 (SOD882D)
				11	13	4.8	12.5	30		PESD5V0V1BLD	DFN1006-2 (SOD882)
				17	25	7.8	38	30		PESD12VV1BL	DFN1006-3 (SOT883)
	12	14.6	16.8	17	25	7.8	38	30		PESD12VV1BL	DFN1006-3 (SOT883)
2	5	5.8	7.8	18	20	9	12.5	30		PESD5V0V2BM	DFN1006B-3 (SOT883B)
				18	20	9	12.5	30		PESD5V0V2BMB	DFN1006B-3 (SOT883B)

Automotive high-speed network protection

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)
2	5	1	0.1	8		PESD2ETH-X		2.9 x 1.3 x 1.0
		1.8	0.1	12		PESD2ETH-AX		
2	5	1.3	0.1	8		PESD2ETH-D		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} 8/20 μ s (A)	V_{CL} 8/20 μ s @ I_{PPM} (V)	ESD rating max (kV) [2]	I_T max [μ A] @ V_{RWM}	Configuration	Type	Package	Size (mm)	
1	24	14	17	3.5	42	30	0.05	 msd211	PESD1IVN24-A		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	 msd212	PESD2IVN24-T		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	 msd210EED	PESD1IVN27-U		2.0 x 1.25 x 0.95	
2	24	14	17	3.5	42	30	0.05	 msd212	PESD2IVN24-U			PESD2IVN27-U
	27	14	17	3	45	30	0.05					
1	15 (diode 1) 24 (diode 2)	13	17	3 (diode 1) 5 (diode 2)	70 (diode 1) 44 (diode 2)	23	0.05	 msd520	PESD1LIN		1.7 x 1.25 x 0.95	
2	24	11	17	3	70	23	0.05	 msd212	PESD1CAN		2.9 x 1.3 x 1.0	
		25	30	5	41	30	0.01		PESD2CAN			
		11	17	3	70	23	0.05		PESD1FLEX		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	 msd210EED	PESD1IVN-U		2.0 x 1.25 x 0.95	
2								 msd212	PESD2IVN-U			

^[1] 8 / 20 μs surge pulse according to IEC 61000-4-5^[2] according to IEC 61000-4-2 (contact discharge)

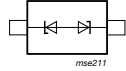
Battery and charger port protection

Number of protected lines	C _{line} (pF)	V _{RWM} (V)	I _{PPM} 8/20μs (A)	Type	Package	Size (mm)
1 x bi	65	4.5	34	PTVS4V5D1BL	DFN1006-2 	1.0 x 0.6 x 0.48
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	DFN1006-3 (SOT883) 	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

Antenna protection (NFC, WiFi,...)

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		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		

^[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			
	3 + 1			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
				USB protection for USB OTG with 12 V Vbat protection	PUSBM12VX4-TL			
	4		1	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
				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

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	PCMF1USB3S	6 GHz	>12	0.3	5	15	3	WLCSP5 	0.8 x 1.2 x 0.5
	2	PCMF2USB3S							WLCSP10 	1.6 x 1.2 x 0.5
	3	PCMF3USB3S							WLCSP15 	2.4 x 1.2 x 0.5
	1	PESD1USB3S	17 GHz	ESD protection only	0.5			-	WLCSP5 	0.8 x 1.2 x 0.5
	2	PESD2USB3S							WLCSP10 	1.6 x 1.2 x 0.5
	3	PESD3USB3S							WLCSP15 	2.4 x 1.2 x 0.5

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

Common mode filter for HDMI and MIPI

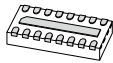
Interface	Number of protected line pairs unidirectional	Type	Differential Mode 3 dB frequency (typ.)	C_d pF typical	V_{RWM}	ESD rating ^[1] max (kV)	Channel series resistance	Package	Size (mm)
HDMI2.0	1	PCMF1HDMI2S	>6 GHz	0.3	5	15	3 Ω	WLCSP5 	0.8 x 1.2 x 0.5
	2	PCMF2HDMI2S						WLCSP10 	1.6 x 1.2 x 0.5
	3	PCMF3HDMI2S						WLCSP15 	2.4 x 1.2 x 0.5

^[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 S21 ~ -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		

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

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	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.5	10			IP4294CZ10-TBR		
		0.5	10			PUSB3F96		
		0.5	10			PUSB3F97		
		0.5	10			PUSB3F99		
		0.5	10			PUSB3FA0		
USB3.1 - 10 Gbps	6	0.29	15	0.27	TrEOS Protection	PUSB3FR4	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48
		0.17	15	0.4		PUSB3AB4		
		0.29	15	0.27		PUSB3FR6		
		0.27	15	0.5		PUSB3TB6		
		0.15	15	0.4		PUSB3AB6		
		0.1	10	0.45		PESD5V0R1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
	1	0.15	15	0.25		PESD5V0H1BSF		
		0.2	20	0.23		PESD5V0C1BSF		
		0.2	20	0.23		PESD3V3C1BSF		
		0.28	20	0.19		PESD5V0C1USF		
		0.45	25	0.11		PESD3V3W1BSF		
		0.45	25	0.11		PESD4V0W1BSF		
		0.45	20	0.1		PESD3V3Z1BSF		
		0.1	10	0.45		PESD7V0R1BSF		
		0.15	15	0.25		PESD7V0H1BSF		
		0.2	20	0.23		PESD7V0C1BSF		
		0.45	20	0.1		PESD6V5C1USF		
	2	0.25	15	0.16		PESD1USB3S	WLCSP5 	1.2 x 0.8 x 0.6
		0.25	15	0.14	Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3S		

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	4.5	4.7	-	34	13.2	-	-	PTVS4V5D1BL	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48
	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

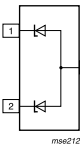
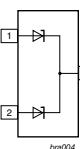
Types in **bold** represent new products

V_{RWM} (V)	V_{BR} min (V)	V_{BR} max (V)	8/20µs pulse		10/1000µs pulse		I_{RM} typ @ V_{RWM} (nA)	I_{RM} max @ V_{RWM} (nA)	R_{dyn} (TLF) - 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)

Types in **bold** represent new products

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_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	3	5.32	5.6	5.88	20	30	210	8	3	5		MMBZ5V6AL	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		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		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VCL		

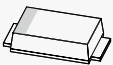
Transient voltage surge suppressor (TVS)

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		2.6 x 1.7 x 1.0
400	5.0	6.40	6.70	7.00	10	9.2	43.5	5	400	PTVS5V0S1UR	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	PTVS10VS1UR	PTVS10VS1UTR		
	11	12.20	12.85	13.50	1	18.2	22.0	0.005	2.5	PTVS11VS1UR	PTVS11VS1UTR		
	12	13.30	14.00	14.70	1	19.9	20.1	0.005	2.5	PTVS12VS1UR	PTVS12VS1UTR		
	13	14.40	15.15	15.90	1	21.5	18.6	0.001	0.1	PTVS13VS1UR	PTVS13VS1UTR		
	14	15.60	16.40	17.20	1	23.2	17.2	0.001	0.1	PTVS14VS1UR	PTVS14VS1UTR		
	15	16.70	17.60	18.50	1	24.4	16.4	0.001	0.1	PTVS15VS1UR	PTVS15VS1UTR		
	16	17.80	18.75	19.70	1	26.0	15.4	0.001	0.1	PTVS16VS1UR	PTVS16VS1UTR		
	17	18.90	19.90	20.90	1	27.6	14.5	0.001	0.1	PTVS17VS1UR	PTVS17VS1UTR		
	18	20.00	21.00	22.10	1	29.2	13.7	0.001	0.1	PTVS18VS1UR	PTVS18VS1UTR		
	20	22.20	23.35	24.50	1	32.4	12.3	0.001	0.1	PTVS20VS1UR	PTVS20VS1UTR		
	22	24.40	25.60	26.90	1	35.5	11.3	0.001	0.1	PTVS22VS1UR	PTVS22VS1UTR		
	24	26.70	28.10	29.50	1	38.9	10.3	0.001	0.1	PTVS24VS1UR	PTVS24VS1UTR		
	26	28.90	30.40	31.90	1	42.1	9.5	0.001	0.1	PTVS26VS1UR	PTVS26VS1UTR		
	28	31.10	32.80	34.40	1	45.4	8.8	0.001	0.1	PTVS28VS1UR	PTVS28VS1UTR		
	30	33.30	35.10	36.80	1	48.4	8.3	0.001	0.1	PTVS30VS1UR	PTVS30VS1UTR		
	33	36.70	38.70	40.60	1	53.3	7.5	0.001	0.1	PTVS33VS1UR	PTVS33VS1UTR		
	36	40.00	42.10	44.20	1	58.1	6.9	0.001	0.1	PTVS36VS1UR	PTVS36VS1UTR		
	40	44.40	46.80	49.10	1	64.5	6.2	0.001	0.1	PTVS40VS1UR	PTVS40VS1UTR		
	43	47.80	50.30	52.80	1	69.4	5.8	0.001	0.1	PTVS43VS1UR	PTVS43VS1UTR		
	45	50.00	52.65	55.30	1	72.7	5.5	0.001	0.1	PTVS45VS1UR	PTVS45VS1UTR		
	48	53.30	56.10	58.90	1	77.4	5.2	0.001	0.1	PTVS48VS1UR	PTVS48VS1UTR		
	51	56.70	59.70	62.70	1	82.4	4.9	0.001	0.1	PTVS51VS1UR	PTVS51VS1UTR		
	54	60.00	63.15	66.30	1	87.1	4.6	0.001	0.1	PTVS54VS1UR	PTVS54VS1UTR		
	58	64.40	67.80	71.20	1	93.6	4.3	0.001	0.1	PTVS58VS1UR	PTVS58VS1UTR		
	60	66.70	70.20	73.70	1	96.8	4.1	0.001	0.1	PTVS60VS1UR	PTVS60VS1UTR		
	64	71.10	74.85	78.60	1	103.0	3.9	0.001	0.1	PTVS64VS1UR	PTVS64VS1UTR		

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

TVS diodes, 600W

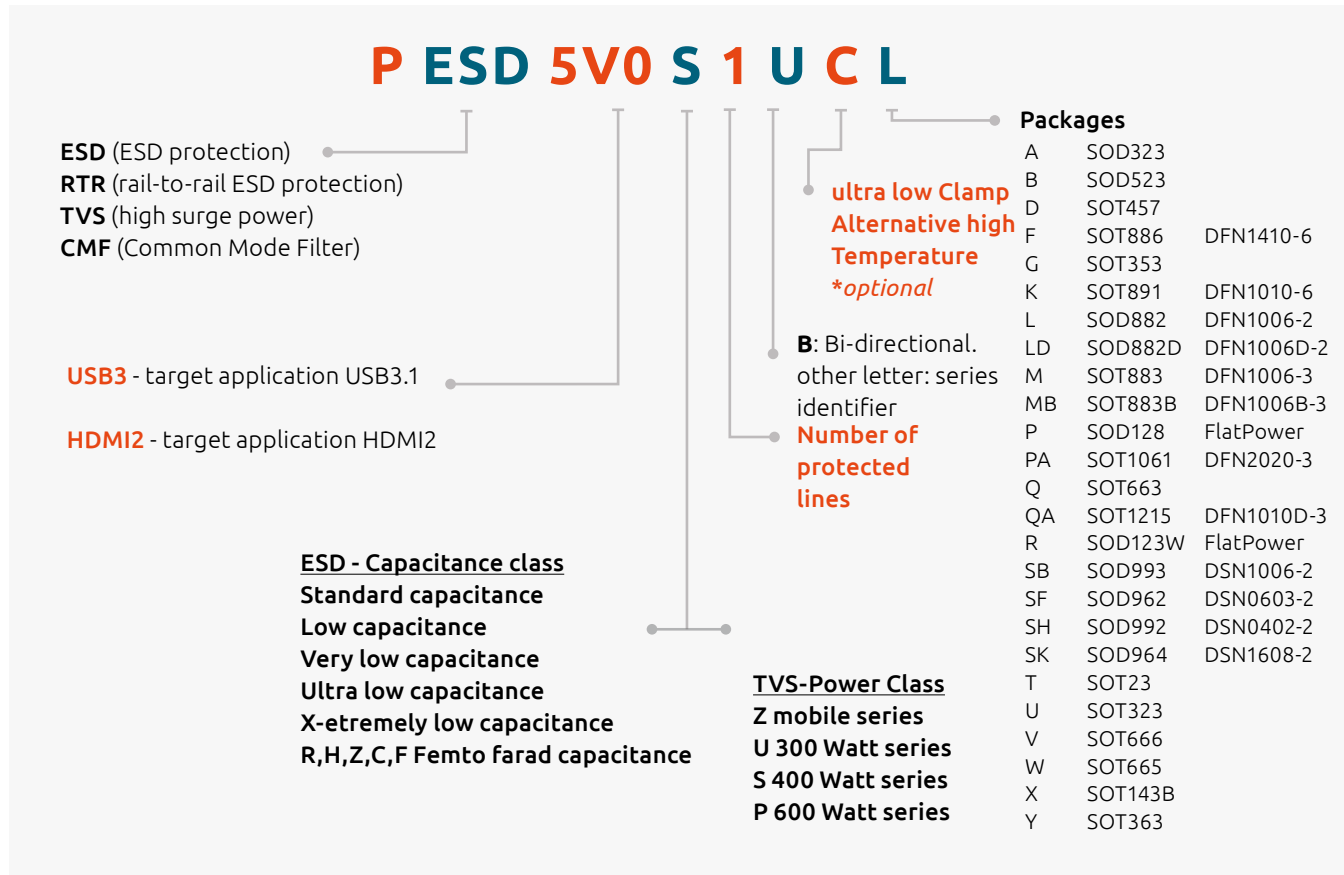
Power (W) (10 / 1000 µs waveform) ⁽¹⁾	V _{RWM} (V)	V _{BR} min (V) @ I _R	V _{BR} typ (V) @ I _R	V _{BR} max (V) @ I _R	I _R (mA)	V _{CL} max (V) @ I _{PP} ⁽¹⁾	I _{PP} (A) ⁽¹⁾	I _{RM} typ (µA) @ V _{RWM}	I _{RM} max (µA) @ V _{RWM}	Type (T _J max = 150 °C)	Type (T _J max = 185 °C)	Package	Size (mm)
600	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	PTVS10V1UP	PTVS10V1UTP		
	11	12.20	12.85	13.50	1	18.2	33	0.005	2.5	PTVS11V1UP	PTVS11V1UTP		
	12	13.30	14.00	14.70	1	19.9	30.2	0.005	2.5	PTVS12V1UP	PTVS12V1UTP		
	13	14.40	15.15	15.90	1	21.5	27.9	0.001	0.1	PTVS13V1UP	PTVS13V1UTP		
	14	15.60	16.40	17.20	1	23.2	25.9	0.001	0.1	PTVS14V1UP	PTVS14V1UTP		
	15	16.70	17.60	18.50	1	24.4	24.6	0.001	0.1	PTVS15V1UP	PTVS15V1UTP		
	16	17.80	18.75	19.70	1	26	23.1	0.001	0.1	PTVS16V1UP	PTVS16V1UTP		
	17	18.90	19.90	20.90	1	27.6	21.7	0.001	0.1	PTVS17V1UP	PTVS17V1UTP		
	18	20.00	21.00	22.10	1	29.2	20.5	0.001	0.1	PTVS18V1UP	PTVS18V1UTP		
	20	22.20	23.35	24.50	1	32.4	18.5	0.001	0.1	PTVS20V1UP	PTVS20V1UTP		
	22	24.40	25.60	26.90	1	35.5	16.9	0.001	0.1	PTVS22V1UP	PTVS22V1UTP		
	24	26.70	28.10	29.50	1	38.9	15.4	0.001	0.1	PTVS24V1UP	PTVS24V1UTP		
	26	28.90	30.40	31.90	1	42.1	14.2	0.001	0.1	PTVS26V1UP	PTVS26V1UTP		
	28	31.10	32.80	34.40	1	45.4	13.2	0.001	0.1	PTVS28V1UP	PTVS28V1UTP		
	30	33.30	35.10	36.80	1	48.4	12.4	0.001	0.1	PTVS30V1UP	PTVS30V1UTP		
	33	36.70	38.70	40.60	1	53.3	11.3	0.001	0.1	PTVS33V1UP	PTVS33V1UTP		
	36	40.00	42.10	44.20	1	58.1	10.3	0.001	0.1	PTVS36V1UP	PTVS36V1UTP		
	40	44.40	46.80	49.10	1	64.5	9.3	0.001	0.1	PTVS40V1UP	PTVS40V1UTP		
	43	47.80	50.30	52.80	1	69.4	8.6	0.001	0.1	PTVS43V1UP	PTVS43V1UTP		
	45	50.00	52.65	55.30	1	72.7	8.3	0.001	0.1	PTVS45V1UP	PTVS45V1UTP		
	48	53.30	56.10	58.90	1	77.4	7.8	0.001	0.1	PTVS48V1UP	PTVS48V1UTP		
	51	56.70	59.70	62.70	1	82.4	7.3	0.001	0.1	PTVS51V1UP	PTVS51V1UTP		
	54	60.00	63.15	66.30	1	87.1	6.9	0.001	0.1	PTVS54V1UP	PTVS54V1UTP		
	58	64.40	67.80	71.20	1	93.6	6.4	0.001	0.1	PTVS58V1UP	PTVS58V1UTP		
	60	66.70	70.20	73.70	1	96.8	6.2	0.001	0.1	PTVS60V1UP	PTVS60V1UTP		
	64	71.10	74.85	78.60	1	103	5.8	0.001	0.1	PTVS64V1UP	PTVS64V1UTP		

ESD protection, TVS, filtering
and signal conditioning

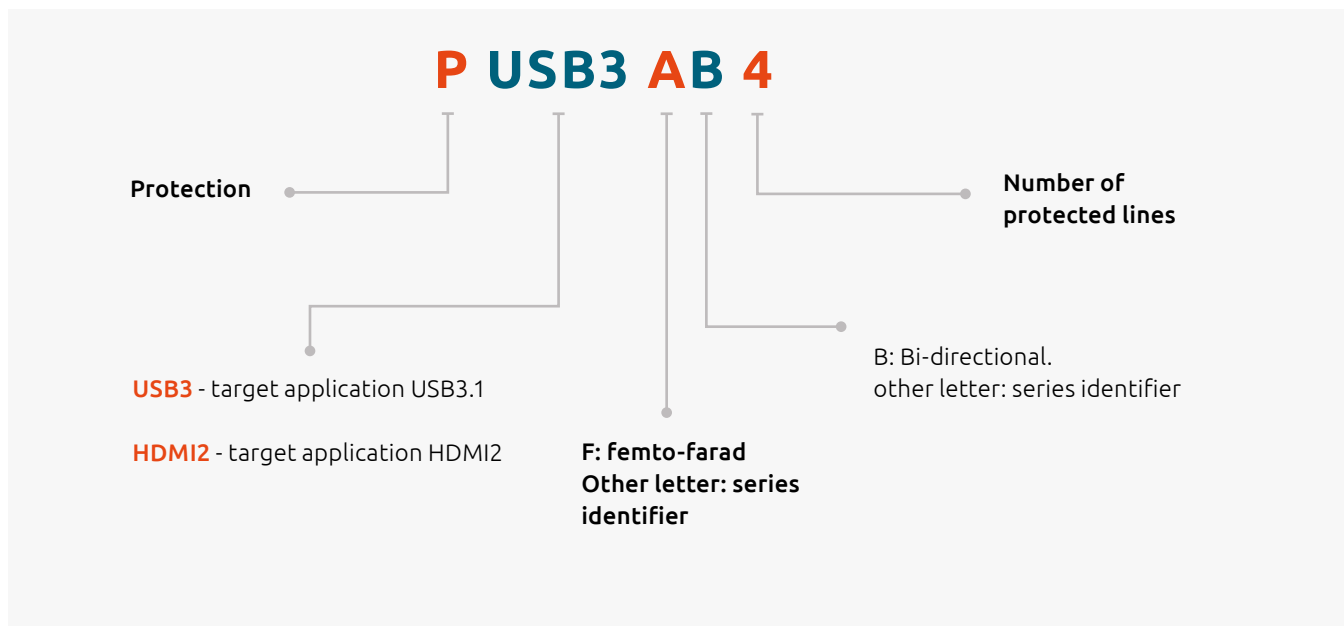
⁽¹⁾ 10 / 1000 µs according to IEC 61643-321

Nomenclatures

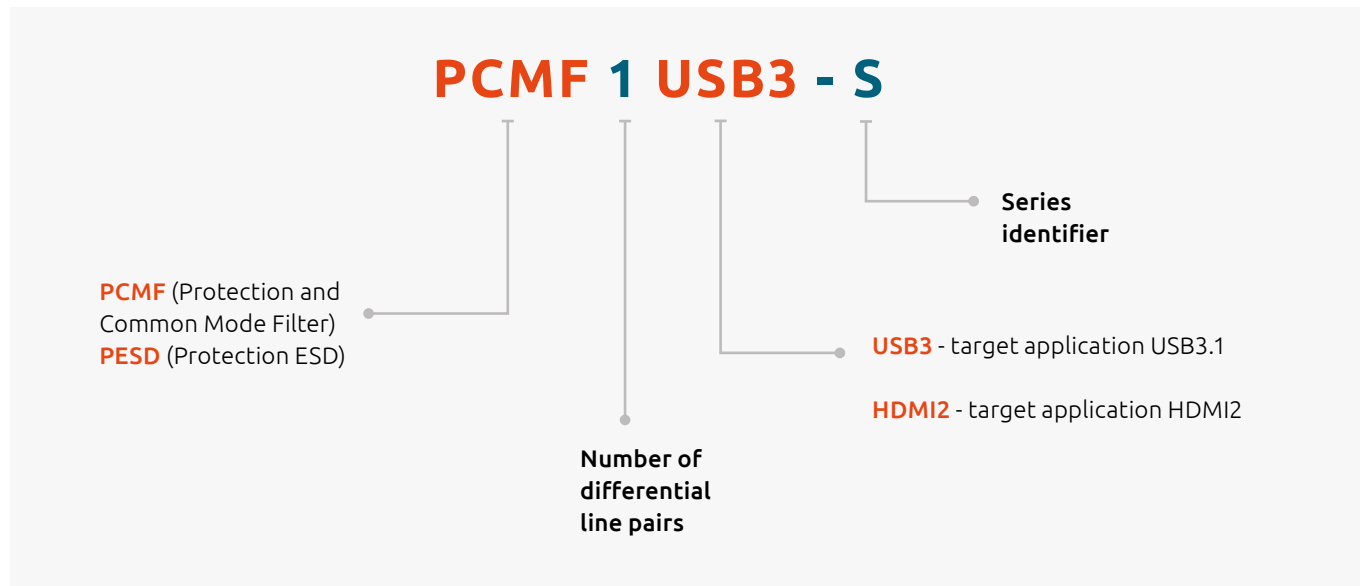
Nomenclature - protection devices



Nomenclature - application specific ESD protection



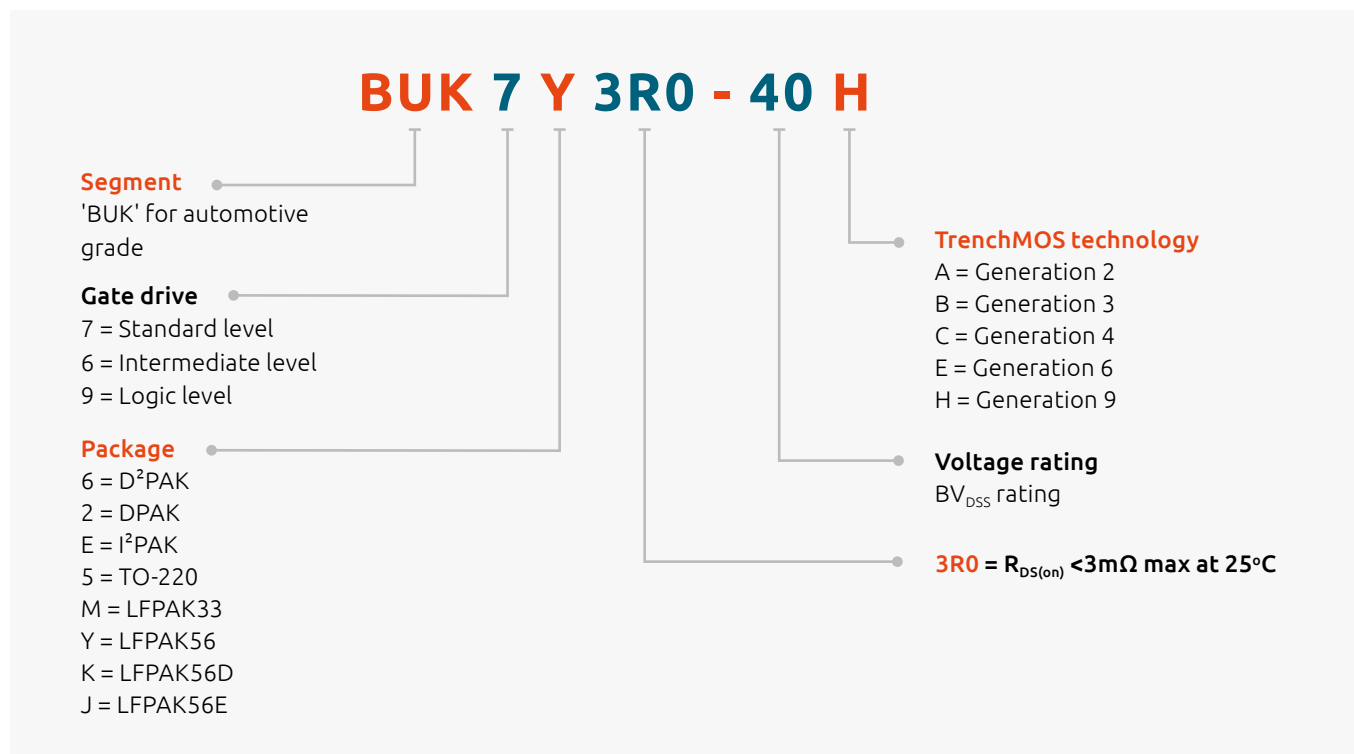
Nomenclature - common mode filter with ESD protection





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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)	BUK962R8-30B	30	2.4	2.8	75	0.5
	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
	BUK9607-30B	30	5	7	75	0.95
	BUK7607-30B	30	7		75	0.95
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	37.7	2.53
	BUK7Y20-30B	30	20		39.5	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** 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
D ² PAK (SOT404)		BUK961R6-40E	40	1.4	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	100	0.57
		BUK762R6-40E	40	2.6	100	0.57
		BUK963R1-40E	40	2.7	100	0.64
		BUK762R9-40E	40	2.9	100	0.64
		BUK964R1-40E	40	3.5	75	0.82
		BUK764R0-40E	40	4	75	0.82
		BUK965R4-40E	40	4.4	75	1.09
		BUK765R3-40E	40	4.9	75	1.09
		BUK768R1-40E	40	7.2	75	1.56
DPAK (SOT428)		BUK9209-40B	40	7	75	0.95
		BUK7208-40B	40	8	75	0.95
I ² PAK (SOT226)		BUK7E1R8-40E	40	1.8	120	0.43
		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)		BUK7J1R4-40H	40	1.4	120	0.38
LFPAK56; Power-SO8 (SOT669)		BUK7Y1R7-40H	40	1.7	120	0.51
		BUK7Y2R0-40H	40	2	120	0.69
		BUK7Y2R5-40H	40	2.5	120	0.79
		BUK7Y3R0-40H	40	3	120	0.87
		BUK9Y3R0-40E	40	2.5	100	0.77
		BUK7Y3R5-40E	40	3.5	100	0.9
		BUK9Y3R5-40E	40	3.6	100	0.9
		BUK9Y4R4-40E	40	3.7	100	1.02
		BUK7Y4R4-40E	40	4.4	100	1.02
		BUK9Y7R6-40E	40	6	79	1.58
		BUK7Y7R6-40E	40	7.6	79	1.58
		BUK9Y12-40E	40	10	52	2.31
		BUK7Y12-40E	40	12	52	2.31
		BUK9Y21-40E	40	17	33	3.33
		BUK7Y21-40E	40	21	33	3.33
		BUK9Y29-40E	40	25	25	4.03
		BUK7Y29-40E	40	29	26	4.03
LFPAK56D (SOT1205)		BUK7K6R2-40E	40	5.8	40	2.21
		BUK9K6R2-40E	40	6	40	2.21
		BUK9K6R8-40E	40	6.1	40	2.36
		BUK7K6R8-40E	40	6.8		2.36
		BUK9K8R7-40E	40	8	30	2.84
		BUK7K8R7-40E	40	8.5		2.84
		BUK9K18-40E	40	16	30	3.96
		BUK7K18-40E	40	19	24.2	3.96
		BUK9K25-40E	40	24	18.2	4.68
		BUK7K25-40E	40	25		4.68

N-channel 40V 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)
LFP3K33 (SOT1210)	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M8R0-40E	40	8		69	2
	BUK7M10-40E	40	10		56	2.43
	BUK7M12-40E	40	12		48	2.75
	BUK7M21-40E	40	21		33	3.4
	BUK7M45-40E	40	45		19	4.8
	BUK9M14-40E	40	11	14	44	2.75
	BUK9M24-40E	40	20	24	30	3.4
	BUK9M52-40E	40	40	52	17.6	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
D2PAK (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
	BUK7624-55A	55	24		47	1.4
	BUK9628-55A	55	25	28	42	1.5
	BUK7628-55A	55	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		20.3	2.4
D ² PAK (SOT404)	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

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)	
DPAK (SOT428)		BUK9212-55B	55	10	12	75	0.95
		BUK7210-55B	55	10		75	0.95
		BUK7212-55B	55	12		75	0.95
		BUK9215-55A	55	14	15	62	1.3
		BUK7215-55A	55	15		62	1.3
		BUK9219-55A	55	18	19	55	1.3
		BUK7219-55A	55	19		55	1.3
		BUK9222-55A	55	20	22	48	1.5
		BUK9225-55A	55	22	25	43	1.6
DPAK (SOT428)		BUK7222-55A	55	22		48	1.5
		BUK7225-55A	55	25		43	1.6
		BUK9230-55A	55	27	30	38	1.7
		BUK7230-55A	55	30		38	1.7
		BUK9237-55A	55	33	37	32	1.94
		BUK7237-55A	55	37		32.3	1.9
		BUK9245-55A	55	40	45	28	2.1
		BUK9277-55A	55	69	77	18	2.93
		BUK7277-55A	55	77		18	2.9
		BUK92150-55A	55	125	140	11	4.1
		BUK72150-55A	55	150		11	4.1
I ² PAK (SOT226)		BUK7E2R6-60E	60	2.6		120	0.43
		BUK7E3R5-60E	60	3.5		120	0.51
		BUK7E4R6-60E	60	4.6		100	0.64
		BUK7E13-60E	60	13		58	1.56
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	16.7	4.03
		BUK7Y59-60E	60	59		17	4.03

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)
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		20.7	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK7K52-60E	60	45		15.4	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	12.8	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 (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	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
	BUK9611-80E	80	10	11	75	0.82
DPAK (SOT428) 	BUK7214-75B	75	14		69	0.95
	BUK9217-75B	75	15	17	64	0.95
	BUK9226-75A	75	25	26	45	1.3
	BUK7226-75A	75	26		45	1
LFPAK56; Power-SO8 (SOT669) 	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	11.8	4.03
	BUK7Y98-80E	80	98		12.3	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
	BUK9K30-80E	80	26	30	17	2.84
LFPAK33 (SOT1210) 	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
D ² PAK (SOT404) 	BUK765R0-100E	100	5		120	0.43
	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
DPAK (SOT428) 	BUK7227-100B	100	27		48	0.95
	BUK9230-100B	100	28	30	47	0.95
	BUK9240-100A	100	39	40	33	1.3
	BUK7240-100A	100	40		34	1.3
	BUK9275-100A	100	72	75	21.7	1.7
	BUK7275-100A	100	75		21.7	1.7
I ² PAK (SOT226) 	BUK7E5R2-100E	100	5.2		120	0.43
LFPAK56; Power-SO8 (SOT669) 	BUK9Y12-100E	100	12	12	85	0.63
	BUK7Y12-100E	100	12		85	0.63
	BUK9Y15-100E	100	15	15	69	0.77
	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		21.4	2.84
	BUK9K45-100E	100	42	45	21	2.84
	BUK7K89-100E	100	83		13	3.96
	BUK9K89-100E	100	85	89	12.5	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	11.5	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

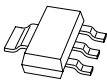
Types in **bold red** are in development

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	67.3	1.4
	BUK6Y20-30P	30	20	41.1	2.3
	BUK6Y15-40P	40	15	63.1	1.4
	BUK6Y25-40P	40	25	39.4	2.3
	BUK6Y32-60P	60	32	38.7	1.4
	BUK6Y57-60P	60	57	22.7	2.3

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

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N-channel	20	8	4.7	0.45	1	2	-	24	29	40	
			2	0.45	1	2	-	57	64	78	
			2.8	0.4	1	2	-	64	78	110	
		12	12.9	0.4	0.9	2	-	10	12	16	
			11.4	0.4	0.9	2	-	12	15	20	
			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	-	
			0.9	0.75	1.25	2	-	212	269	-	
		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	7	1.4	2.1	0.5	-	18	22	-	
			19	1	2	-	-	23	-	-	
		20	7	2.4	4	0.5	19	-	-	-	
			2.7	1	2.5	1	64	79	-	-	
			2.5	1	2.5	1	95	120	-	-	
			19	1.3	2.7	-	23	30			
			19	2.4	4	-	25	-			
	60	20	5	1.3	2.7	0.5	32	38	-	-	
			4	1.3	2.7	2	42	49	-	-	
			3.1	1.3	2.7	2	46	52	-	-	
			3	1.3	2.7	2	72	85	-	-	
			2.1	1.3	2.7	2	96	108	-	-	
			1.5	1.3	2.7	2	176	196	-	-	
			0.8	1.3	2.7	2	300	332	-	-	
			13	1.3	2.7	-	43	53	-	-	
		80	2.8	1.3	2.7	2	80	92	-	-	
			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	
	20	8	5.6	0.45	0.95	2	-	27	38	50	
			6	0.45	0.95	2	-	37	45	59	
			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	
			5.7	0.75	1.25	2	-	27	39	-	
			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	-	
			4.1	0.75	1.25	2	-	70	101	-	
			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	-	-	
			5	1.5	3	1	32	42	-	-	
	70	20	14	1.4	2.7	-	43	70			
			2.3	1	3	2	156	177	-	-	

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	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 1.25 x 0.95	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	200	1250	1250	1000
			PMV28UNEA				
				PMF63UNEA			
			PMV65UNEA				
					PMPB10XNEA		
					PMPB12XNEA		
			PMV20XNEA		PMPB20XNEA		
					PMPB13XNEA		
					PMPB29XNEA		
						PMDPB56XNEA	
				PMF250XNEA			
			PMV25ENEA				
			PMV50ENEA				
			PMV100ENEA				
					BUK9D23-40E		
			PMV65ENEA				
			PMV130ENEA				
					BUK6D23-40E		
					BUK7D25-40E		
					PMPB55ENEA		
			PMV55ENEA				
					PMPB85ENEA		
			PMV120ENEA				
			PMV230ENEA				
			PMV450ENEA				
					BUK6D43-60E		
					PMPB95ENEA		
					PMPB215ENEA		
							PMXB360ENEA
	PMT280ENEA PMT560ENEA		PMV280ENEA				
					PMPB15XPA		
			PMV27UPEA				
		PMN40UPEA					
			NX2301P				
			BSH205G2				
					PMPB20XPEA		
		PMN27XPEA					
					PMPB29XPEA		
			PMV30XPEA				
					PMPB43XPEA		
		PMN42XPEA					
			PMV48XPA				
			PMV65XPEA				
		PMN70XPEA					
			PMV100XPEA				
					PMPB27EPA		
			PMV50EPEA		PMPB50EPEA		
			PMV250EPEA				
					PMPB45EPA		
					BUK6D43-40P		
	PMT200EPEA						

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	
	60	20	0.36	0.9	1.5	-	900	1000	-	-	
			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

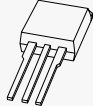
Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	20	8	0.8	0.5	0.95	2	-	380	620	1100	
	30	12	4	0.75	1.25	2	-	55	72	-	
			0.95	0.75	1.25	2	-	211	267	-	
P	20	8	0.55	0.5	1.3	2	-	670	1200	1800	
N	20	8	0.73	0.5	0.95	2	-	290	420	600	
P			0.5	0.5	1.3	2	-	670	1200	1800	

	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	SOT666	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	1.6 x 1.2 x 0.55	1.0 x 0.6 x 0.5
	250	300	200	300	250
	NX3008NBK	NX3008NBKS	NX3008NBKW	NX3008NBKV	
	BSS138P	BSS138PS	BSS138PW		
	BSS138BK	BSS138BKS	BSS138BKW		
	2N7002BK	2N7002BKS	2N7002BKW		2N7002BKM
	2N7002CK				
	BSS138AKA				
	NX3008PBK	NX3008PBKS	NX3008PBKW	NX3008PBKV	
	BSS84AK	BSS84AKS	BSS84AKW	BSS84AKV	BSS84AKM

	SOT363 (SC-88)	SOT666	DFN2020D-6 (SOT1118D)
			
	2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.65
	300	300	1250
		PMDT290UNE	
			PMDBP56XNEA
	PMGD175XNEA		
		PMDT670UPE	
	PMGD290UCEA		

N-channel 25V-30V 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] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (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
IPAK (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 MOSFETs

Types in **bold red** are in development

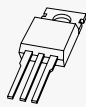
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(bot)}$ [typ] (nC)
LFPAK56 (Power-SO8) 	PSMNR58-30YLH	30	0.58	0.86	300	48
	PSMNR70-30YLH	30	0.7	0.98	300	40
	PSMN0R9-30YLD	30	0.87	1.1	300	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

N-channel 25V-30V 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] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK33 (SOT1210) 	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	1.6	2.2	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 MOSFETs

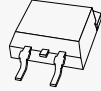
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN1R5-40PS	40	1.6		150	136
	PSMN1R9-40PL	40	1.7	1.9	150	230
	PSMN2R2-40PS	40	2.1		100	110
	PSMN2R1-40PL	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

N-channel 40V-60V 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)	$Q_{G(tot)}$ [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) 	PSMN1R0-40YLD	40	1.1	1.4	280	127
	PSMN1R4-40YLD	40	1.4	1.9	240	96
	PSMN1R8-40YLC	40	1.8	2.1	100	96
	PSMN2R6-40YS	40	2.8		100	63
	PSMN3R3-40YS	40	3.3		100	49
	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
LFPAK33 (SOT1210) 	PSMN011-60ML	60	11	13	61	37.2
	PSMN011-60MS	60	11		61	23

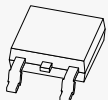
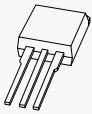
N-channel 75V-200V MOSFETs

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)
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
	PHP30NQ15T	150	63		29	55
	PHP28NQ15T	150	65		28.5	24
	PSMN057-200P	200	57		39	96
	PHP33NQ20T	200	77		32.7	32.2
	PHP20NQ20T	200	130		20	65
	PHP9NQ20T	200	400		8.7	24
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

N-channel 75V-200V 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] @ $V_{GS} = 4.5\text{ V or }5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	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
	PSMN4R8-100BSE	100	4.8		120	196
	PSMN5R6-100BS	100	5.6		100	141
	PSMN7R0-100BS	100	6.8		100	125
	PSMN7R0-100BSF	100	7			
	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
	PSMN018-100BSF	100	18			
	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
	PHB20NQ20T	200	130		20	65
DPAK (SOT428) 	PSMN063-150D	150	63		29	55
	PSMN130-200D	200	130		20	65
	PHD9NQ20T	200	400		8.7	24
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
	PSMN013-100ES	100	14		68	59
	PSMN018-100ESF	100	18		53	21
	PSMN6R3-120ES	120	6.7		70	207.1
	PSMN7R8-120ES	120	7.9		70	167

Types in **bold red** are in development

N-channel 75V-200V MOSFETs

Types in **bold** represent new products

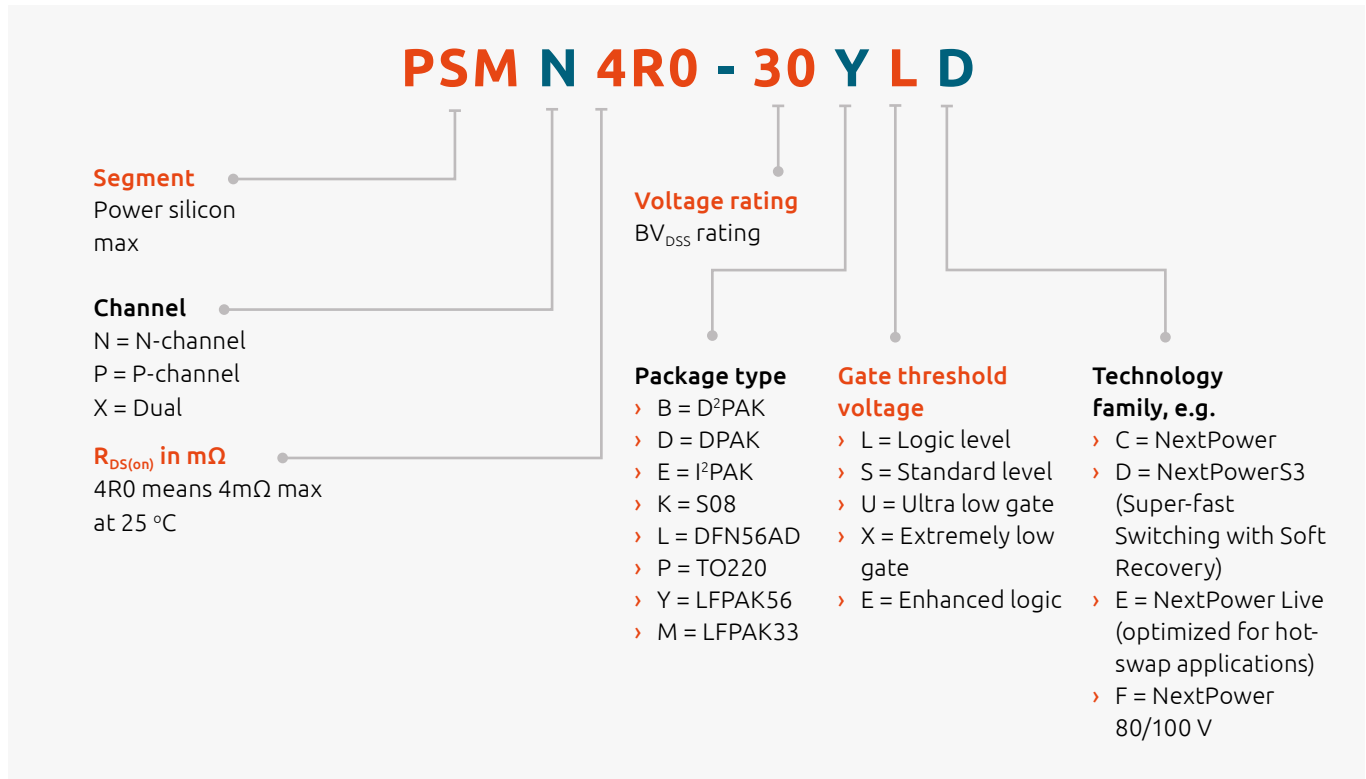
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56 (Power-SO8)	PSMN8R0-80YL	80	8	8.5	100	104
	PSMN8R2-80YS	80	8.5		82	55
	PSMN010-80YL	80	10	11	84	84.7
	PSMN011-80YS	80	11		67	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
	PSMN5R6-100YSF	100	5.6		158	63
	PSMN6R9-100YSF	100	6.9		128	51
	PSMN8R7-100YSF	100	8.7		100	39
	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 MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56	PSMP012-30YE	30	12	67.3	52
	PSMP020-30YE	30	20	41.1	24
	PSMP015-40YE	40	15	63.1	43.5
	PSMP025-40YE	40	25	39.4	28
	PSMP032-60YE	60	32	38.7	46
	PSMP057-60YE	60	57	22.7	21

Types in **bold red** are in development

Power MOSFETs nomenclature



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
P _{tot} (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 protec- tion (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 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		PMCXB900UE
	P	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		
	N	30	8	0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMCXB1000UE
	P	30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		

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
Ptot (mW)															250	250	350
ConFig.	Polarity	V _{DS} (V)	V _{GS} (V)	I _b (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			PMCXB900UEL
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500			

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

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 protec- tion (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	2	-	14	17	21	PMPB12UNE	
			12	12.9	0.4	0.9	13	54	23	2.2	-	10	12	16	PMPB10XNE	
				5.9	0.75	1.25	16	49	31	2	-	14	20	-	PMPB20XNEA	
				10.4	0.4	0.9	9	31	13.4	-	-	18	21	23	PMPB15XN	
				10.1	0.4	0.9	9	31	11.6	2.1	-	19	23	31	PMPB23XNE	
		30	12	11.3	0.4	0.9	12	54	24	2.2	-	13	14	17	PMPB13XNE	
				5	0.4	0.9	8	33	12.4	2.1	-	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	
		60	20	4	1.3	2.7	4.5	13.5	7.5	1	42	48	-	-	PMPB55ENEAE	
				3	1.3	2.7	4	10.5	6.2	2.7	72	85	-	-	PMPB85ENEAE	
	P-channel	80	20	2.8	1.3	2.7	5	15	9.9	2.8	80	92	-	-	PMPB95ENEAE	
				1.9	1.3	2.7	3.5	9.5	4.8	2	175	195	-	-	PMPB215ENEAE	
		12	12	11.8	0.47	0.9	18	85	67	-	-	15	17	21	PMPB15XP	
				10.3	0.47	0.9	16	43	28.8	-	-	19	21	27	PMPB19XP	
				10.3	0.47	0.9	13	92	30	2.4	-	19	22	28	PMPB20XPE	
				5	0.47	0.9	12	91	30	2.3	-	28	31	36	PMPB29XPE	
				7.9	0.47	0.9	12	62	15	-	-	30	35	45	PMPB33XP	
				5	0.47	0.9	9	57	15.6	2.3	-	39	45	56	PMPB43XPE	
		30	20	5	0.47	0.9	15	28	14	-	-	47	54	74	PMPB47XP	
				8.8	1	2.5	10	28	30	-	24	32	-	-	PMPB27EP	
				6.8	1	2.5	7.4	27	17	-	40	55	-	-	PMPB48EP	
Dual	Nch	20	12	5.3	0.4	0.9	4	40	14.4	-	-	32	40	60		PMDPB30XN
		30	12	3.1	0.75	1.25	9	19	2.9	2	-	55	72	-		PMDPB56XNEA
				3.1	0.5	1.5	6	18	1.65	1.8	-	95	130	-		PMDPB95XNE2
	P-channel	20	8	4.5	0.45	0.95	7	41	6.3	2	-	58	74	97		PMDPB58UPE
				3.7	0.45	0.95	6	47	5.4	2	-	82	107	142		PMDPB85UPE
			12	4.5	0.47	0.9	4	135	16.5	-	-	55	75	110		PMDPB55XP
				4.2	0.75	1.25	7	33	5	2	-	66	98			PMDPB70XPE
				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

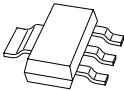
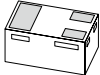
Types in **bold** represent new products

Package															WLCSP4	WLCSP6
																
Size (mm)															0.78 × 0.78 × 0.35	1.48 × 0.98 × 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 _G typ (nC)	ESD protec- tion (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	-		PMCM6501CUNE

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	
		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	
30	8	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	
		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	
	12	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	-	
		7.6	1	2	9	9	7.2	-	17	21	-	-	
		5.5	1	2.5	8	33	12.6	2	17	22	-	-	
	20	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	-	
		2.7	1	2.5	6	12	4.1	1	64	79	-	-	
		2.5	1	2.5	14	14	2.4	1	95	120	-	-	
40	20	0.3	0.4	1.3	4	11	1	3	-	2300	2400	3100	
55	10	3.1	1.3	2.7	9	33	12.7	2	46	52	-	-	
60	20	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	-	-	
		1.5	1.3	2.7	4.8	9.3	4.5	1	285	300	-	-	
100	20	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
			PMV28UNE ~~A~~			
				PMF63UNE		
			PMV65UNE			
					PMZ130UNE	
						PMZB150UNE
					PMZ290UNE2	PMZB290UNE2
					PMZ600UNE	PMZB600UNE
			PMV20XNE ~~A~~			
			PMV16XN			
		PMN16XNE				
			PMV30UN2			
		PMN30UNE				
					PMZ200UNE	PMZB200UNE
					PMZ390UNE	PMZB390UNE
					PMZ550UNE	PMZB550UNE
			NX3008NBK	NX3008NBKW		
			PMV20XNE			
		PMN30UN				
			PMV40UN2			
				PMF250XNE		
			PMV20EN			
			PMV25ENE ~~A~~			
			PMV50ENE ~~A~~			
			PMV37EN2			
		PMN40ENE	PMV42ENE			
			PMV45EN2			
			PMV90ENE			
			NX3020NAK	NX3020NAKW		
			PMV65ENE ~~A~~			
			PMV130ENE ~~A~~			
			B5H111BK			
			PMV55ENE ~~A~~			
			PMV120ENE ~~A~~			
			PMV230ENE ~~A~~			
			PMV450ENE ~~A~~			
			NX138AK	NX138AKW		
			NX138BK	NX138BKW		
			B5N20BK			
			NX7002AK	NX7002AKW		
			NX7002BK	NX7002BKW	NX7002BKM	NX7002BKMB
	PMT280ENE ~~A~~		PMV280ENE~~A~~			
	PMT560ENE ~~A~~					

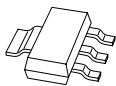
Small-signal MOSFETs single (P-channel)

Package													
Size (mm)													
P _{tot} (mW)													
V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =				
									10 V	4.5 V	2.5 V	1.8 V	
20	8	5.6	0.45	0.95	11	83	14.7	2	-	27	38	50	
		5.3	0.45	0.95	41	122	14.7	2	-	30	38	51	
		5.4	0.45	0.95	34	128	15.5	-	-	34	42	57	
		4	0.47	0.9	400	2180	10.5	3	-	50	57	70	
		2	0.5	1.1	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	
	12	4.5	0.75	1.25	7.9	59	11	2	-	28	42	-	
		6.8	0.47	0.9	12	62	15	-	-	30	35	48	
		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	-	-	
		4.2	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 _G 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				
			B5H205G2				
						PMZ350UPE	PMZB350UPE
						PMZ950UPE	PMZB950UPE
			PMV30XPEA				
		PMN30XP					
		PMN48XP	PMV48XP				
			PMV50XP				
		PMN52XP					
			PMV65XP				
			PMV65XPE				
		PMN70XPE					
		PMN70XP					
			PMV75UP				
				PMG85XP			
			PMV100XPEA				
					PMF170XP		
						PMZ320UPE	PMZB320UPE
						PMZ1200UPE	PMZB1200UPE
			NX3008PBK		NX3008PBKW		
			PMV35EPE				
		PMN70EPE					
			PMV250EPEA				
			B5S84AK		B5S84AKW	B5S84AKM	B5S84AKMB
	PMT200EPEA						

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	0.8	0.5	0.95	10	117	0.45	2	
			0.6	0.45	0.95	5.6	19	0.4	1	
		12	5.3	0.4	0.9	4	40	14.4	-	
	30	8	0.59	0.45	0.95	4	12	0.6	2	
			0.35	0.6	1.1	26	88	0.52	2	
		12	3.1	0.75	1.25	9	19	2.9	2	
			3.1	0.5	1.5	6	18	1.65	1.8	
			1	0.5	1.5	6.5	14	0.7	2	
		20	0.18	0.8	1.5	10	51	0.34	yes	
	60	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	0.55	0.5	1.3	48	152	0.76	2	
			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 _{GSth} min (V)	V _{GSth} max (V)	
 SOT666 (1.6 x 1.2 x 0.55)	NX1029X	N	60	20	0.33	1.1	2.1	
		P	50	20	0.17	1.1	2.1	
	NX3008CBKV	N	30	8	0.4	0.6	1.1	
		P	30	8	0.22	0.6	1.1	
	PMDT290UCE	N	20	8	0.8	0.5	0.95	
		P	20	8	0.55	0.5	1.3	
 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	
 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)	SOT666	DFN2020-6 (SOT1118)	DFN1010B-6 (SOT1216)	
									
					2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.65	1.0 x 1.0 x 0.37	
					300	300	1250	350	
	$R_{DS(on)}$ typ (mΩ) @ $V_{GS} =$								
	10 V	4.5 V	2.5 V	1.8 V					
	-	290	420	600		PMDT290UNE			
	-	470	620	845				PMDXB600UNE	
	-	32	40	60			PMDPB30XN		
	-	550	660	770				PMDXB550UNE	
	-	1000	1400	2000	NX3008NBKS	NX3008NBKV			
	-	55	72	-			PMDPB56XNEA		
	-	95	130	-			PMDPB95XNE2		
	-	170	240	-	PMGD175XNE				
	2700	3000	4000	-	NX3020NAKS	NX3020NAKV			
	2800	3500	4500	-	NX138AKS				
	2100	2200	2600	-	NX138BKS				
	3000	3700	-	-	NX7002AKS				
	2200	2500	-	-	NX7002BKS				NX7002BKXB
	-	670	1200	1800		PMDT670UPE			
	-	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	NX3008PBKV			
	-	70	89	-			PMDPB70XP		
	4500	5700	-	-	BSS84AKS	BSS84AKV			

	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
	11	19	0.5	2	1000	1300	-	-	-	-
	24	73	0.26	1	4500	5100	-	-	-	-
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	10	117	0.45	2	-	290	420	600	-	-
	48	152	0.76	2	-	670	1200	1800	-	-
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	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	-	-

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)	SOT815-1 (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	•	•	•						
74AHCT04-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	•	•	•						
74AHCT125-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	•	•	•						
74AHCT126-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						•	•	•	
74AHCT240-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						•	•	•	
74AHCT244-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						•	•	•	
74AHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC04-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				•	•				
74HC540-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						•			
74HC541-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									•
74LCU04A-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

Types in **bold** represent new products

Type number	Description	Features				Package (suffix)					
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74HC161-Q100	Presetable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	± 5.2	19	-40~125				•	•	
74HC163-Q100	Presetable synchronous 4-bit binary counter; synchronous reset	2.0 - 6.0	± 5.2	17	-40~125				•	•	
74HCT163-Q100	Presetable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC193-Q100	Presetable synchronous 4-bit binary up/down counter	2.0 - 6.0	± 5.2	20	-40~125				•	•	
74HCT193-Q100	Presetable 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

Types in **bold** represent new products

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)	SOT402-1 (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	•	•	•
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	•	•	•
74VHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-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				•	•	•	
74HC573-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 bushold (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

Types in **bold** represent new products

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

Types in **bold** represent new products

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_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74AHC164-Q100	8-bit serial-in/parallel-out shift register	2.0 - 5.5	± 8	4.5	-40~125	•	•	•					
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				•				
74HC594-Q100	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	± 7.8	14	-40~125			•					
74HCT594-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled	4.5 - 5.5	± 6	15	-40~125				•				
74HC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 6.0	± 7.8	16	-40~125				•	•	•		
74HCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 6	25	-40~125				•	•	•		
74HC597-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register	2.0 - 6.0	± 5.2	16	-40~125				•	•			
74HCT597-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register; TTL-enabled	4.5 - 5.5	± 4	20	-40~125				•				
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				•	•			
74LV165A-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	7.5	-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)
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_{pud} (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	•	•				
74AHCT1G66-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_{pLH} (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

Types in **bold** represent new products

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	•	•				
74AHC1G14-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					•	•
74AHC3G14-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

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)
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

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)
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
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	LVTTL	-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	LVTTL	±12	50	2.2	75	-40~85
74ALVT16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTL	-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

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)
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
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
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

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)
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
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

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)
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
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
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

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)
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
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

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)
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
74LCU04A	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
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
XC7SET04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.5	60	-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)
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

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)
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
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/LVTTL	±12	3.3	16	175	-40~125
74LVC16245A	16-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	16	175	-40~125
74LVC2245A	Octal transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.3	8	175	-40~125
74LVC245A	Octal transceiver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	2.9	8	175	-40~125
74LVC32245A	32-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTL	±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/LVTTL	±12	3.3	16	175	-40~125
74LVCH16245A	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	16	175	-40~125
74LVCH245A	Octal transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±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 _{vv} (°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

Schmitt-triggers

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 (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

Schmitt-triggers

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 (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
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
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

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)
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
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

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
74HC555	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
74LVC161	Presetable synchronous 4-bit binary counter; asynchronous reset	1.2 - 3.6	±24	CMOS/ LVTTTL	4.9	50	200	-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)
74LVC163	Presetable synchronous 4-bit binary counter; synchronous reset	1.2 - 3.6	±24	CMOS/ LVTTTL	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

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

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

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)
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
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

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)
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

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

AND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	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 pF	60	4	-40~125
74AHC1G08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHC1G09	Single 2-input AND gate; open drain	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHC2G08	Dual 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	2	-40~125
74AHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
74AHCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50 pF	60	1	-40~125
74AHCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50 pF	60	2	-40~125
74ALVC08	Quad 2-input AND gate	1.65 - 3.6	CMOS / LVTTTL	±24	2.0	50 pF	145	4	-40~85
74AUP1G08	Single 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30 pF	70	1	-40~125
74AUP1G09	Single 2-input AND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30 pF	70	1	-40~125
74AUP1G11	Single 3-input AND gate	1.1 - 3.6	CMOS	±1.9	6.9	30 pF	70	1	-40~125
74AUP2G08	Dual 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30 pF	70	2	-40~125
74AXP1G08	Single 2-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5 pF	70	1	-40~85
74AXP1G09	Single 2-input AND gate with open-drain output	0.7 - 2.75	CMOS	±4.5	2.6	5 pF	70	1	-40~85
74AXP1G11	Single 3-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5 pF	70	1	-40~85
74HC08	Quad 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50 pF	36	4	-40~125
74HC11	Triple 3-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50 pF	36	3	-40~125
74HC1G08	Single 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50 pF	36	1	-40~125
74HC21	Dual 4-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50 pF	36	2	-40~125
74HC2G08	Dual 2-input AND gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50 pF	36	4	-40~125
74HCT11	Triple 3-input AND gate	4.5 - 5.5	TTL	±4	11	50 pF	36	3	-40~125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±2	11	50 pF	36	1	-40~125
74HCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50 pF	36	2	-40~125
74LV08	Quad 2-input AND gate	1.0 - 5.5	TTL	±12	7.0	50 pF	30	4	-40~125
74LVC08A	Quad 2-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	2.1	50 pF	150	4	-40~125
74LVC11	Triple 3-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	3.7	50 pF	150	3	-40~125
74LVC1G08	Single 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50 pF	150	1	-40~125
74LVC1G11	Single 3-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.6	50 pF	150	1	-40~125
74LVC2G08	Dual 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50 pF	150	2	-40~125
74LVT08	Quad 2-input AND gate	2.7 - 3.6	TTL	-20 / 32	3.4	50 pF	150	4	-40~85
74VHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74VHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
HEF4073B	Triple 3-input AND gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	3	-40~85
HEF4081B	Quad 2-input AND gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~85
HEF4082B	Dual 4-input AND gate	3.0 - 15	CMOS	±2.4	25	50 pF	10	2	-40~85
XC7SET08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50 pF	60	1	-40~125
XC7SH08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	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)	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 pF	70	1	-40~125
74AUP1G3208	Single 3-input OR-AND gate	1.1 - 3.6	CMOS	±1.9	7.4	30 pF	70	1	-40~125
74AUP1G885	Dual function gate	1.1 - 3.6	CMOS	±1.9	7.6	30 pF	70	1	-40~125
74AUP1Z04	Crystal driver with enable and internal resistor	1.1 - 3.6	CMOS	±1.9	5.6	30 pF	70	1	-40~125
74AUP1Z125	Crystal driver with enable and internal resistor (3-state)	1.1 - 3.6	CMOS	±1.9	4.7	30 pF	70	1	-40~125
74AUP2G0604	Inverter with open drain and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	2	-40~125
74AUP2G3404	Buffer and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	2	-40~125
74AUP2G3407	Buffer and buffer with open drain	1.1 - 3.6	CMOS	±1.9	4.1	30 pF	70	2	-40~125
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 - 3.6	CMOS	±1.9	3.8	30 pF	70	2	-40~125
74AUP3G0434	Dual inverter and single buffer	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	3	-40~125
74AUP3G3404	Dual buffer and single inverter	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	3	-40~125
74LVC1GX04	Crystal driver	1.65 - 5.5	CMOS / LVTTTL	±24	2.8	50 pF	150	1	-40~125
HEF4007UB	Dual complementary pair and inverter	3.0 - 15	CMOS	±3.4	15	50 pF	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)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30 pF	70	1	-40~125
74AUP1G3208	Configurable multiple function gate	0.8 - 3.6	CMOS	±4	6.6	30 pF	70	1	-40~125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP2G57	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5pF	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5pF	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5pF	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5pF	70	1	-40~85
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	8.4	50 pF	150	1	-40~125

EXCLUSIVE-NOR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
HEF4077	Quad 2-input EXCLUSIVE-NOR gate	3.0 - 15	CMOS	±2.4	30	50 pF	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)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC1G86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50 pF	60	1	-40~125
74AHC1G86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50 pF	60	4	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.4	50 pF	60	4	-40~125
74AUP1G386	Single 3-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	8.6	30 pF	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
74AUP2G86	Dual 2-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30 pF	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 pF	36	1	-40~125
74HCT1G86	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50 pF	36	1	-40~125
74HC2G86	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT2G86	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	11	50 pF	36	2	-40~125
74HC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	11	50 pF	36	4	-40~125
74HCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50 pF	36	4	-40~125
74LVC1G386	Single 3-Input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	4.5	50 pF	150	1	-40~125
74LVC1G86	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50 pF	150	1	-40~125
74LVC2G86	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.3	50 pF	150	2	-40~125
74LVC86	Quad 2-input EXCLUSIVE-OR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.0	50 pF	150	4	-40~125
HEF4030B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50 pF	10	4	-40~85
HEF4070B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50 pF	10	4	-40~85
XC7SET86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
XC7SH86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50 pF	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)	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
74AHC00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	4	-40~125
74AHC132	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)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
74AHT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-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
74AHT30	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
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

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ)	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
74AHC02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50 pF	60	4	-40~125
74AHC1G02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHC1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
74ALVC02	Quad 2-input NOR gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.2	50 pF	150	4	-40~85
74AUP1G02	Single 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30 pF	70	1	-40~125
74AUP2G02	Dual 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30 pF	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 pF	36	4	-40~125
74HCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	9.0	50 pF	36	4	-40~125
74HC1G02	Single 2-input NOR gate	2.0 - 6.0	CMOS	±2.6	7.0	50 pF	36	1	-40~125
74HCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	9.0	50 pF	36	1	-40~125
74HC27	Triple 3-input NOR gate	2.0 - 6.0	CMOS	±5.2	8.0	50 pF	36	3	-40~125
74HCT27	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50 pF	36	3	-40~125
74HC2G02	Dual 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50 pF	36	2	-40~125
74HC4002	Dual 4-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT4002	Dual 4-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50 pF	36	2	-40~125
74LV02	Quad 2-input NOR gate	1.0 - 5.5	TTL	±12	6.0	50 pF	30	4	-40~125
74LVC02A	Quad 2-input NOR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50 pF	150	4	-40~125
74LVC1G02	Single 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.1	50 pF	150	1	-40~125
74LVC1G27	Single 3-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50 pF	150	1	-40~125
74LVC2G02	Dual 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50 pF	150	2	-40~125
74LVT02	Quad 2-input NOR gate	2.7 - 3.6	TTL	-20 / 32	2.8	50 pF	150	4	-40~85
74VHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50 pF	60	4	-40~125
74VHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50 pF	60	4	-40~125
HEF4001B	Quad 2-input NOR gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~85
HEF4002B	Dual 4-input NOR gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~85
XC7SET02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
XC7SH02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125

OR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	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 pF	60	1	-40~125
74AHCT1G32	Single 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50 pF	60	1	-40~125
74AHC2G32	Dual 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	2	-40~125
74AHCT2G32	Dual 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50 pF	60	2	-40~125
74AHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74AHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
74ALVC32	Quad 2-input OR gate	1.65 - 3.6	CMOS/LVTTL	±24	2.0	50 pF	150	4	-40~125
74AUP1G32	Single 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30 pF	70	1	-40~125
74AUP1G332	Single 3-input OR gate	1.1 - 3.6	CMOS	±1.9	6.8	30 pF	70	1	-40~125
74AUP2G32	Dual 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30 pF	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 pF	36	1	-40~125
74HCT1G32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50 pF	36	1	-40~125
74HC2G32	Dual 2-input OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT2G32	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	13	50 pF	36	2	-40~125
74HC32	Quad 2-input OR gate	2.0 - 6.0	CMOS	±5.2	6.0	50 pF	36	4	-40~125
74HCT32	Quad 2-input OR gate	4.5 - 5.5	TTL	±4.0	9.0	50 pF	36	4	-40~125
74HC4075	Triple 3-input OR gate	2.0 - 6.0	CMOS	±5.2	8.0	50 pF	36	3	-40~125
74HCT4075	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50 pF	36	3	-40~125
74LVC1G32	Single 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.1	50 pF	150	1	-40~125
74LVC1G332	Single 3-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32		50 pF	150	1	-40~125
74LVC2G32	Dual 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.2	50 pF	150	2	-40~125
74LVC32A	Quad 2-input OR gate	1.2 - 3.6	CMOS/LVTTL	±24	2.1	50 pF	150	4	-40~125
74VHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74VHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
HEF4071B	Quad 2-input OR gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~125
XC7SET32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50 pF	60	1	-40~125
XC7SH32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125

Level shifters/Translators

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
74AUP1T34	Single dual-supply translating buffer	1.1 - 3.6	1.1 - 3.6	CMOS	±1.9	15.2	30	1	-40~125
74AUP1T45	Single dual-supply voltage-translating transceiver (3-state)	1.1 - 3.6	1.1 - 3.6	CMOS	±1.9	15.6	30	1	-40~125
74AVC16T245	16-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	16	-40~125
74AVC1T1022	1-to-4 fan out buffer	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±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/LVTTL	±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/LVTTL	±12	3.5	30	20	-40~125
74AVC2T245	2-bit dual-supply voltage-translating transceiver	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±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/LVTTL	±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/LVTTL	±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/LVTTL	±12	2.1	30	4	-40~125
74AVC4TD245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±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/LVTTL	±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/LVTTL	±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/LVTTL	±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/LVTTL	±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/LVTTL	±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/LVTTL	±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
74LVC1T45	Single dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	1	-40~125
74LVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	2	-40~125
74LVC4245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
74LVC4245A	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
74LVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
74LVC8T595	Dual supply 8-bit serial-in/serial-out or parallel-out shift register; 3-state	1.1 - 5.5	1.1 - 5.5	CMOS/LVTTL	±24	4.1	15	8	-40~125
74LVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	1	-40~125
74LVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	2	-40~125
74LVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
HEF4104B	Quad low-to-high voltage translator (3-state)	3.0 - 15	3.0 - 15	CMOS	±2.4	3.4	50	16	-40~85

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

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
74AHC123A	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	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

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

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

Printer interfaces

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
PDI1284P11	Parallel interface transceiver/buffer	3.0 - 3.6	LVTTL	±14	13.9	50	0~70

Bus Switches

Types in **bold** represent new products

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

Analog Switches

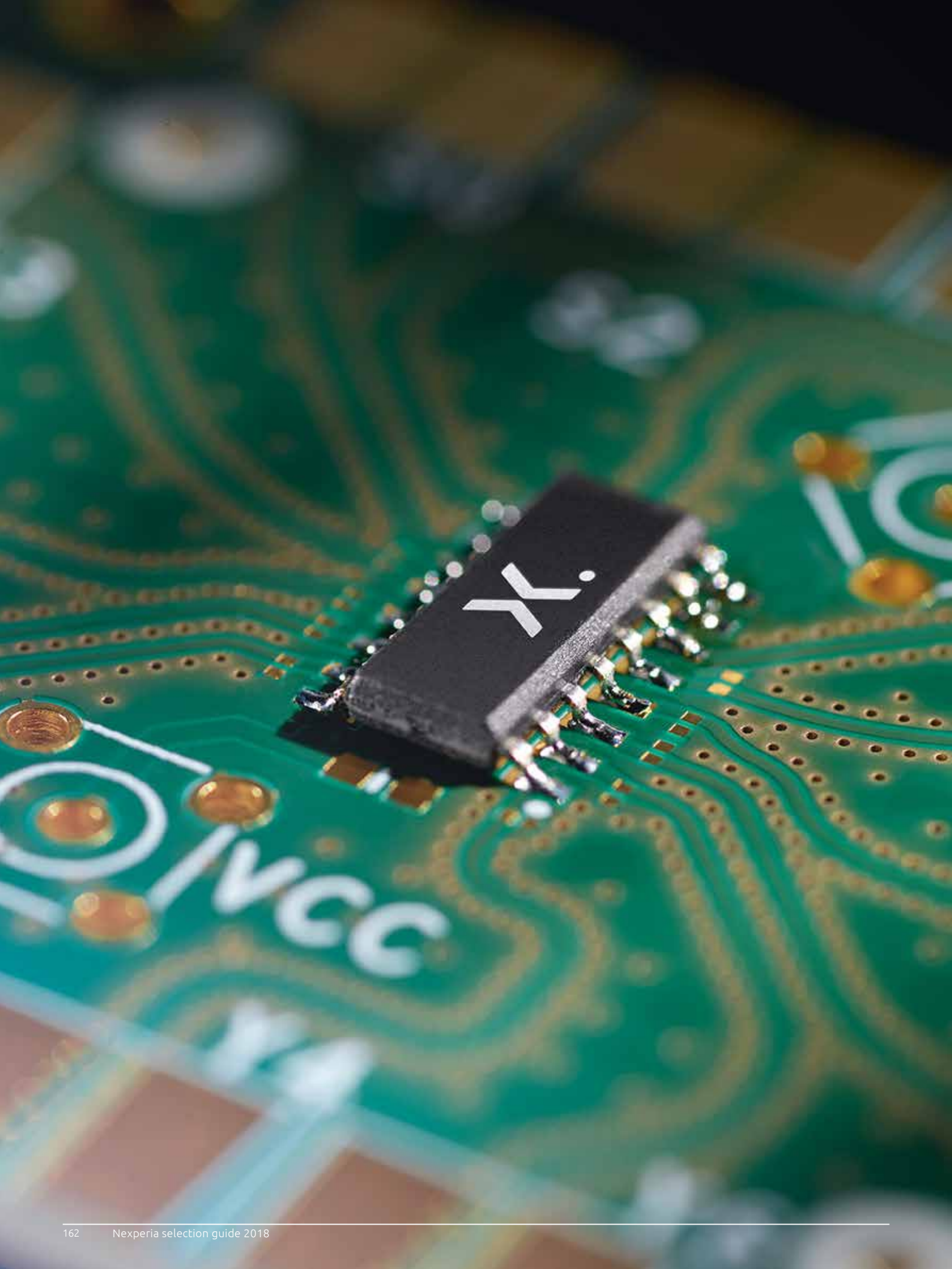
Type number	Description	V _{CC} (V)	Logic switching levels	R _{ON} (Ω)	R _{ON(FLAT)} (Ω)	f _(-3dB) (MHz)	T _{HD} (%)	X _{talk} (dB)	T _{amb} (°C)
74AHC1G66	Single-pole, single-throw analog switch	2.0 - 5.5	CMOS	40	14	280	0.015		-40~125
74AHC1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 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

Standard logic functions

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

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)				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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Package details and packing methods SMD – Part 1

Package details					Packing methods																	
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)															
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000
2	DSN0402-2 (SOD992)	0.40 x 0.20 x 0.12	0.25		2 mm pitch, 8 mm tape and reel	180 x 8																-315
	DSN0603B-2 (SOD962B)	0.60 x 0.30 x 0.20	0.4		2mm pitch, 8mm tape and reel	180 x 8															-315	
	DSN0603-2 (SOD962)	0.60 x 0.30 x 0.30	0.4		2 mm pitch. 8 mm tape and reel	180 x 8															-315	
	DSN1006U-2 (SOD995)	1.00 x 0.60 x 0.30	0.55		2 mm pitch, 8 mm tape and reel	180 x 8															-315	
	DSN1006-2 (SOD993)	1.00 x 0.60 x 0.30	0.65		2 mm pitch, 8 mm tape and reel	180 x 8															-315	
	DFN1006D-2 (SOD882D)	1.00 x 0.60 x 0.37	0.65		2 mm pitch. 8 mm tape and reel	180 x 8															-315	
	DFN1006-2 (SOD882)	1.00 x 0.60 x 0.48	0.65		2 mm pitch. 8 mm tape and reel	180 x 8															-315	
	SOD523 (SC-79)	1.20 x 0.80 x 0.60			2 mm pitch. 8 mm tape and reel	180 x 8														-315		
					4 mm pitch. 8 mm tape and reel	180 x 8																
					4 mm pitch. 8 mm tape and reel	286 x 8															-135	
	DFN1608D-2 (SOD 1608)	1.60 x 0.80 x 0.37	0.94		2 mm pitch. 8 mm tape and reel	180 x 8														-315		
	DSN1608-2 (SOD964)	1.60 x 0.80 x 0.37	0.94		2 mm pitch. 8 mm tape and reel	180 x 8														-315		
	SOD323F (SC-90)	1.70 x 1.25 x 0.70			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
						286 x 8														-135		
	SOD323 (SC-76)	1.70 x 1.25 x 0.95			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8														-135		
					10 reels in one box	286 x 8														-135		
	SOD123F	2.60 x 1.60 x 1.10			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
	CFP3 (SOD123W)	2.60 x 1.70 x 1.00			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
	SOD123	2.70 x 1.60 x 1.20			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
						286 x 8														-118		
	SOD80C (MiniMelf)	3.50 x 1.50 x 1.50			4 mm pitch. 8 mm tape and reel	180 x 8							-115									
					4 mm pitch. 8 mm tape and reel	330 x 8														-135		
	CFP5 (SOD128)	3.80 x 2.50 x 1.00			4 mm pitch. 12 mm tape and reel	180 x 12								-115								
3	DFN1006B-3 (SOT883B)	1.00 x 0.60 x 0.37	0.65		2 mm pitch. 8 mm tape and reel	180 x 8															-315	
	DFN1006-3 (SOT883)	1.00 x 0.60 x 0.48	0.65		2 mm pitch. 8 mm tape and reel	180 x 8														-315		
	DFN1010D-3 (SOT1215)	1.10 x 1.00 x 0.37	0.75		4 mm pitch. 8 mm tape and reel	180 x 8											-115					
	SOT663	1.20 x 1.60 x 0.55	0.5		4 mm pitch. 8 mm tape and reel	180 x 8									-115							
	SOT323 (SC-70)	2.00 x 1.25 x 0.95	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8														-135		
	DFN2020-3 (SOT1061)	2.00 x 2.00 x 0.62	1.3		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
	DFN2020D-3 (SOT1061D)	2.00 x 2.00 x 0.62	1.3		4 mm pitch, 8 mm tape and reel	180 x 8								-115								
	SOT23	2.90 x 1.30 x 1.00	0.95		4 mm pitch. 8 mm tape and reel	180 x 8								-215								
						286 x 8														-235		
					10 reels in one box	180 x 8							-185									

Package details and packing methods SMD – Part 2

Package details					Packing methods																		
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000	
3	SOT89 (SC-62)	4.50 x 2.50 x 1.50	1.5		8 mm pitch. 12 mm tape and reel	180 x 12			-115														
					8 mm pitch. 12 mm tape and reel	330 x 12									-135								
					8 mm pitch. 12 mm tape and reel	180 x 12				-146													
					8 mm pitch. 12 mm tape and reel	180 x 12				-147													
	CFP15 (SOT1289)	5.80 x 4.30 x 0.78	2.13		8 mm pitch. 12 mm tape and reel	330 x 12					-146							-139					
	DPAK (SOT428)	6.60 x 6.10 x 2.30	4.57		8 mm pitch. 16 mm tape and reel	330 x 16							-118										
D2PAK (SOT404)	10 x 9.60 x 4.30	5.08		16 mm pitch. 24 mm tape and reel	330 x 24		118																
4	SOT143B	2.90 x 1.30 x 1.00	1.9		4 mm pitch. 8 mm tape and reel	180 x 8								-215									
					4 mm pitch. 8 mm tape and reel	286 x 8																-235	
	LFPK56 (SOT669)	4.90 x 4.45 x 1.00	1.27		8 mm pitch. 12 mm tape and reel	180 x 12					-115												
	SOT223 (SC-73)	6.50 x 3.50 x 1.65	2.3		8 mm pitch. 12 mm tape and reel	180 x 12				-115													
					8 mm pitch. 12 mm tape and reel	330 x 12										-135							
	5	X2SON5 (SOT1226)	0.80 x 0.80 x 0.35	0.4		2mm pitch, 8mm tape and reel	180 x 8																-125
SOT665		1.60 x 1.20 x 0.55	0.5		2 mm pitch. 8 mm tape and reel	180 x 8																-125	
					4 mm pitch. 8 mm tape and reel	180 x 8										-115							
SOT353 (SC-88 A)		2.00 x 1.25 x 0.95	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
					4 mm pitch. 8 mm tape and reel	286 x 8																-135	
					4 mm pitch. 8 mm tape and reel	180 x 8									-125								
					4 mm pitch. 8 mm tape and reel	286 x 8																-165	
TSOP5 (SOT753)		2.90 x 1.50 x 1.00	0.95		4mm pitch, 8mm tape and reel	180 x 8								-125									
6		X2SON6 (SOT1255)	1.00 x 0.80 x 0.35	0.40		2mm pitch, 8mm tape and reel	180 x 8																-147
		XSON6 (SOT1115)	0.90 x 1.00 x 0.35	0.3		4mm pitch, 8mm tape and reel	180 x 8												-125				
		XSON6 (SOT1202)	1.00 x 1.00 x 0.35	0.35		4mm pitch, 8mm tape and reel	180 x 8												-125				
	DFN1010-6 (SOT891)	1.00 x 1.00 x 0.50	0.35		4 mm pitch. 8 mm tape and reel	180 x 8												-125					
	XSON6 (SOT886)	1.45 x 1.00 x 0.50	0.5		4mm pitch, 8mm tape and reel	180 x 8												-115					
	DFN1010B-6 (SOT1216)	1.10 x 1.00 x 0.37	0.35		4 mm pitch. 8 mm tape and reel	180 x 8													-147				
	DFN1412-6 (SOT1268)	1.40 x 1.20 x 0.50	0.5		4 mm pitch. 8 mm tape and reel	180 x 8													-147				
	SOT666	1.60 x 1.20 x 0.55	0.5		2 mm pitch. 8 mm tape and reel	180 x 8															-315		
					4 mm pitch. 8 mm tape and reel	180 x 8												-115					
	DFN1616-6 (SOT 1189)	1.60 x 1.60 x 0.48	0.5		4 mm pitch. 8 mm tape and reel	180 x 8												-115					
	SOT363 (SC-88)	2.00 x 1.25 x 0.95	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
4 mm pitch. 8 mm tape and reel					286 x 8																	-135	
4 mm pitch. 8 mm tape and reel					180 x 8									-125									
4 mm pitch. 8 mm tape and reel					286 x 8																	-165	

Package details and packing methods SMD – Part 3

Package details					Packing methods																		
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000	
6	DFN2020-6 (SOT1118)	2.00 x 2.00 x 0.62	0.65		4 mm pitch. 8 mm tape and reel	180 x 8										-115							
																-184							
	DFN2020D-6 (SOT1118D)	2.00 x 2.00 x 0.62	0.65		4 mm pitch, 8 mm tape and reel	180 x 8										-115							
	DF- N2020MD-6 (SOT1220)	2.00 x 2.00 x 0.62	0.65		4 mm pitch. 8 mm tape and reel	180 x 8										-115							
																-125							
	SOT457 (SC-74)	2.90 x 1.50 x 1.00	0.95		4 mm pitch. 8 mm tape and reel	180 x 8										-115							
					4 mm pitch. 8 mm tape and reel	286 x 8																	-135
					4 mm pitch. 8 mm tape and reel	180 x 8												-125					
4 mm pitch. 8 mm tape and reel					286 x 8																	-165	
7	DFN2111-7 (SOT1358)	2.10 x 1.10 x 0.50	1.3		4 mm pitch, 8 mm tape and reel	180 x 9										471							
	D2PAK-7 (SOT427)	10 x 15.30 x 4.30	-		16 mm pitch, 24 mm tape and reel	330 x 24		118															
8	XSON8 (SOT1116)	1.20 x 1.00 x 0.35	0.55		4mm pitch, 8mm tape and reel	180 x 8												-115					
	XSON8 (SOT1089)	1.35 x 1.00 x 0.50	0.55		4mm pitch, 8mm tape and reel	180 x 8												-115					
	X2SON8 (SOT1233)	1.35 x 0.80 x 0.35	0.40		2mm pitch, 8mm tape and reel	180 x 8															-115		
	XSON8 (SOT1203)	1.35 x 1.00 x 0.35	0.35		4mm pitch, 8mm tape and reel	180 x 8												-115					
	XQFN8 (SOT902-2)	1.60 x 1.60 x 0.50	0.5		4mm pitch, 8mm tape and reel	180 x 8											-125						
	XSON8 (SOT833-1)	1.95 x 1.00 x 0.50	0.5		4mm pitch, 8mm tape and reel	180 x 8												-115					
	VSSOP8 (SOT765-1)	2.00 x 2.30 x 1.00	0.5		4mm pitch, 8mm tape and reel	180 x 8										-125							
	XSON8 (SOT996-2)	2.00 x 3.00 x 0.50	0.5		4mm pitch, 8mm tape and reel	180 x 8											-125						
	TSSOP8 (SOT505-2)	3.00 x 3.00 x 1.10	0.65		4mm pitch, 12mm tape and reel	180 x 12											-125						
	TSSOP8 (SOT530-1)	3.00 x 3.40 x 1.10	0.65			330 x 12									-118								
	LFPK33 (SOT1210)	3.30 x 3.30 x 0.85	-		8 mm pitch, 12 mm tape and reel	180 x 12					-115												
	SOT96 (SO8)	4.90 x 3.90 x 1.75	1.27		8 mm pitch. 12 mm tape and reel	180 x 12				-115													
					8 mm pitch. 12 mm tape and reel	330 x 12							-518										
					8 mm pitch. 12 mm tape and reel	331 x 12							-118										
	LFPK56D (SOT1205)	4.90 x 4.45 x 1.00	1.27		8 mm pitch. 12 mm tape and reel	180 x 12					-115												
10	XQFN10 (SOT1337-1)	1.30 x 1.60 x 0.50	0.4														-115						
	X2QFN10 (SOT1430-1)	1.30 x 1.60 x 0.33	0.40		4 mm pitch, 8 mm tape and reel	180 x 8													-471				
	XQFN10 (SOT1160-1)	1.40 x 1.80 x 0.50	0.40		4 mm pitch, 8 mm tape and reel	180 x 8											-115						
	XQFN10 (SOT1049-3)	1.55 x 2.00 x 0.50	0.5		4mm pitch, 8mm tape and reel	180 x 8													-115				
	XSON10 (SOT1081-2)	1.70 x 1.00 x 0.50	0.50																-115				
	DFN2510-10 (SOT1165)	2.50 x 1.00 x 0.48	0.5		4 mm pitch. 8 mm tape and reel	180 x 8													-115				
	DFN2510A-10 (SOT1176)	2.50 x 1.00 x 0.48	0.5		4 mm pitch. 8 mm tape and reel	180 x 8													-115			-471	
	HVSON10 (SOT650)	3.00 x 3.00 x 0.85	0.5		8mm pitch, 12mm tape and reel	330 x 12														-118			
	TSSOP10 (SOT552-1)	3.00 x 3.00 x 1.10	0.50		8 mm pitch, 12 mm tape and reel	330 x 12								-118									
12	XQFN12 (SOT1174-1)	1.70 x 2.00 x 0.50	0.4		4mm pitch, 8mm tape and reel	180 x 8											-115						

Package details and packing methods SMD – Part 4

Package details					Packing methods																		
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000	
14	DHVQFN14 (SOT762-1)	3.00 x 2.50 x 1.00	0.50		4 mm pitch, 12 mm tape and reel	180 x 12									-115								
	TSSOP14 (SOT402-1)	5.00 x 4.40 x 1.10	0.65		8mm pitch, 12mm tape and reel	330 x 12								-118									
	SSOP14 (SOT337-1)	6.20 x 5.30 x 2.00	0.65		12 mm pitch, 16 mm tape and reel	330 x 16							-118										
	SO14 (SOT108-1)	8.65 x 3.9 x 1.45	1.27		8mm pitch, 16mm tape and reel	330 x 16								-118									
16	XQFN16 (SOT1161-1)	1.80 x 2.60 x 0.50	0.4		4mm pitch, 8mm tape and reel	180 x 8										-115							
	TSSOP16 (SOT403-1)	5.00 x 4.40 x 1.10	0.65		8mm pitch, 12mm tape and reel	330 x 12								-118									
	SSOP16 (SOT519-1)	4.90 x 3.90 x 1.73	0.64		8 mm pitch, 12 mm tape and reel	330 x 12								-118									
	SSOP16 (SOT338-1)	6.20 x 5.30 x 2.00	0.65		12mm pitch, 16mm tape and reel	330 x 16							-118										
	SO16 (SOT109-1)	9.90 x 3.90 x 1.35	1.27		8 mm pitch, 16 mm tape and reel	330 x 16								-118									
20	DHXQFN20 (SOT1045-2)	4.50 x 2.50 x 0.50	0.50			180 x 12											-115						
	DHVQFN20 (SOT764-1)	4.50 x 2.50 x 1.00	0.5		4mm pitch, 12mm tape and reel	180 x 12										-115							
	TSSOP20 (SOT360-1)	6.50 x 4.40 x 1.10	0.65		8 mm pitch, 16 mm tape and reel	330 x 16									-118								
	SSOP20 (SOT339-1)	7.20 x 5.30 x 2.00	0.65		12mm pitch, 16mm tape and reel	330 x 16				-118													
	SO20 (SOT163-1)	12.80 x 7.50 x 2.65	1.27		12mm pitch, 24mm tape and reel	330 x 24							-118										
24	DHVQFN24 (SOT815-1)	5.50 x 3.50 x 0.85	0.5		8mm pitch, 12mm tape and reel	330 x 12									-118								
	TSSOP24 (SOT355-1)	7.80 x 4.40 x 1.10	0.65		8mm pitch, 16mm tape and reel	330 x 16								-118									
	SSOP24 (SOT340-1)	8.20 x 5.30 x 2.00	0.65		12mm pitch, 16mm tape and reel	330 x 16				-118													
	SO24 (SOT137-1)	15.40 x 7.50 x 2.65	1.27		12mm pitch, 24mm tape and reel	330 x 24				-118													
32	DFN5050-32 (SOT617)	5.00 x 5.00 x 1.00	0.5		8 mm pitch, 12 mm tape and reel	330 x 12														-118 -128			
48	TSSOP48 (SOT480-1)	9.70 x 4.40 x 1.10	0.40			330 x 16								-118									
	TSSOP48 (SOT362-1)	12.50 x 6.10 x 1.20	0.50		12 mm pitch, 24 mm tape and reel	330 x 24							-118										
	SSOP48 (SOT370-1)	15.90 x 7.50 x 2.80	0.64		16 mm pitch, 24 mm tape and reel	330 x 24				-118													
56	VFBGA56 (SOT702-1)	4.50 x 7.00 x 1.00	0.65		8 mm pitch, 16 mm tape and reel	330 x 16									-518								
	TSSOP56 (SOT364-1)	14.00 x 6.10 x 1.20	0.50		12 mm pitch, 24 mm tape and reel	330 x 24							-118										
	SSOP56 (SOT371-1)	18.45 x 7.50 x 2.80	0.64			330 x 32				-518													
96	LFBGA96 (SOT536-1)	5.50 x 13.50 x 1.50	0.80		8 mm pitch, 24 mm tape and reel	330 x 24									-518								

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		WLCSP
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	20 tubes x 50 pcs
	I2PAK (SOT226)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	20 tubes x 50 pcs

Package cross reference list – Part 1

Type	Competitor	Nexperia	Pins/ Leads
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-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CMPAK/ CMAK	Renesas	SOT323	3
CP4	Toshiba	SOT143B	4
CPT3	Rohm	DPAK (SOT428)	3
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	ON Semi	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK-3	OnSemi	D2PAK (SOT404)	3
D2PAK-7	ST	D2PAK-7 (SOT427)	7
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK7P	Infineon	D2PAK-7 (SOT427)	7
DFN-5	OnSemi	LFPK56 (SOT669)	4
DFN-8	OnSemi	LFPK56D (SOT1205)	8
DFN1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1006H4-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1411*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
DFN2	ST	DSN0603-2 (SOD962)	2
DPAK	ON Semi	DPAK (SOT428)	3
DPAK	Toshiba	DPAK (SOT428)	3
DPAK	OnSemi	DPAK (SOT428)	3
DPAK	Infineon	DPAK (SOT428)	3
DPAK	ST	DPAK (SOT428)	3
DPAK(S)	Renesas	DPAK (SOT428)	3
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
EMD5/EMT5	Rohm	SOT665	5
EMD6/EMT6/WEMT6	Rohm	SOT666	6
EMT3	Rohm	DFN1006-3 (SOT883)	3

Types with * show footprint compatibility only

Type	Competitor	Nexperia	Pins/ Leads
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
EMT5*	Rohm	SOT666	6
EMT5/EMD5	Rohm	SOT665	5
EMT6	Rohm	SOT666	6
EMT6/EMD6/WEMT6	Rohm	SOT666	6
ES6	Toshiba	SOT666	6
ES6 ESV	Toshiba	SOT666	6
ESC/TESC	Toshiba	SOD523	2
ESM	Toshiba	DFN1006-3 (SOT883)	3
ESV	Toshiba	SOT665	5
ESV	Toshiba	SOT666	6
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
GMD2	Rohm	DSN0603-2 (SOD962)	2
H2PAK-2	ST	D2PAK (SOT404)	3
H2PAK-6	ST	D2PAK-7 (SOT427)	7
HSMT8	Rohm	LFPK33 (SOT1210)	8
HSO-8	Renesas	LFPK56 (SOT669)	4
HSO-8 Dual	Renesas	LFPK56D (SOT1205)	8
HSOP8 (Dual)	Rohm	LFPK56D (SOT1205)	8
HSOP8 (Single)	Rohm	LFPK56 (SOT669)	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
LDPK(S)-1	Renesas	D2PAK (SOT404)	3
LFPK	Renesas	LFPK (SOT669)	5
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 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
MICRO FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6

Package cross reference list – Part 2

Type	Competitor	Nexperia	Pins/ Leads
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-7 (SOT427)	7
MP-25ZT	Renesas	D2PAK (SOT404)	3
MP-3Z	Renesas	DPAK (SOT428)	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	LFPAK (SOT669)	5
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO220-3	Infineon	TO-220 (SOT78)	3
PG-TO252-3	Infineon	DPAK (SOT428)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TO263-7	Infineon	D2PAK-7 (SOT427)	7
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power FLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
Power FLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8
Power FLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
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 SC-70	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPak SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPak SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPAK SO-8	Vishay	LFPAK56 (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8

Types with * show footprint compability only

Type	Competitor	Nexperia	Pins/ Leads
PW-Mini	Toshiba	SOT89	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
S08	Vishay	SOT96	8
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC-74 TSOP-6	ON Semi	SOT457	6
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC-88	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC-89	Semtech	SOT666	6
SC2	Toshiba	DSN0603-2 (SOD962)	2
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-3	AOS	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	Vishay	SOT363	6
SC70-6	AOS	SOT363	6
SC70-6	Fairchild	SOT363	6
SC70-6L	Semtech	SOT363	6
SC74 TSOP6	Infineon	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC88/SC 70-6/SOT 363 6 LEAD	ON Semi	SOT363	6
SC89	Fairchild	SOT666	6
SC89-3	Vishay	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Fairchild	DFN1006-3 (SOT883)	3
SC89-6	Vishay	SOT666	6
SC89-6	AOS	SOT666	6
SC89-6	Fairchild	SOT666	6
SC89-6lead	Vishay	SOT666	6
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

Package cross reference list – Part 3

Type	Competitor	Nexperia	Pins/ Leads
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
SMFPAK-6	Renesas	SOT666	6
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
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
SOD-323	ON Semi	SOD323	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ST	SOD323	2
SOD-523	ON Semi	SOD523	2
SOD-523	ST	SOD523	2
SOD323	Infineon	SOD323	2
SOD323	Vishay	SOD323	2
SOD323	Semtech	SOD323	2
SOD523	Diodes Inc.	SOD523	2
SOD523	Vishay	SOD523	2
SOD523	Semtech	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-8	Renesas	SOT96	8
SOP/DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP8	Rohm	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT-143	Diodes Inc.	SOT143B	4
SOT-223	ON Semi	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	OnSemi	SOT223	3
SOT-223	Infineon	SOT223	3

Types with * show footprint compatibility only

Type	Competitor	Nexperia	Pins/ Leads
SOT-223	ST	SOT223	3
SOT-23	ON Semi	SOT23	3
SOT-23	Diodes Inc.	SOT23	3
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	SOT323	3
SOT-363	Diodes Inc.	SOT363	6
SOT-553	ON Semi	SOT665	5
SOT-563	ON Semi	SOT666	6
SOT-89	ON Semi	SOT89	3
SOT063*	ON Semi	DFN101 OB-6 (SOT1216)	6
SOT223	Vishay	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	Fairchild	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Diodes Inc.	SOT223	4
SOT223	Diodes Inc.	SOT223	3
SOT23	Infineon	SOT23	3
SOT23	ST	SOT23	3
SOT23	Vishay	SOT23	3
SOT23	Semtech	SOT23	3
SOT23	Diodes Inc.	SOT23	3
SOT23	AOS	SOT23	3
SOT23	ON Semi	SOT23	3
SOT23-3	Diodes Inc.	SOT23	3
SOT23-3	AOS	SOT23	3
SOT23-3	ON Semi	SOT23	3
SOT23-5	AOS	SOT457	6
SOT23-5	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	ST	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6L	Semtech	SOT457	6
SOT23F	Toshiba	SOT23	3
SOT23F	Diodes Inc.	SOT23	3
SOT26	Diodes Inc.	SOT457	6
SOT323	Infineon	SOT323	3
SOT323	Diodes Inc.	SOT323	3
SOT323	Fairchild	SOT323	3
SOT353	Diodes Inc.	SOT353	5
SOT353	Vishay	SOT353	5
SOT353	Diodes Inc.	SOT363	6
SOT363	Infineon	SOT363	6
SOT363	Diodes Inc.	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3
SOTS23F	Fairchild	DFN1006-3 (SOT883)	3
SOTS63	Diodes Inc.	SOT666	6
SOTS63-6	ON Semi	SOT666	6
SOTS63F	Fairchild	SOT666	6
SOT666	Infineon	SOT666	6

Package cross reference list – Part 4

Type	Competitor	Nexperia	Pins/ Leads
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Infineon	SOT89	3
SOT89	Diodes Inc.	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
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
Thin PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO-220	ST	TO-220 (SOT78)	3
TO-220	Vishay	TO-220 (SOT78)	3
TO-220	Toshiba	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
TO-252	Renesas	DPAK (SOT428)	3
TO-252	Vishay	DPAK (SOT428)	3
TO-252 (MP-3ZK)	Renesas	DPAK (SOT428)	3
TO-252 reverse, TO-252	Vishay	DPAK (SOT428)	3
TO-252-3/-3-23	Infineon	DPAK (SOT428)	3
TO-252, TO-252 reverse	Vishay	DPAK (SOT428)	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
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

Types with * show footprint compability only

Type	Competitor	Nexperia	Pins/ Leads
TO-263-7L	Vishay	D2PAK-7 (SOT427)	7
TO-263AB	Vishay	D2PAK (SOT404)	3
TO220	Infineon	TO-220 (SOT78)	3
TO220-3	Diodes Inc.	TO-220 (SOT78)	3
TO252	Diodes Inc.	DPAK (SOT428)	3
TO262	Infineon	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	3
TP-FA	OnSemi	DPAK (SOT428)	3
TSLP-2-1	Infineon	DFN1006-2 (SOD882)	2
TSLP-2-7/-17	Infineon	DFN1006D-2 (SOD882D)	2
TSLP-3-1, -15	Infineon	DFN1006B-3 (SOT883B)	3
TSLP-3-4	Infineon	DFN1006-3 (SOT883)	3
TSLP-9-1	Infineon	DFN2510A-10 (SOT 1176)	10
TSMT5*	Rohm	SOT457	6
TSMT6	Rohm	SOT457	6
TSNP-2-2	Infineon	DFN1608D-2 (SOD 1608)	2
TSON Advance	Toshiba	LFPAK33 (SOT1210)	8
TSOP-6	Renesas	SOT457	6
TSOP-6/ TSOP6	Vishay	SOT457	6
TSOP6	Vishay	SOT457	6
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	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
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
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
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
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN10 2.5 x 1, 0.5P	ON Semi	DFN2510A-10 (SOT1176)	10
UDFN12 2.5 x 1.35, 0.4P	ON Semi	DFN2514-12 (SOT1167)	12
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN6	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

Package cross reference list – Part 5

Type	Competitor	Nexperia	Pins/ Leads
UMT3F*	Rohm	SOT323	3
UMT5/ UMD5	Rohm	SOT353	5
UMT6	Rohm	SOT363	6
UMT6/ UMD6	Rohm	SOT363	6
UPAK (SOT89)	Renesas	SOT89	3
URP	Renesas	SOD323	2
US-Flat	Toshiba	SOD323F	2
US6	Toshiba	SOT363	6
US6/ UF6/ USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5
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	DFN101 OB-6 (SOT1216)	6
VS6	Toshiba	SOT457	6
VSON-5	Renesas	SOT665	5
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6
WDFN-8	OnSemi	LFPK33 (SOT1210)	8
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WEMT6	Rohm	SOT666	6
WEMT6/ EMT6/ EMD6	Rohm	SOT666	6
WLCSP 1 x 1*	Fairchild	WLCSP4	3
WLCSP-4*	Fairchild	WLCSP4	3
WLCSP-4*	ON Semi	WLCSP4	3
WLCSP1.6 x 1.6*	AOS	WLCSP6	6
WLCSP2	ON Semi	DSN0603-2 (SOD962)	2
WLL-2-2	Infineon	DSN0402-2 (SOD992)	2
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

Types with * show footprint compability only

Type	Competitor	Nexperia	Pins/ Leads
X2-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X3-DFN0603-2	Diodes Inc.	DSN0603-2 (SOD962)	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
μ8FL	OnSemi	LFPK33 (SOT1210)	8

Package cross reference matrix – Part 1

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		WLL-2-2		ST01005		SLP- 0402P2X3
	DSN1006-2 (SOD993)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DSN1006U-2 (SOD995)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250		(VMN2)	CTS2 (FSC)	(SOD923-2)		TSLP-2-1	XI-DFN1006-2	SOD 882 uQFN-2L	LLP1006-2M LLP1006-2L	SLP1006P2
	DFN1006D-2 (SOD882D)		1.0 x 0.6 x 0.37	250		(VMN2)	CTS2 (FSC)	DSN2 1.0 x 0.6		TSLP-2-7/ -17	X2- DFN1006-2	SOD882T	LLP1006-2L LLP1006-2M	SLP1006P2T
	DFN1608D-2 (SOD1608)		1.6 x 0.8 x 0.37	780		KMD2		DSN2 1.6 x 0.8		TSNP-2-2				SLP1610N2
	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	Strmite 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-DFN 1006-3			SLP1006P3
	DFN1006B-3 (SOT883B)		1.0 x 0.6 x 0.37	250		VML1006	CST3	XDFN3		TSLP-3-1, -15	X2- DFN1006-3			SLP1006P3T
	DFN1010D-3 (SOT1215)		1.1 x 1.0 x 0.37	325		(VMT3)	(VESM)	(SOT723)			X2- DFN1010-3			
	DFN2020-3 (SOT1061)	HU- SON3	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	
	DPAK (SOT428)		6.6 x 6.1 x 2.3			CPT3	DPAK	DPAK, TP-FA	TO-252 (MP-3ZK) DPAK(S)	TO-252- 3/-3-2 3 DPAK, PG- TO252-3	TO252	DPAK	TO- 252,TO-252 reverse	
	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- TO263-3	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 – Part 2

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	
	SOT223		6.5 x 3.5 x 1.65					SOT-223		SOT-223	SOT223	SOT-223		
4	LFPAK56 (SOT669)	Power- S08	4.9 x 4.45 x 1.0	3000		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
	SOT223	SC-73	6.5 x 3.5 x 1.65	1700				SOT-223		SOT223	SOT-223		SOT223	
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
	SOT665		1.6 x 1.2 x 0.55	300		EMD5/ EMT5	ESV	SOT-553	VSON-5					
6	DFN1010-6 (SOT891)	x SON6	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)	x SON6	1.45 x 1.0 x 0.48	250										SLP1510N6
	DFN1616-6 (SOT1189)	H x SON6	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
	SOT666		1.6 x 1.2 x 0.55	300		EMD6/ EMT6 WEMT6	ES6 ESV	SOT-563	SMFPAK-6	SOT666	SOT563		SC89- 6lead	SC-89
7	D2PAK-7 (SOT427)		11 x 10 x 4.3						MP-25ZT, 7pin TO-263	D2PAK7P, PG-TO263-7		D2PAK-7, H2PAK-6	TO-263-7L	
8	LFPAK33 (SOT1210)		3.3 x 3.3 x 0.85			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	3000		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)	H x SON8	1.7 x 1.35 x 0.48					UDFN 1.7 x 1.35, 0.4P						SLP1713P8
10	DFN2510-10 (SOT 1165)	x SON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4

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

Package cross reference matrix – Part 3

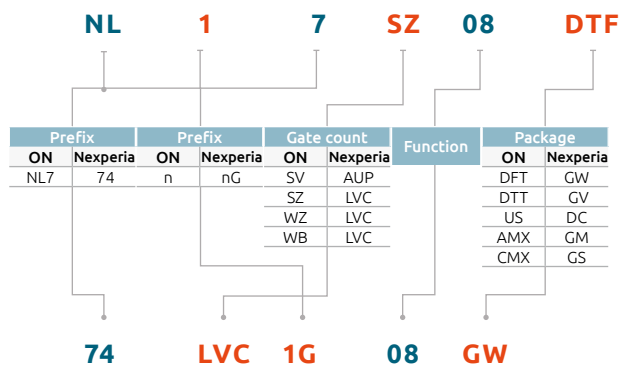
Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
10	DF-N2510A-10 (SOT1176)	x SON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2626-10 (SOT 1197)		2.6 x 2.6 x 0.48					UDFN10 2.6 x 2.6, 0.5P						SLP2626P10
12	DFN2512-12 (SOT 1158)	H x - SON12	2.5 x 1.2 x 0.48					UDFN12, 2.5 x 1.2, 0.4P						
	DFN2514-12 (SOT 1167)	HU-SON12	2.5 x 1.35 x 0.53					UDFN12, 2.5 x 1.35, 0.4P						SLP2513P12
16	DFN3312-16 (SOT 1159)	H x - SON16	3.3 x 1.2 x 0.48					UDFN 16, 3.5 x 1.2, 0.4P						
	DFN3314-16 (SOT 1168)	HU-SON16	3.3 x 1.35 x 0.53											SLP3313P16

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

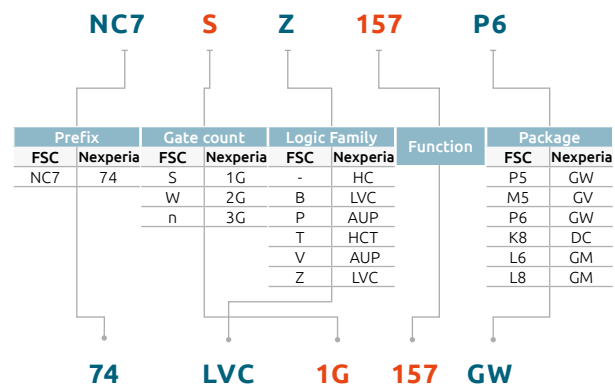
Competitive cross reference - Logic

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.

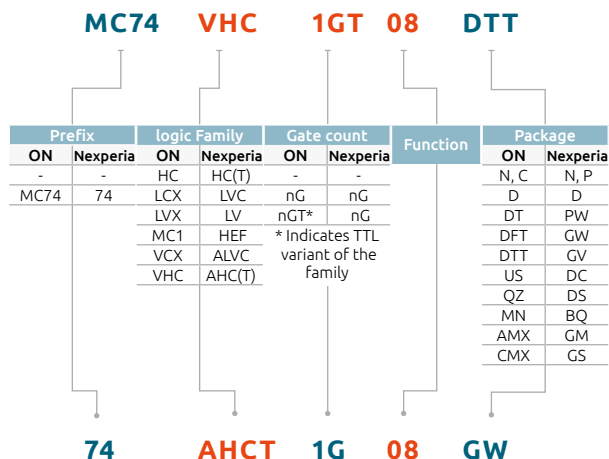
On semiconductor low pin count logic



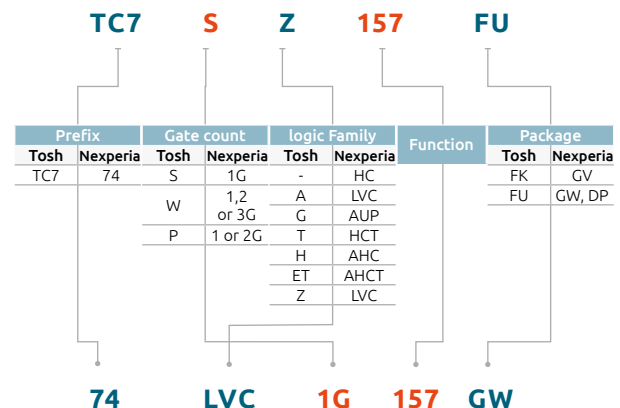
Fairchild semiconductor tiny logic



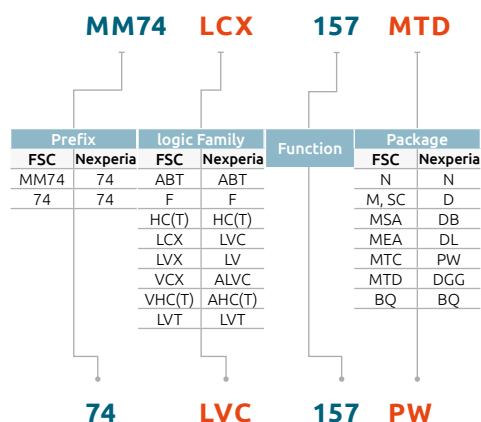
On semiconductors logic



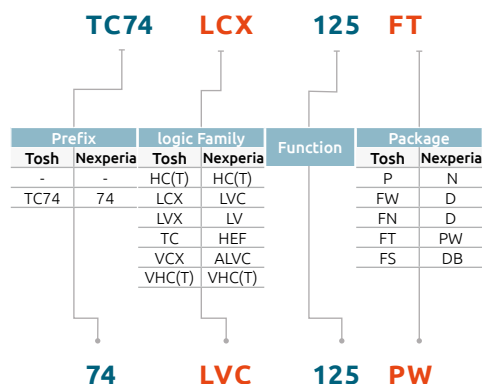
Toshiba one gate



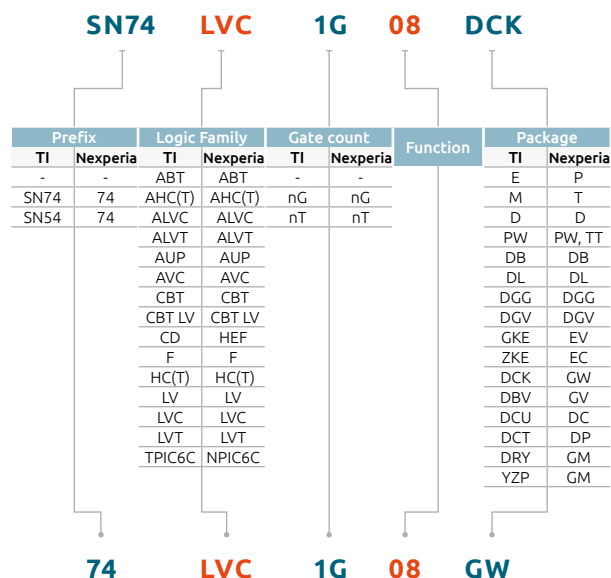
Fairchild semiconductor standard logic



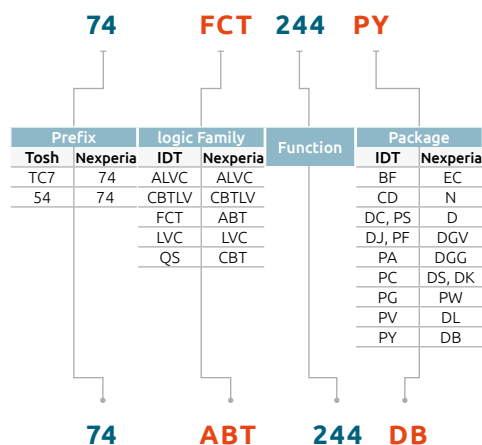
Toshiba standard logic



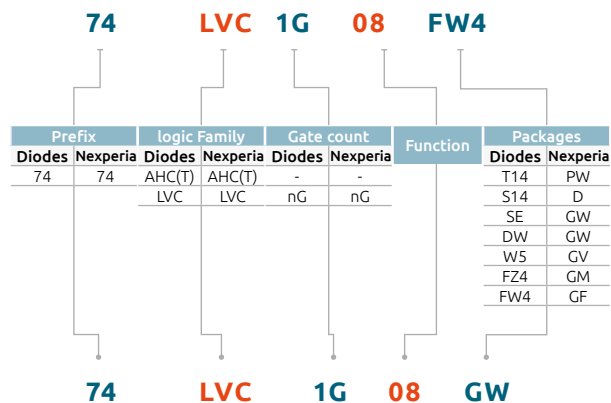
Texas instruments logic



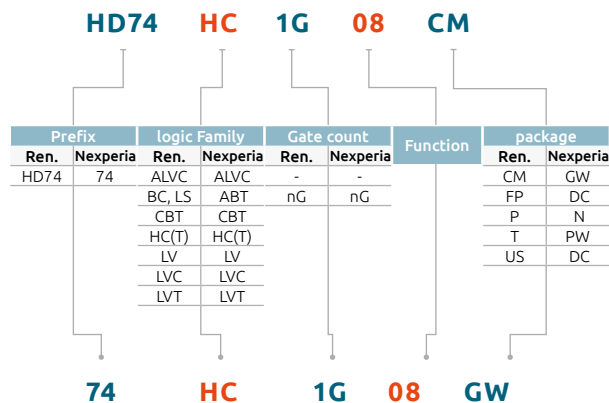
IDT logic



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
		DSN0402-2 (SOD992)	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
		SOT89	146
	Orientation in tape	Package	Packing 12NC ending
		DFN1006-3 (SOT883)	315
		DFN1006B-3 (SOT883B)	315
		SOT23	185, 215, 235
		SOT323	115, 135
		SOT416	115, 135

3 pin packages	Orientation in tape	Package	Packing 12NC ending
		DFN1010D-3 (SOT1215)	147
		DFN2020-3 (SOT1061)	115, 135
		DFN2020D-3 (SOT1061D)	115, 135
		SOT89	115, 135
		SOT663	115
		CFP15 (SOT1289)	139, 146
		DPAK (SOT428)	118
		D2PAK (SOT404)	118
	Orientation in tape	Package	Packing 12NC ending
		SOT89	147

4 pin packages	Orientation in tape	Package	Packing 12NC ending
		WLCSP4 (0808)	084
	Orientation in tape	Package	Packing 12NC ending
		SOT143B	215, 235
		SOT223	115, 135
		DFN1010-4 (SOT1194)	115

4 pin packages	Orientation in tape	Package	Packing 12NC ending
		SOT89	115, 135
	Orientation in tape	Package	Packing 12NC ending

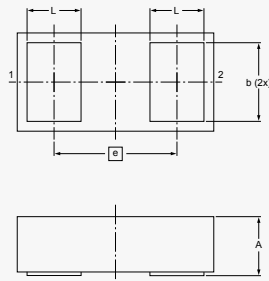
5 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		LPAK56 (SOT669)	115			SOT353	115, 135
		WLCSP5 (1208)	087			SOT665	115
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		SOT753	125				
		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)	147
		DFN1616-6 (SOT1189)	115			DFN2020-6 (SOT1118)	115
		DFN2020MD-6 (SOT1220)	184			DFN2020D-6 (SOT1118D)	115
		LPAK33 (SOT1210)	115			DFN2020MD-6 (SOT1220)	115
		LPAK56D (SOT1205)	115			SOT363	115, 135
		WLCSP6 (1510)	023			SOT457	115, 135
		X2SON6 (SOT1115)	125			SOT666	115, 315
		XSON6 (SOT1202)	125			X2SON6 (SOT1255)	147
		XSON6 (SOT886)	125				
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN1010-6 (SOT891)	132				
		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				

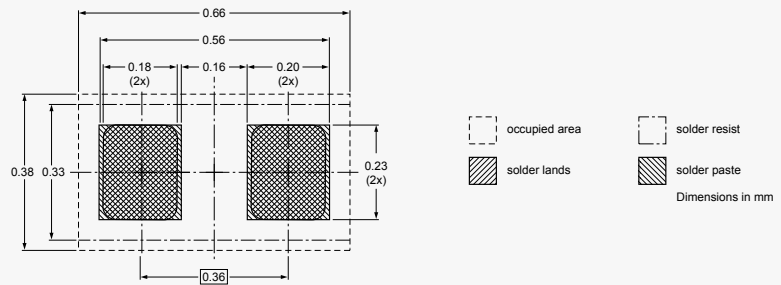
Packing methods

multi I/O pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN2110-9 (SOT1178)	115				
		DFN2111-7 (SOT1358)	471				
		DFN2510A-10 (SOT1176)	115				
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN5050-32 (SOT617-3)					
		XSON8 (SOT1116)	115				
		X2SON8 (SOT1233)	115				
		XSON8 (SOT1203)	115				
		XSON8 (SOT1089)	115				
		XSON8 (SOT833-1)	115				
		TSSOP8 (SOT530-1)	118				
		SO8 (SOT96-1)	118				
		X2QFN10 (SOT1430-1)	471				
		XQFN10 (SOT1337-1)	115				
		XSON10 (SOT1081-2)	115				
		TSSOP10 (SOT552-1)	118				
		XQFN10 (SOT1160-1)	115				
		XQFN12 (SOT1174-1)	115				
		DHVQFN14 (SOT762-1)	115				
		TSSOP14 (SOT402-1)	118				
		SSOP14 (SOT337-1)	118				
		SSOP16 (SOT519-1)	118				
		TSSOP16 (SOT403-1)	118				
		SSOP16 (SOT338-1)	118				
		SO16 (SOT109-1)	118				
		TSSOP20 (SOT360-1)	118				
		SO20 (SOT163-1)	118				
		DHXQFN20 (SOT1045-2)	115				
		DHVQFN20 (SOT764-1)	115				
		SSOP20 (SOT339-1)	118				
		SO24 (SOT137-1)	118				
		DHVQFN24 (SOT815-1)	118				
		TSSOP24 (SOT355-1)	118				
		SSOP24 (SOT340-1)	118				
		TSSOP48 (SOT362-1)	118				
		TSSOP48 (SOT480-1)	118				
		SSOP48 (SOT370-1)	118				
		TSSOP56 (SOT364-1)	118				
		SSOP56 (SOT371-1)	518				
		VFBGA56 (SOT702-1)	518				
		LFGBA96 (SOT536-1)	518				
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		XQFN8 (SOT902-2)	125				
		VSSOP8 (SOT765-1)	125				
		TSSOP8 (SOT505-2)	125				

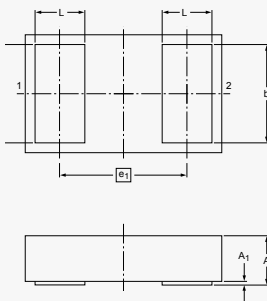
2-pin SMD packages



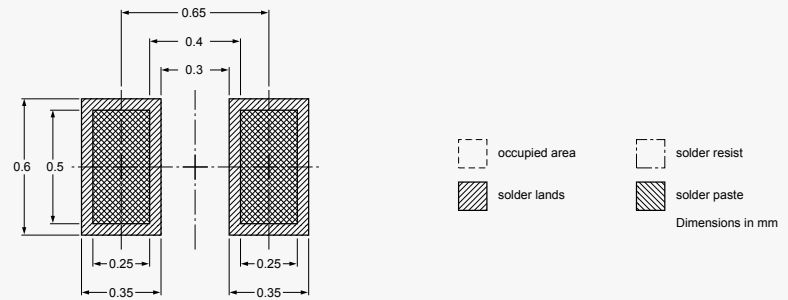
DSN0402-2 (SOD992)



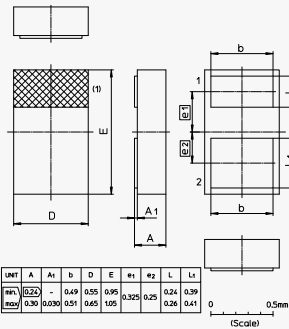
DSN0402-2 (SOD992)



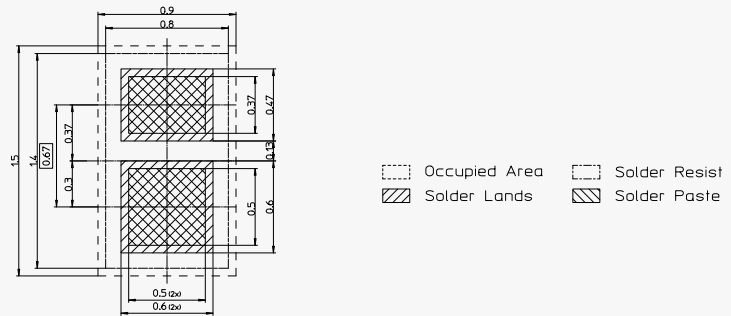
DSN1006-2 (SOD993)



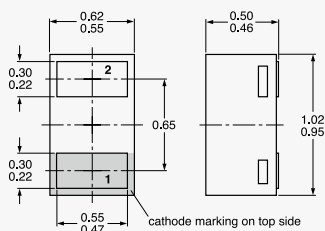
DSN1006-2 (SOD993)



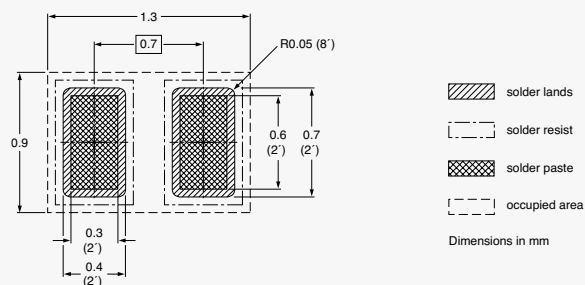
DSN1006U-2 (SOD995)



DSN1006U-2 (SOD995)



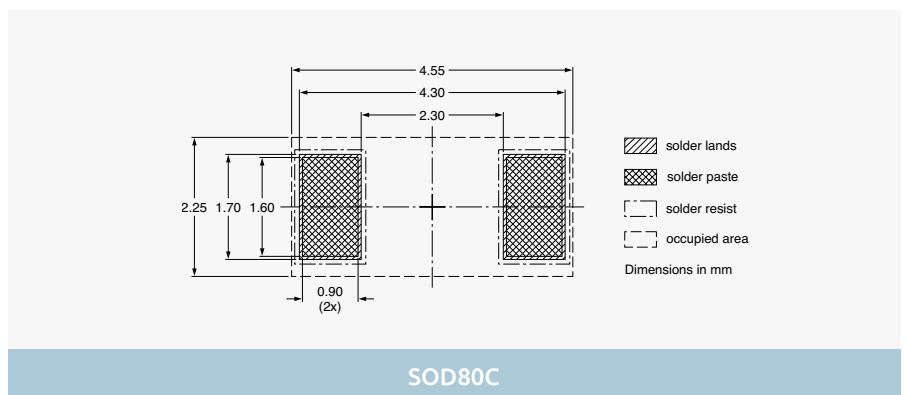
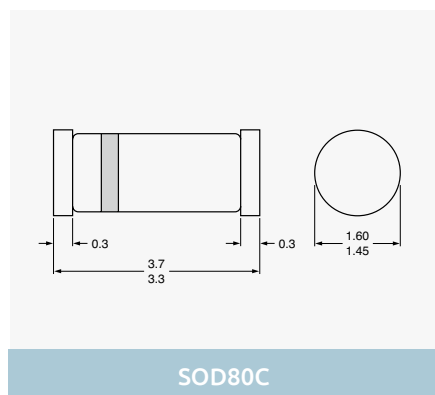
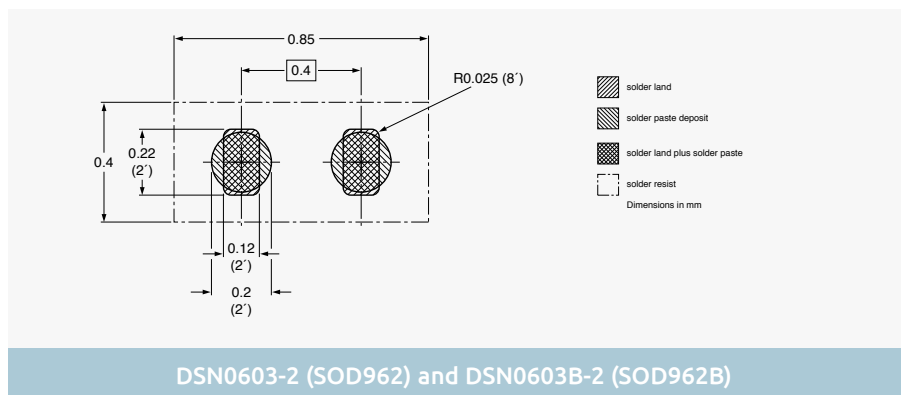
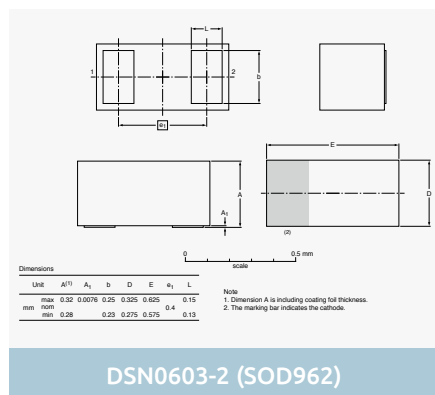
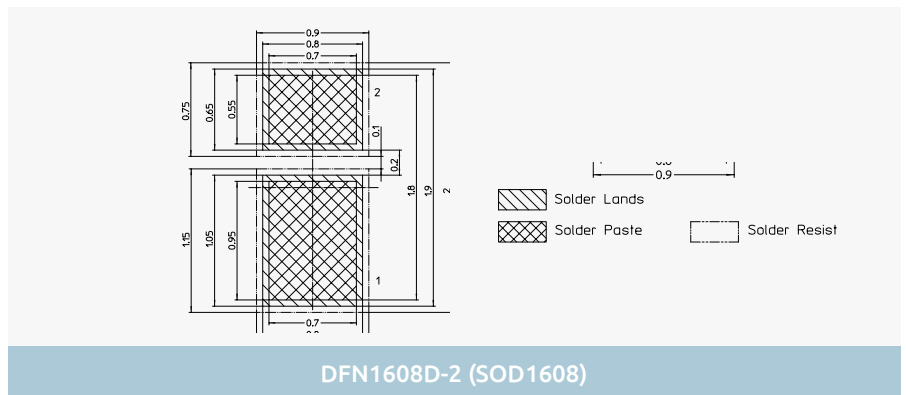
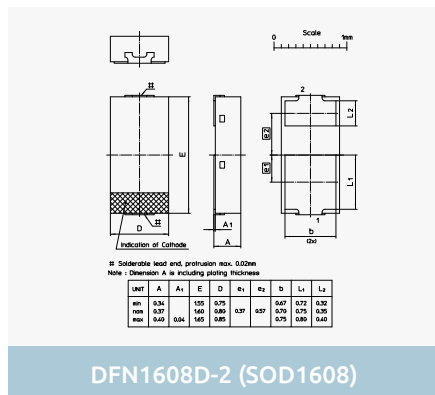
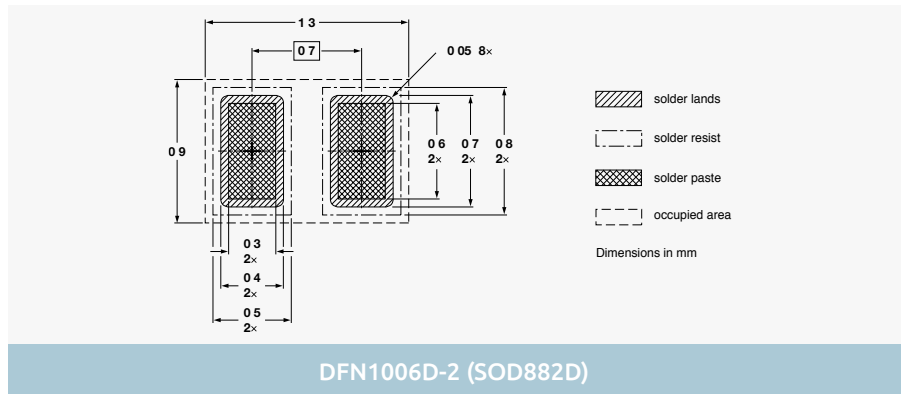
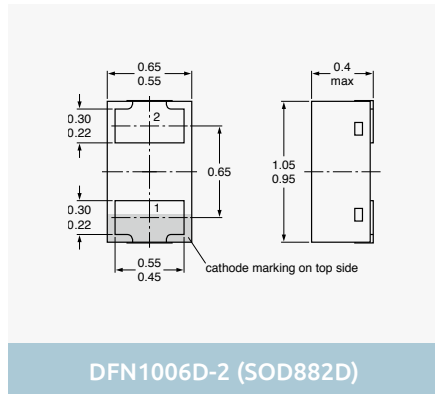
DFN1006-2 (SOD882)



DFN1006-2 (SOD882)

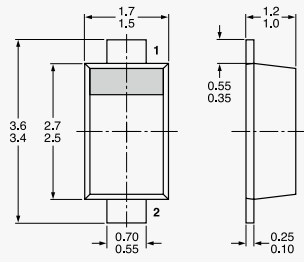
Dimensions in mm

2-pin SMD packages

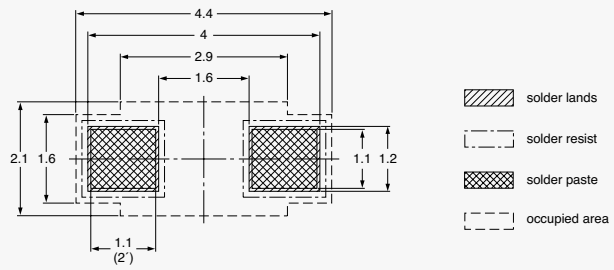


Dimensions in mm

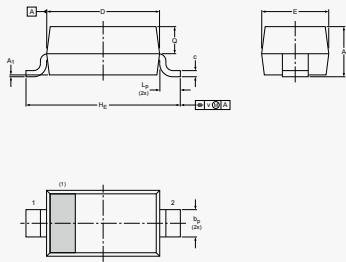
2-pin SMD packages



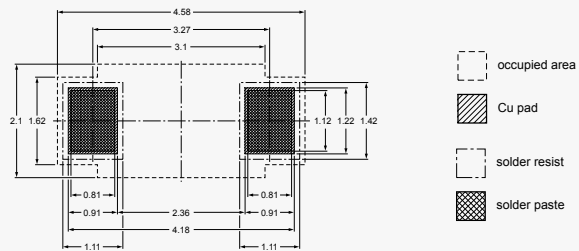
SOD123F



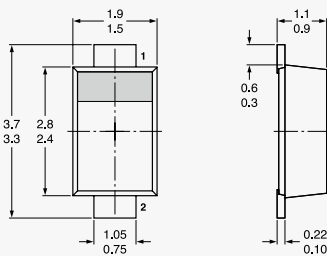
SOD123F



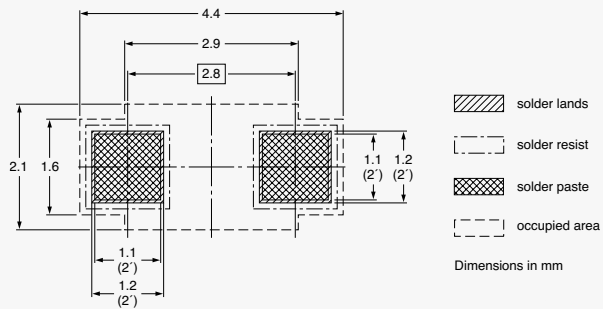
SOD123



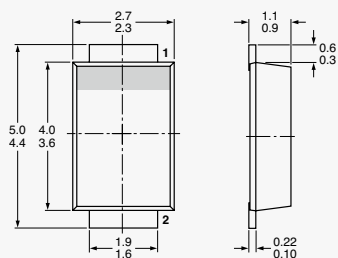
SOD123



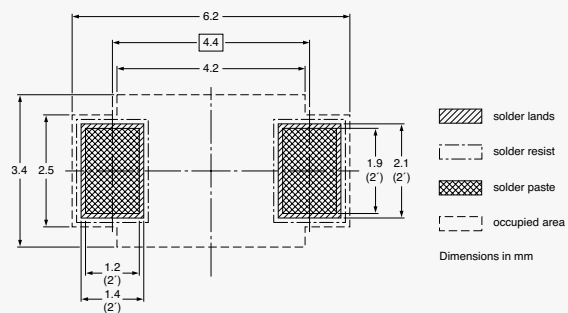
SOD123W



SOD123W



SOD128



SOD128

Dimensions in mm

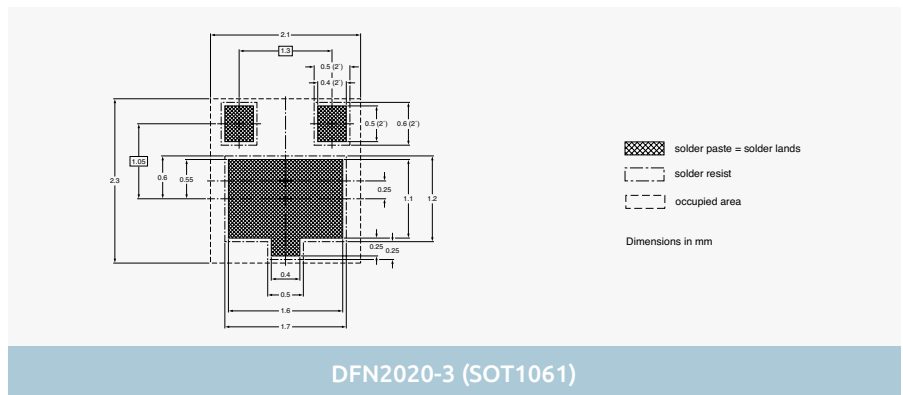
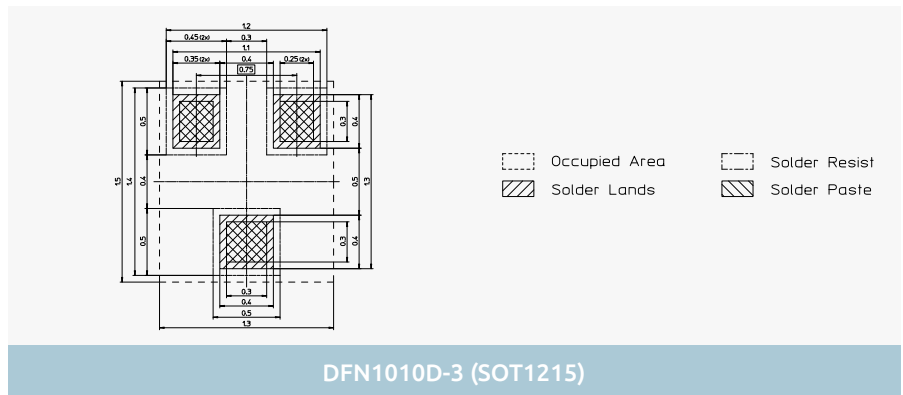
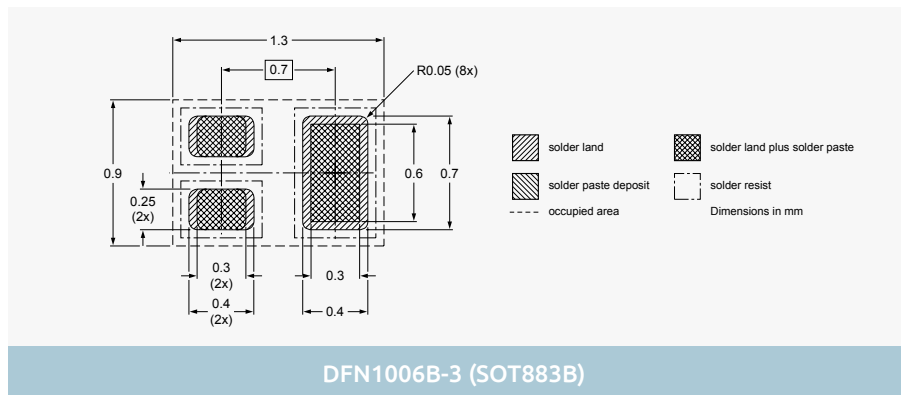
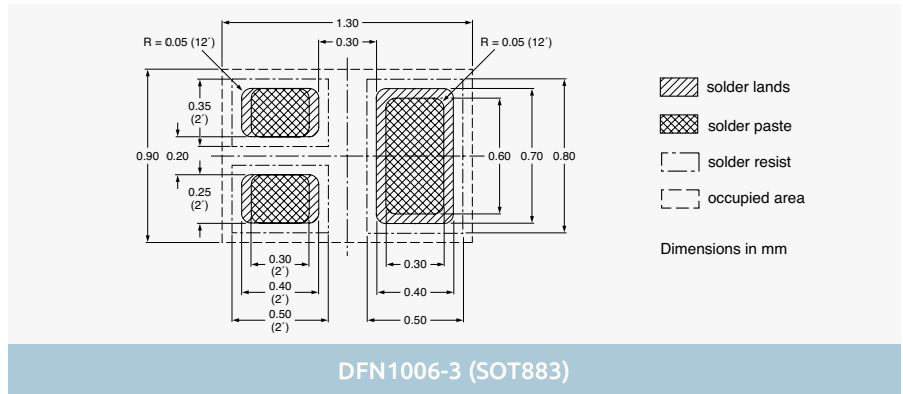


3-pin SMD packages



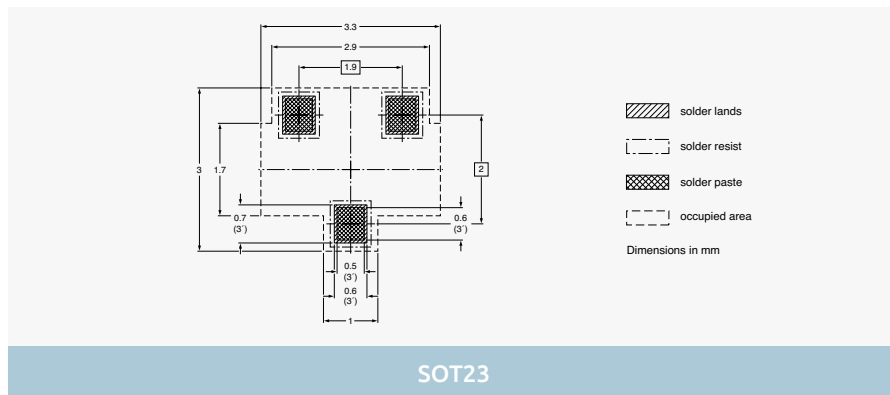
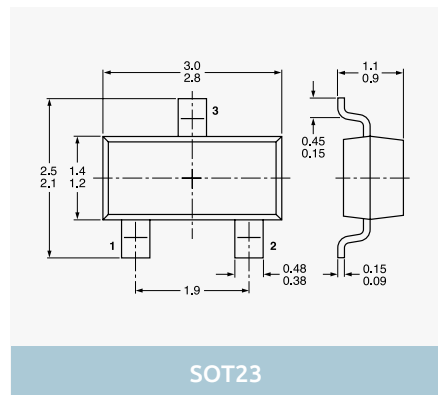
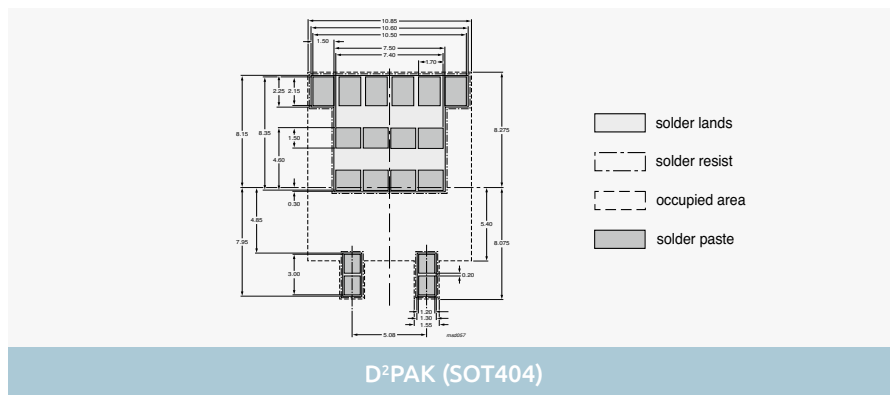
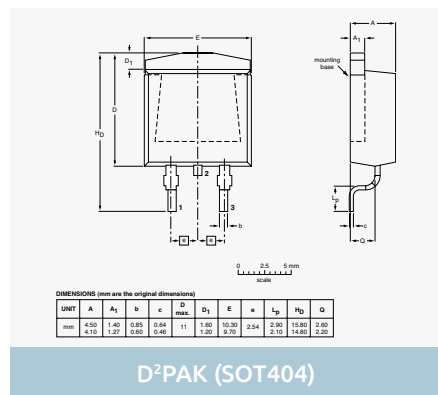
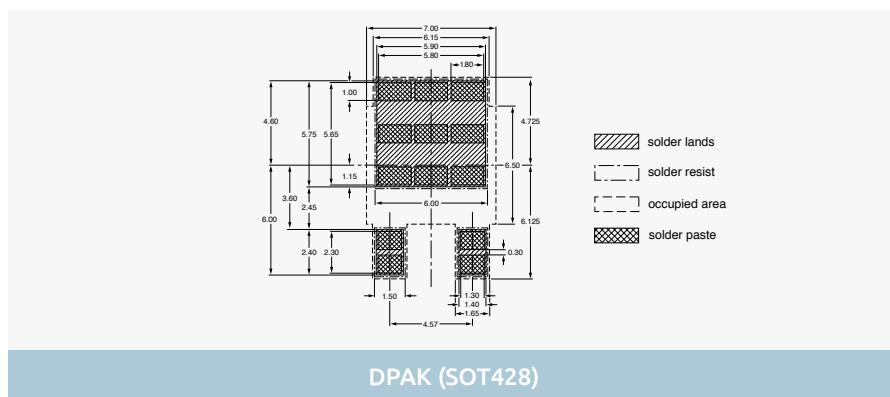
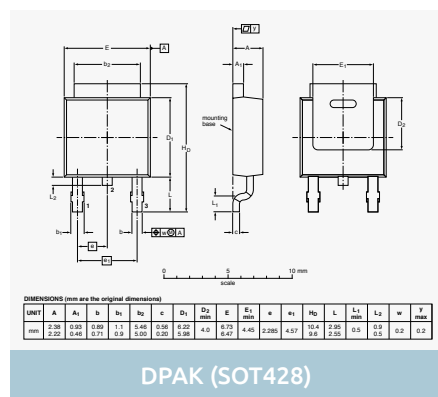
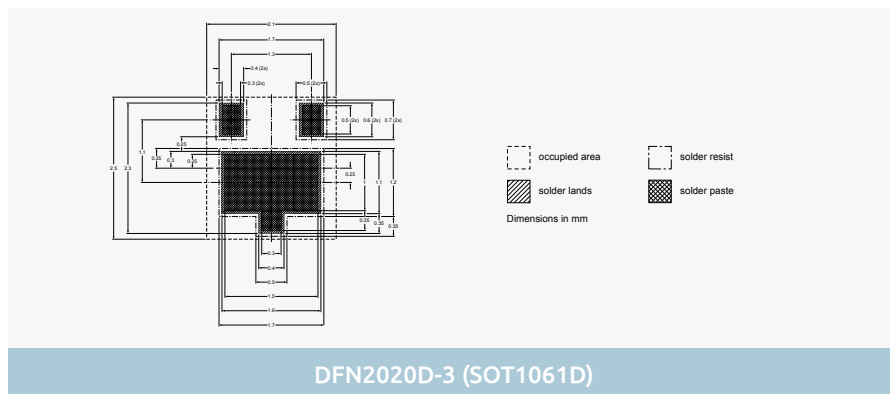
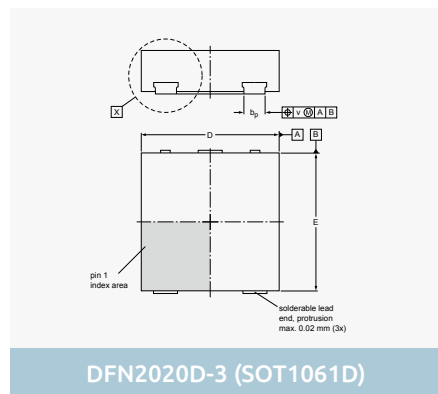
184

The drawing shows the mechanical specifications for the DFN1006-3 (SOT883) package. The top view (left) shows a rectangular package with three solder pads labeled 1, 2, and 3. Dimensions include a total width of 0.62 mm, a distance of 0.55 mm between the centers of pads 1 and 2, and a distance of 0.47 mm from the center of pad 3 to the center of pad 2. The distance from the top edge to the center of pad 3 is 0.30 mm, and from the bottom edge to the center of pad 3 is 0.22 mm. The distance from the left edge to the center of pad 2 is 0.30 mm, and from the right edge to the center of pad 2 is 0.22 mm. The distance from the left edge to the center of pad 1 is 0.20 mm, and from the right edge to the center of pad 1 is 0.12 mm. The total length of the package is 0.65 mm. The side view (right) shows a package with a width of 0.50 mm and a thickness of 0.46 mm. The total height is 1.02 mm, with a distance of 0.95 mm from the bottom edge to the top of the package body.



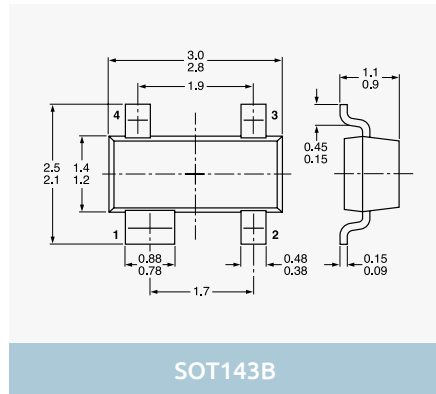
185

3-pin SMD packages

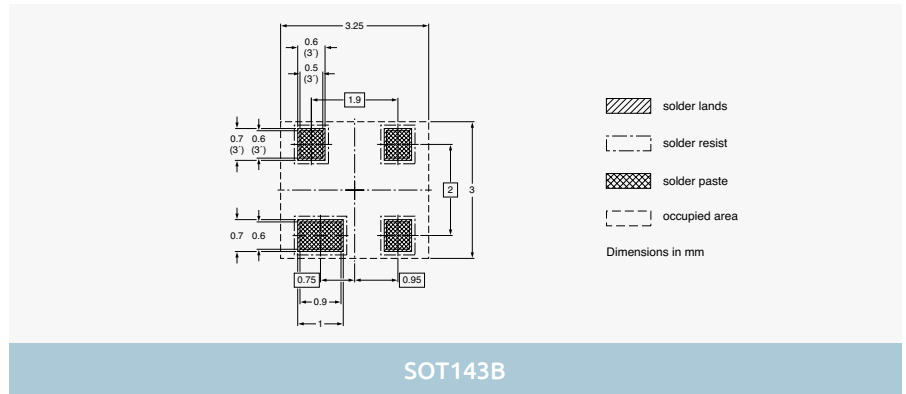


Dimensions in mm

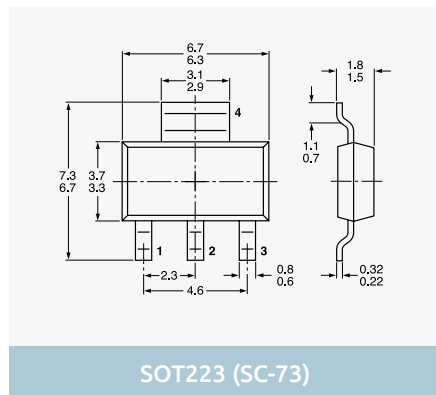
4-pin SMD packages



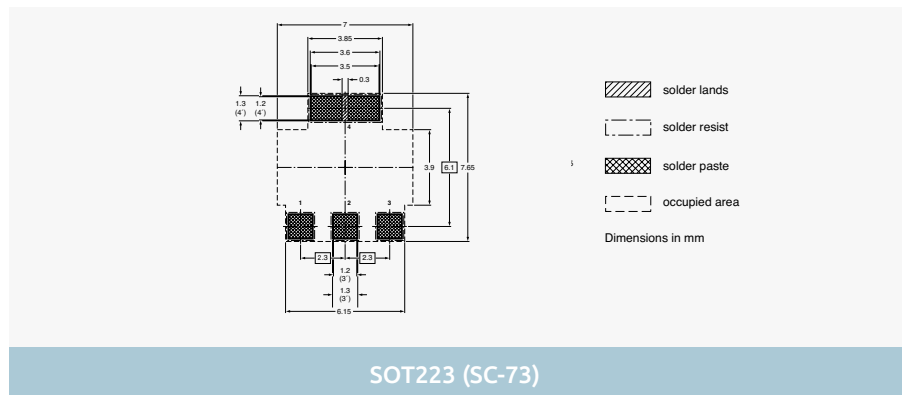
SOT143B



SOT143B

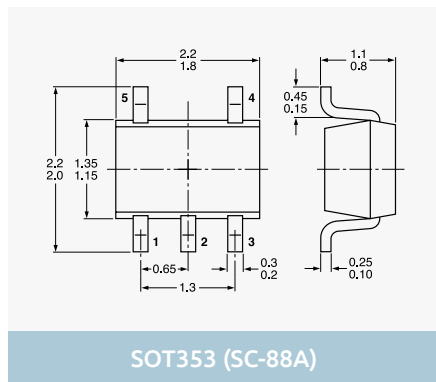


SOT223 (SC-73)

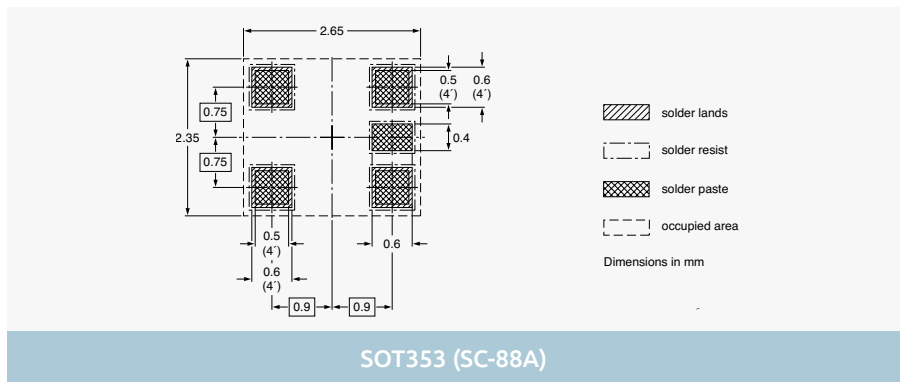


SOT223 (SC-73)

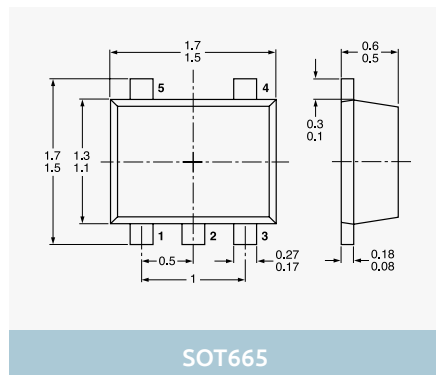
5-pin SMD packages



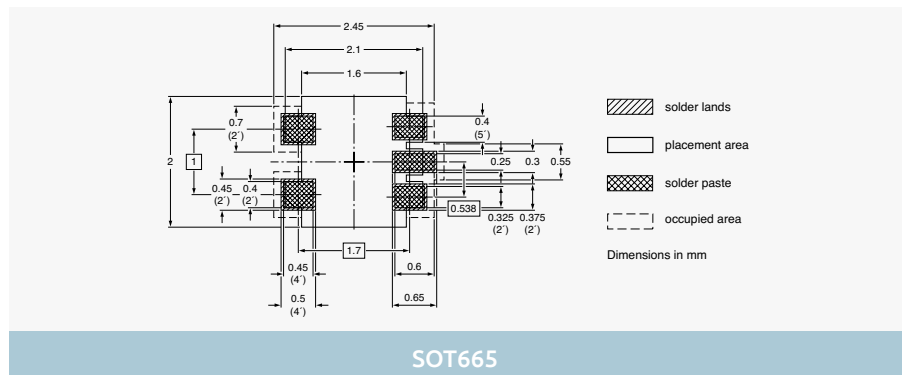
SOT353 (SC-88A)



SOT353 (SC-88A)



SOT665



SOT665

Dimensions in mm

Technical drawing of the SOT353 GW package showing top and side views with dimensions in mm.

Top View Dimensions:

- Overall width: 2.25 mm
- Distance between pins 4 and 5: 1.85 mm
- Pin 5 diameter: 0.60 mm
- Pin 5 height: 0.15 mm
- Pin 4 diameter: 0.60 mm
- Pin 4 height: 0.15 mm
- Pin 1 diameter: 0.65 mm
- Pin 2 diameter: 0.65 mm
- Pin 3 diameter: 0.65 mm
- Pin 1 height: 0.30 mm
- Pin 2 height: 0.30 mm
- Pin 3 height: 0.30 mm
- Distance between pins 1 and 2: 0.65 mm
- Distance between pins 2 and 3: 0.65 mm
- Distance between pins 1 and 3: 1.3 mm
- Overall height: 2.25 mm
- Distance from top edge to pin 5: 1.35 mm
- Distance from top edge to pin 4: 1.15 mm

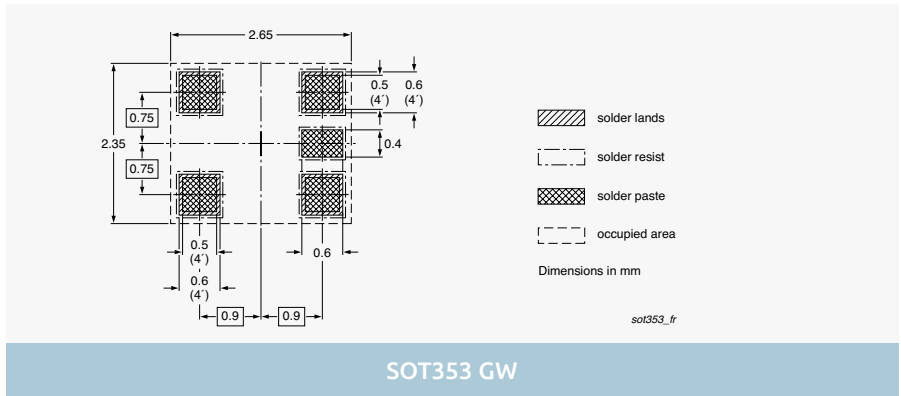
Side View Dimensions:

- Overall height: 1.1 mm
- Pin 5 diameter: 0.1 mm
- Pin 5 height: 0.0 mm
- Pin 4 diameter: 0.46 mm
- Pin 4 height: 0.21 mm
- Pin 1 diameter: 0.25 mm
- Pin 2 diameter: 0.25 mm
- Pin 3 diameter: 0.25 mm
- Pin 1 height: 0.08 mm
- Pin 2 height: 0.08 mm
- Pin 3 height: 0.08 mm
- Distance between pins 1 and 2: 0.25 mm
- Distance between pins 2 and 3: 0.25 mm
- Distance between pins 1 and 3: 0.5 mm

Dimensions in mm

Symbol and Part Number:

14-10-01



Technical drawing of the SOT753-1 GV component showing dimensions in mm.

Top View Dimensions:

- Overall width: 3.1
- Distance between mounting holes: 2.7
- Mounting hole diameter: 0.40
- Distance from center to mounting hole: 0.25
- Distance between mounting holes (center-to-center): 0.95
- Overall length: 1.9
- Distance from top edge to mounting hole: 0.13
- Distance from top edge to mounting hole (center-to-center): 1.7
- Distance from top edge to mounting hole (outer edge): 2.5
- Distance from top edge to mounting hole (outer edge): 3.0

Side View Dimensions:

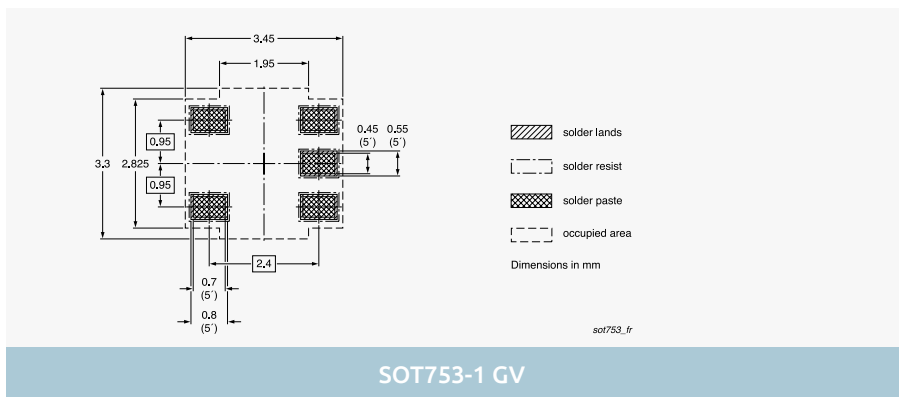
- Overall height: 1.1
- Distance from top edge to mounting hole: 0.9
- Distance from top edge to mounting hole (center-to-center): 0.6
- Distance from top edge to mounting hole (outer edge): 0.2

Detail View Dimensions:

- Distance from top edge to mounting hole: 0.26
- Distance from top edge to mounting hole (center-to-center): 0.10

Dimensions in mm

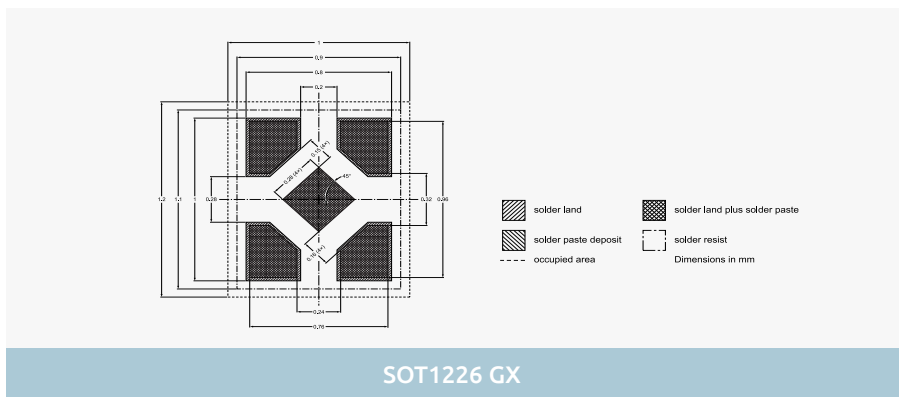
14-10-03



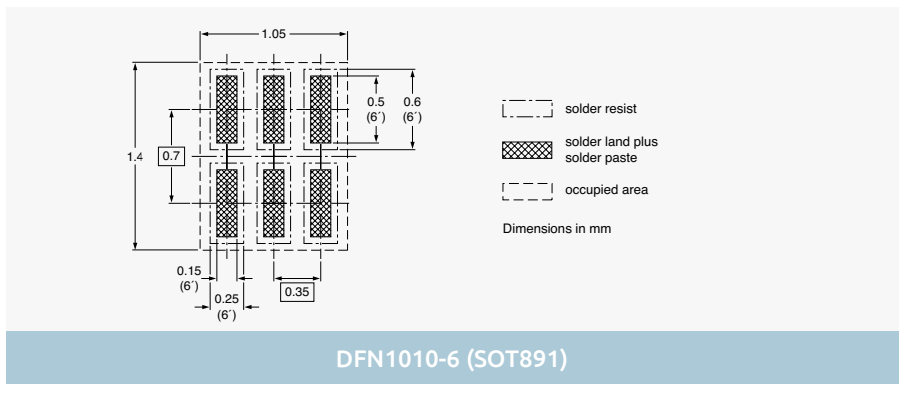
The drawing shows the mechanical specifications of the SOT1226 GX package. The top view is a square with a side length of 0.8 mm. It is divided into four quadrants by a vertical dashed line (labeled 1 and 2) and a horizontal dashed line (labeled 3 and 4). Each quadrant contains a different type of lead: a gull-wing lead, a J-lead, a standard lead, and a surface-mount lead. A central diamond-shaped feature is also indicated. The side view shows a maximum height of 0.35 mm and features three rectangular cutouts for the leads.

Dimensions in mm

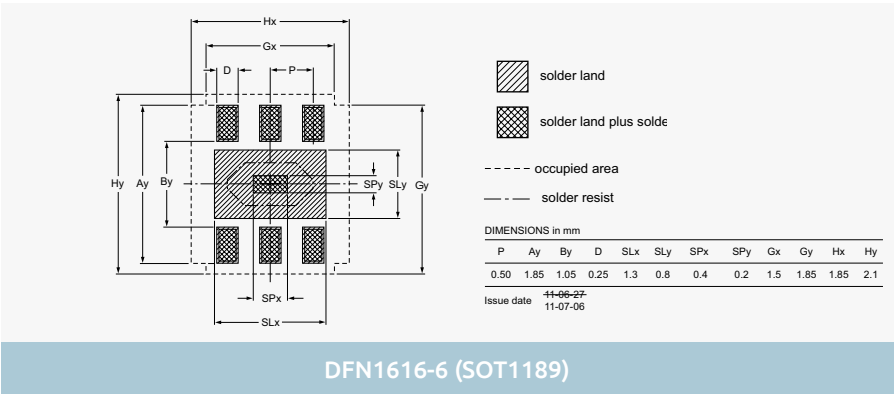
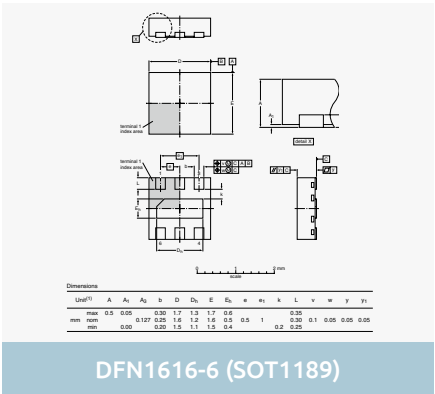
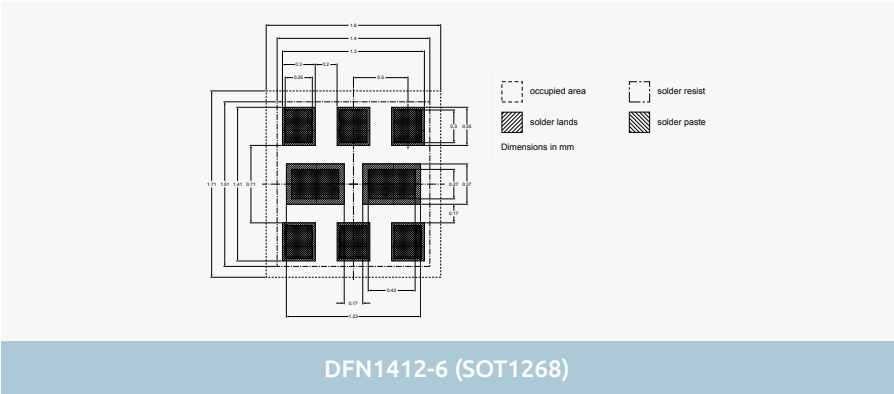
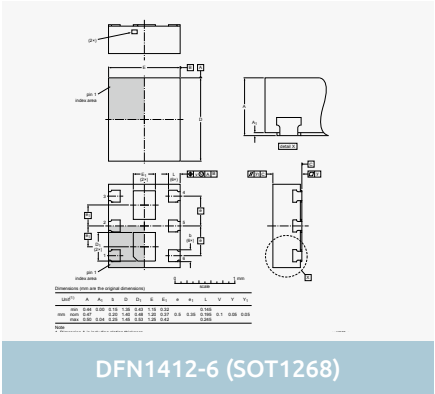
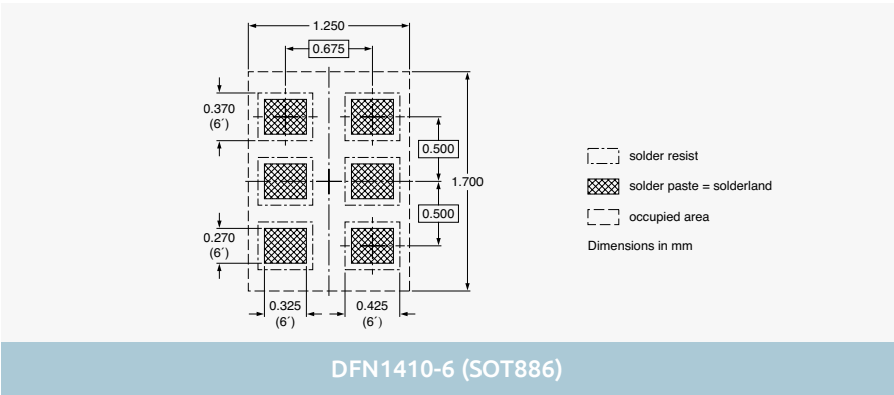
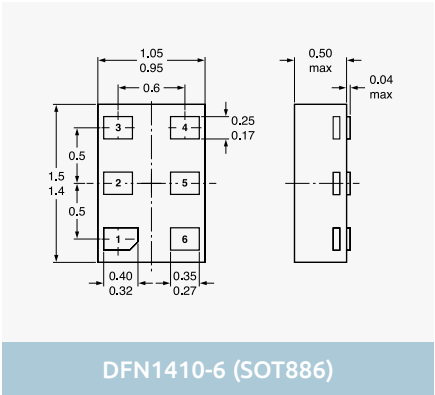
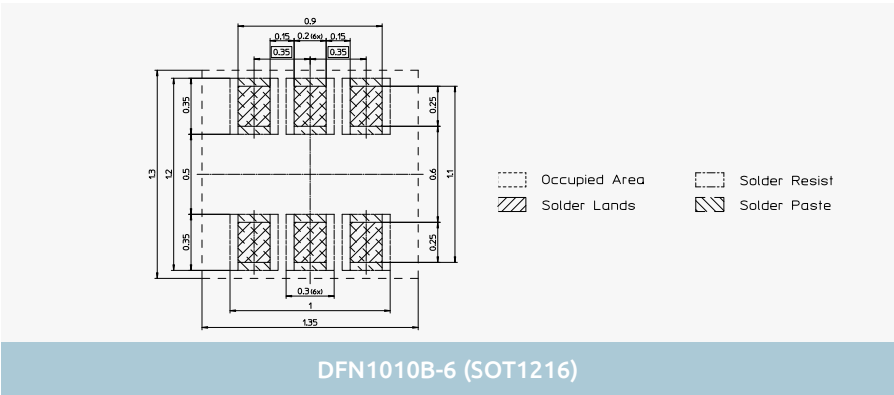
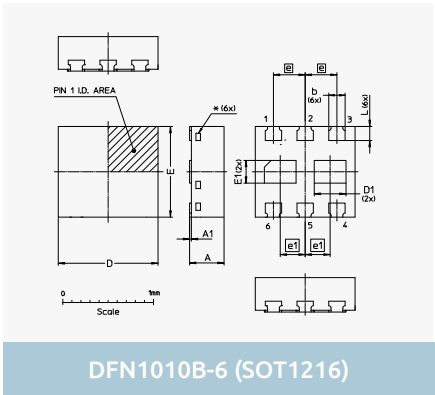
15-05-27



The drawing shows the mechanical specifications for the DFN1010-6 (SOT891) package. The top view is a square with a side length of 1.05 mm. The pitch between the pins is 0.95 mm. The pin width is 0.35 mm, and the pin pitch is 0.35 mm. The pin length is 0.20 mm. The pin thickness is 0.12 mm. The pin diameter is 0.40 mm. The pin pitch is 0.32 mm. The pin thickness is 0.35 mm. The pin pitch is 0.27 mm. The side view shows a maximum height of 0.5 mm and a maximum width of 0.04 mm.

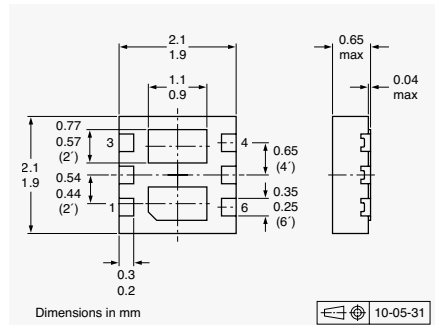


6-pin SMD packages

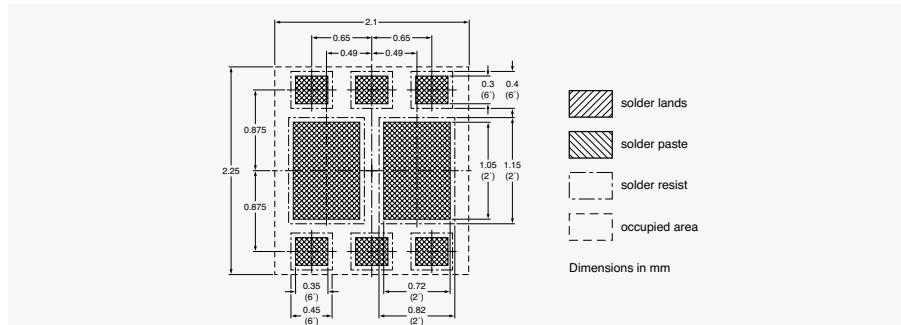


Dimensions in mm

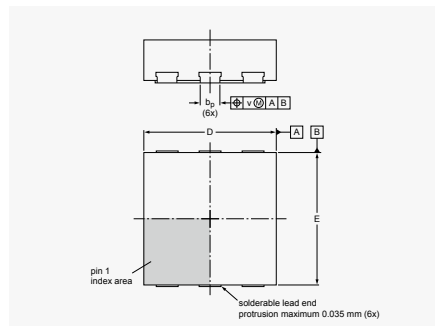
6-pin SMD packages



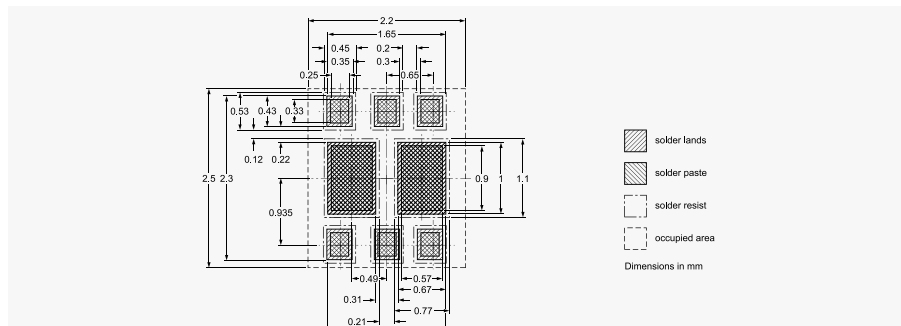
DFN2020-6 (SOT1118)



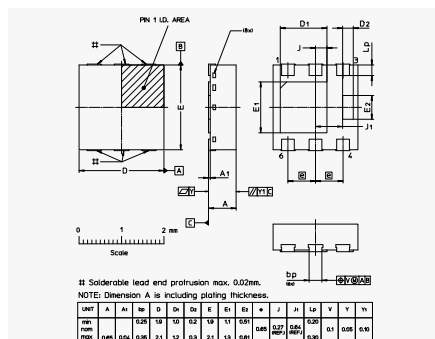
DFN2020-6 (SOT1118)



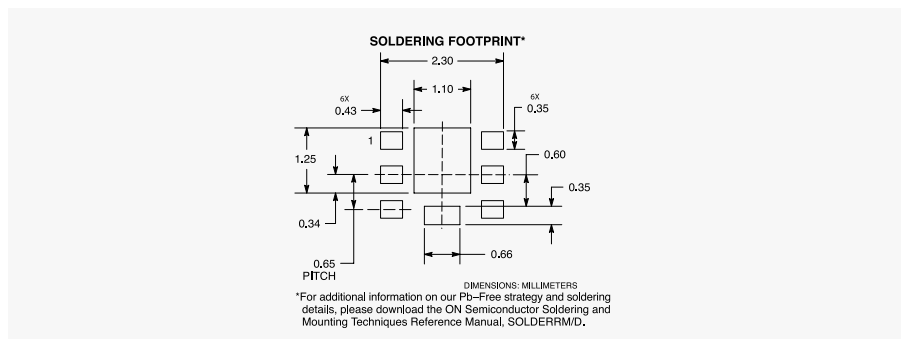
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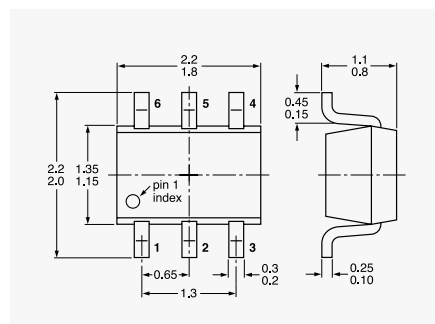
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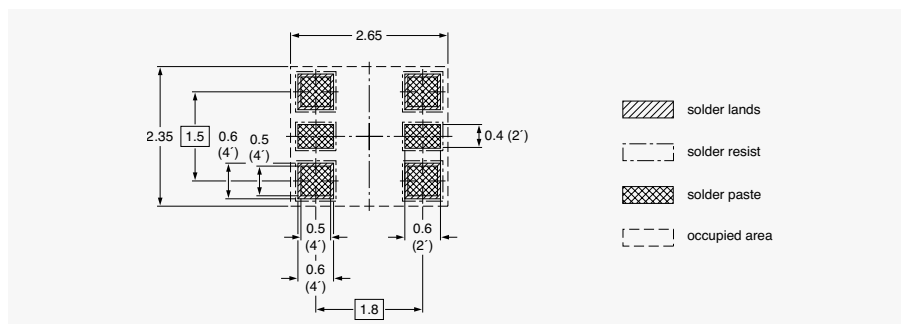
DFN2020MD-6 (SOT1220)



DFN2020MD-6 (SOT1220)



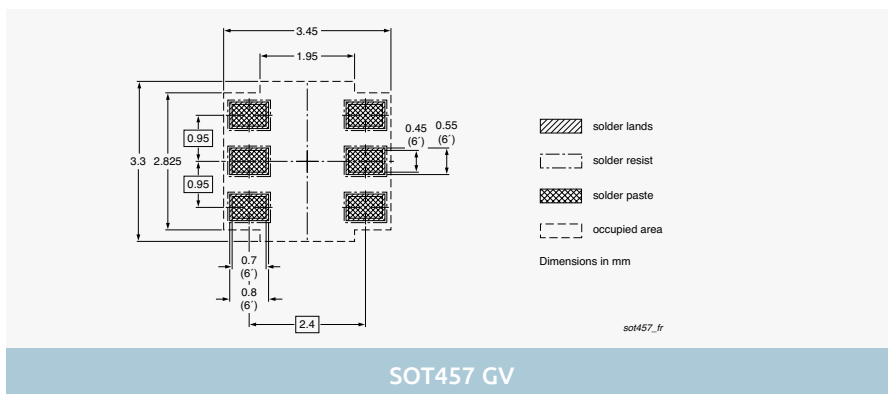
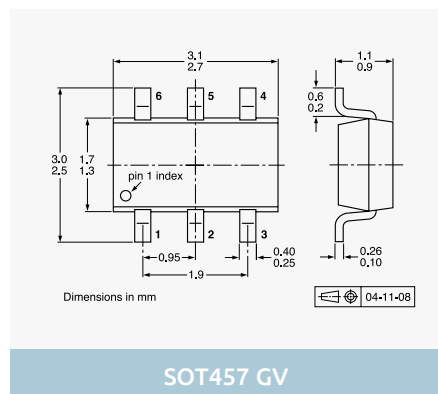
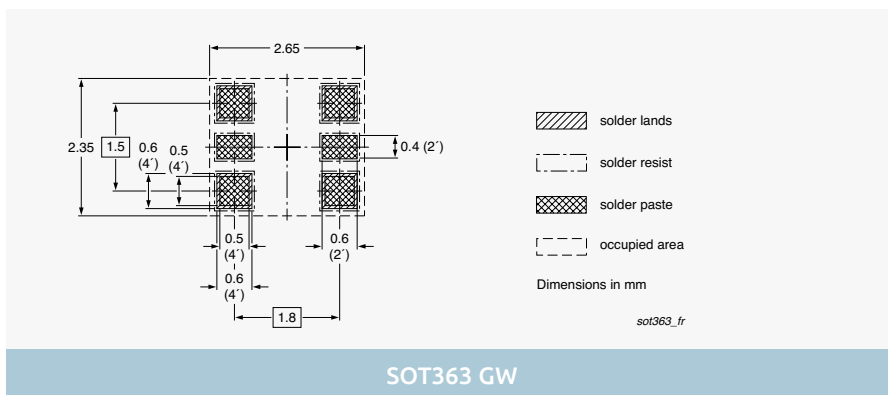
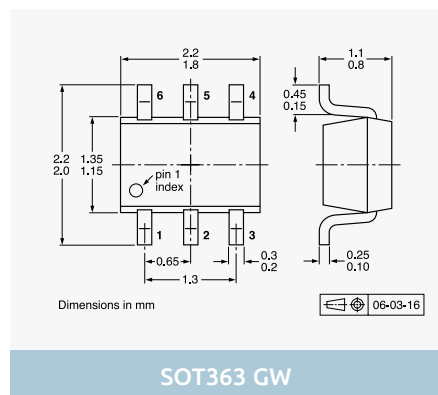
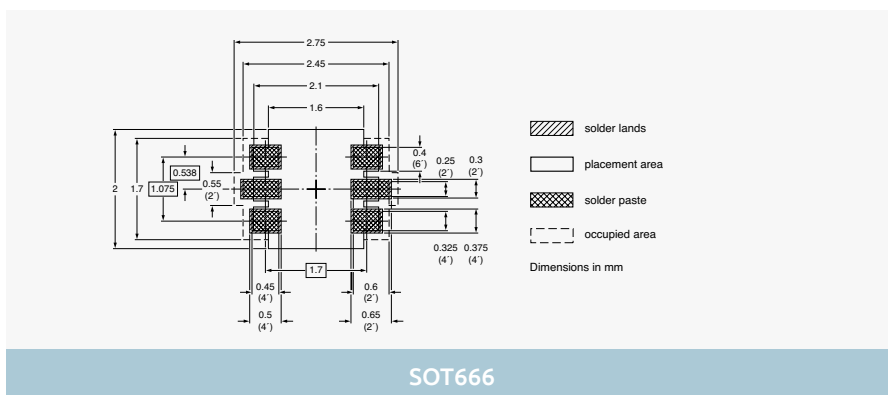
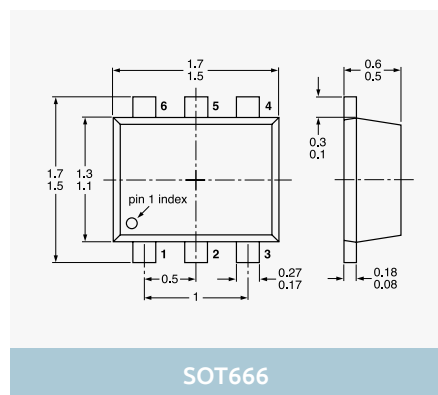
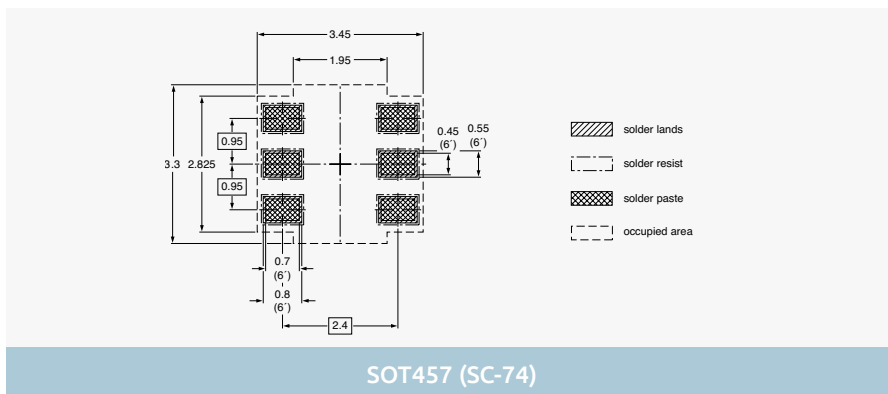
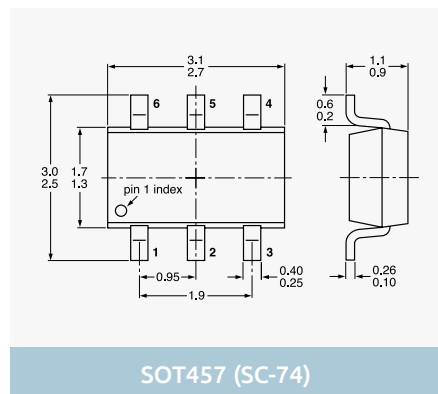
SOT363 (SC-88)



SOT363 (SC-88)

Dimensions in mm

6-pin SMD packages

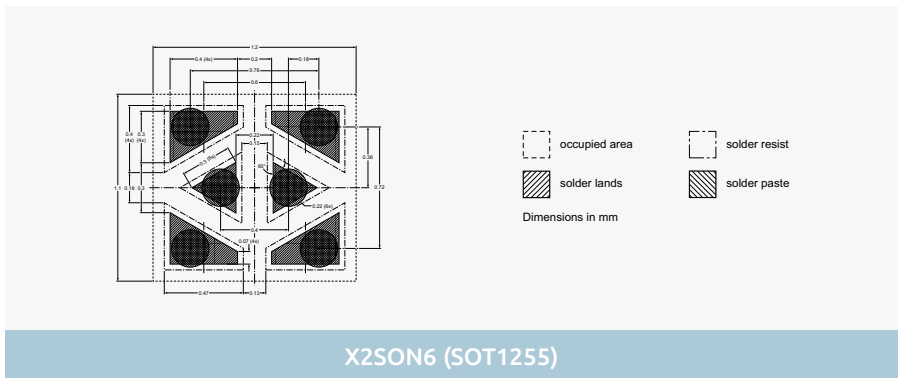
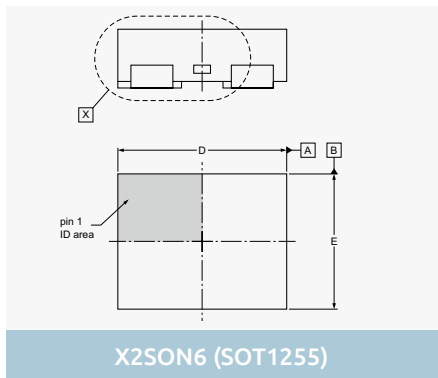
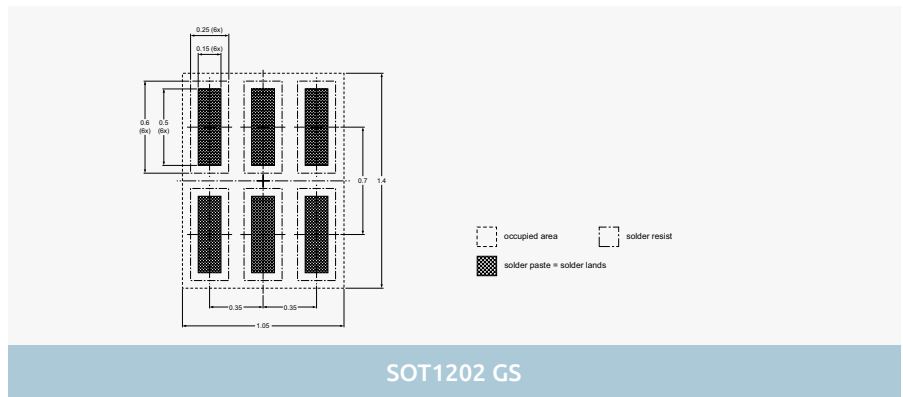
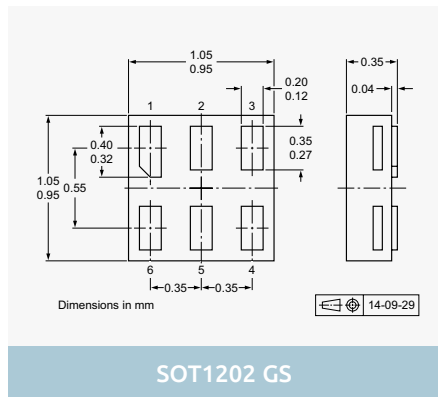
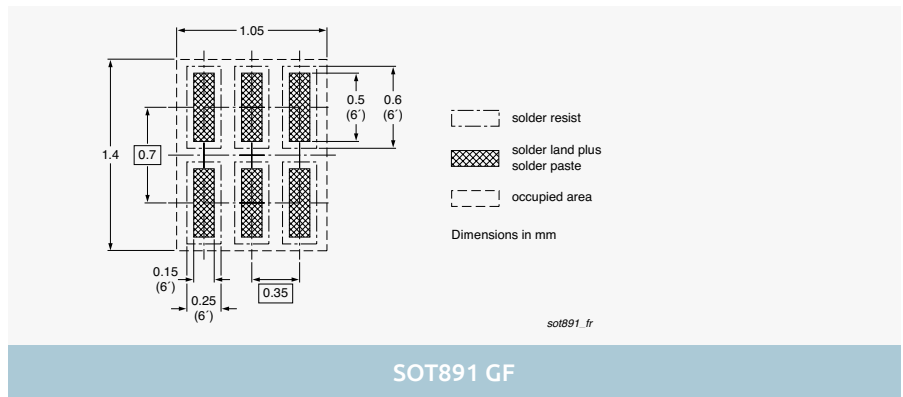
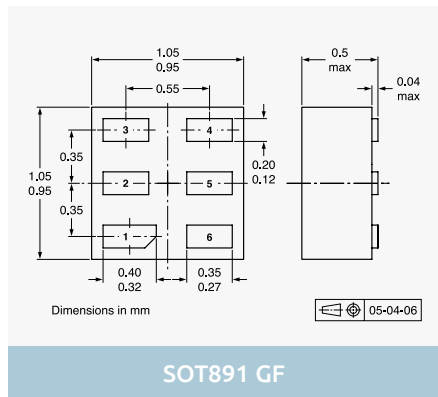
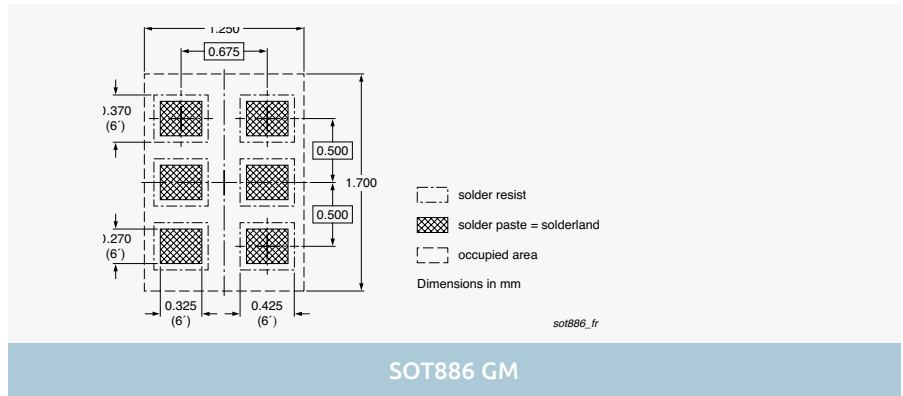


Dimensions in mm

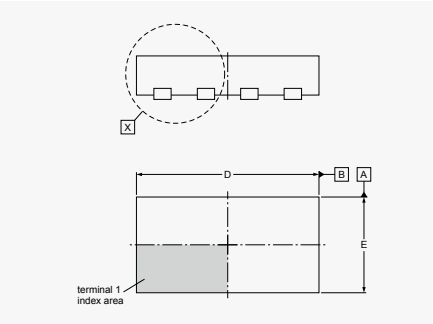
The drawing shows the mechanical specifications for the SOT886 GM component. The top view is a rectangle with overall dimensions of 1.05 mm in width and 1.5 mm in height. It is divided into six rectangular pads, numbered 1 through 6. The pads are arranged in a 2x3 grid. The horizontal spacing between the centerlines of the pads is 0.95 mm, with a 0.6 mm gap between the first and second columns. The vertical spacing between the centerlines of the pads is 1.4 mm, with a 0.5 mm gap between the first and second rows. The dimensions of the individual pads are: Pad 1 (0.40 mm x 0.32 mm), Pad 2 (0.40 mm x 0.32 mm), Pad 3 (0.40 mm x 0.32 mm), Pad 4 (0.40 mm x 0.32 mm), Pad 5 (0.40 mm x 0.32 mm), and Pad 6 (0.40 mm x 0.32 mm). The side view shows the component's profile with a maximum height of 0.50 mm and a maximum width of 0.04 mm. The drawing is labeled 'Dimensions in mm' and includes a date '04-07-22'.

Dimensions in mm

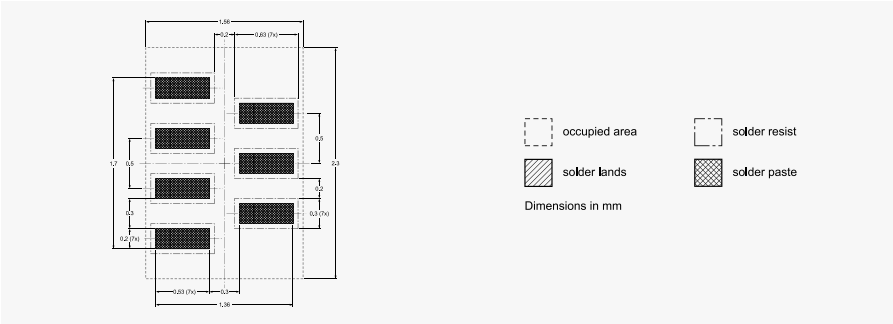
04-07-22



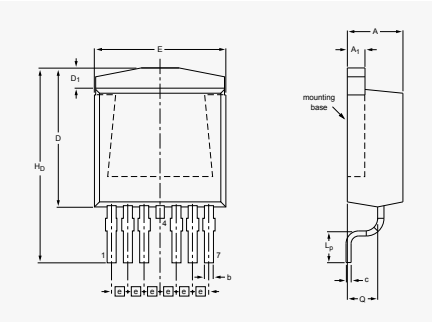
7-pin SMD packages



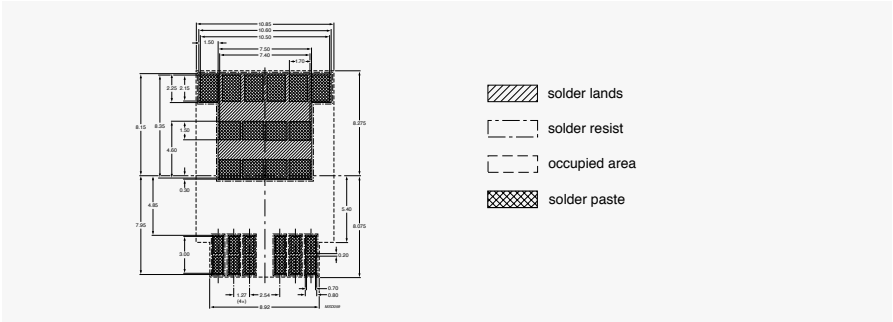
DFN2111-7 (SOT1358)



DFN2111-7 (SOT1358)

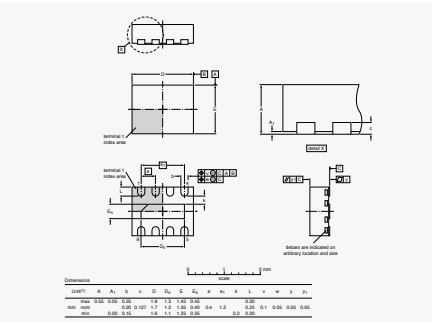


D2PAK-7 (SOT428)

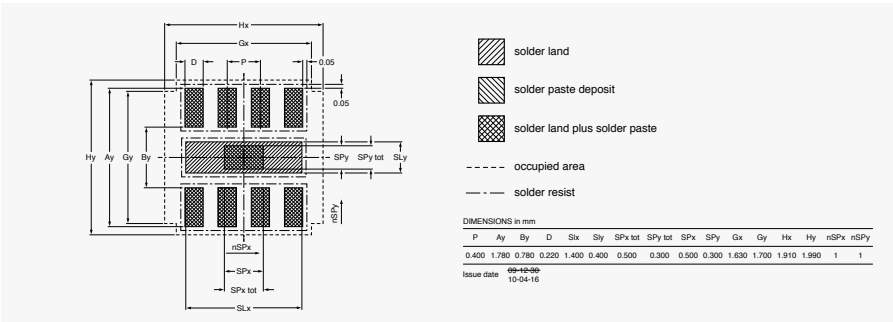


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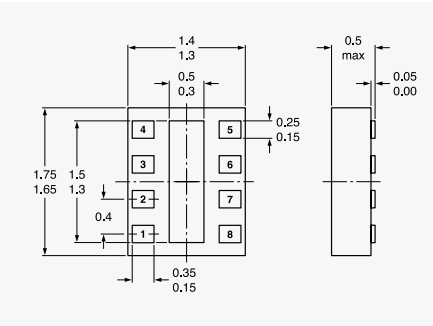
8-pin SMD packages



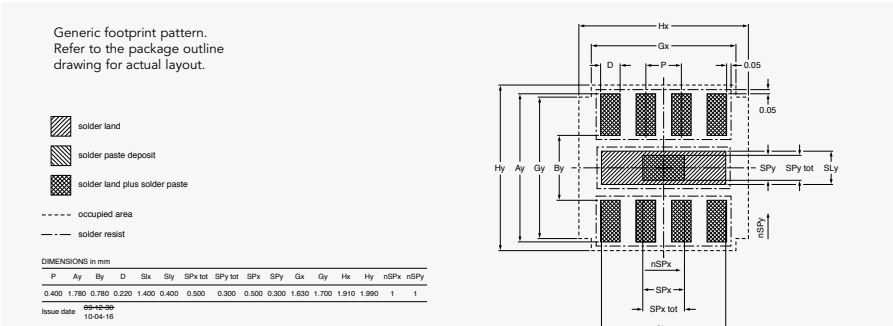
DFN1714-8 (SOT1166)



DFN1714-8 (SOT1166)



DFN1714U-8 (SOT983)

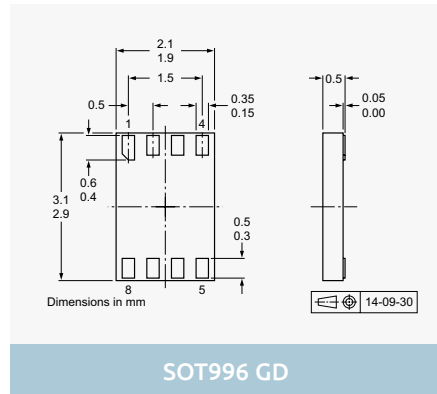


DFN1714U-8 (SOT983)

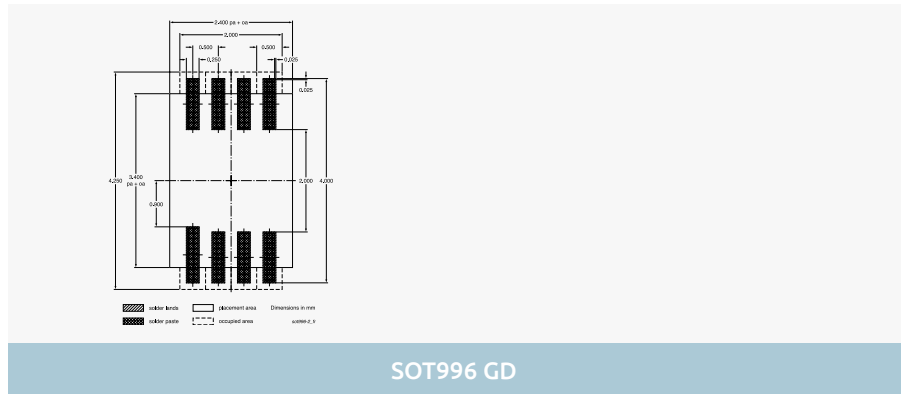


196 Nexperia selection guide 2018

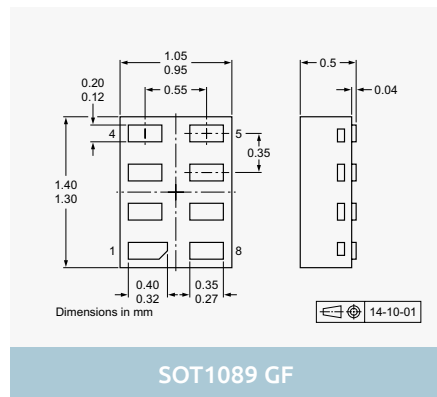
8-pin SMD packages



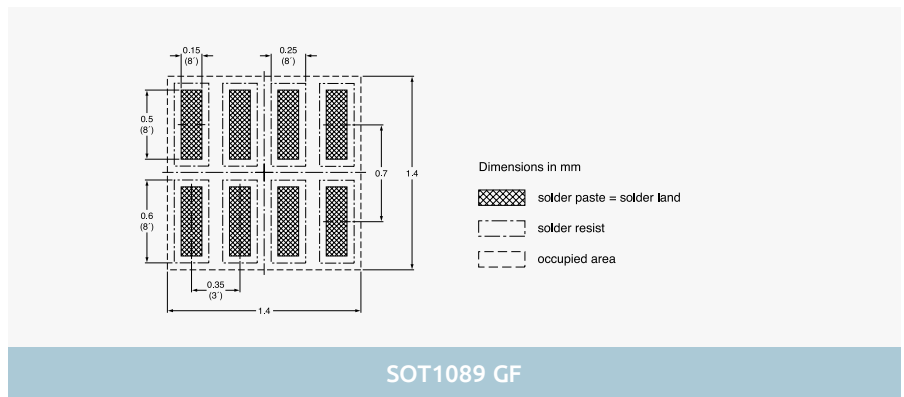
SOT996 GD



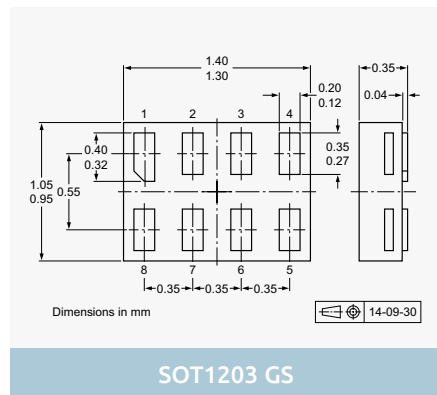
SOT996 GD



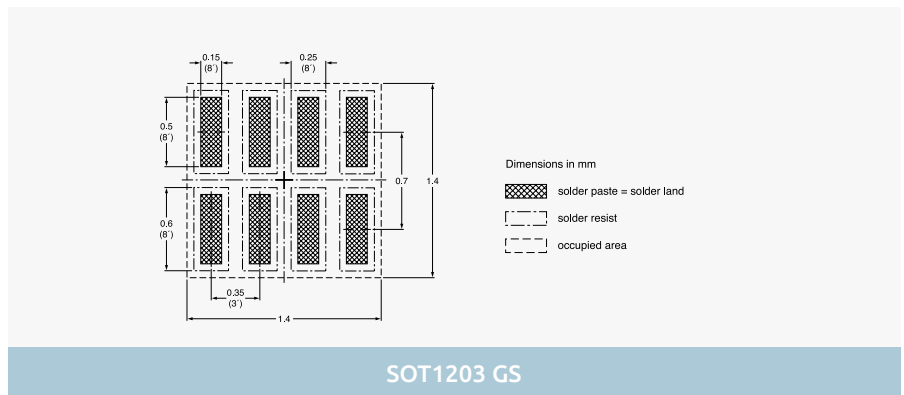
SOT1089 GF



SOT1089 GF



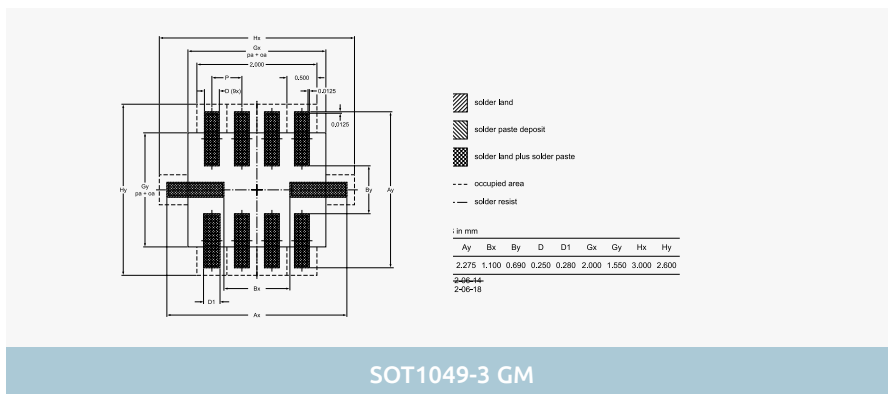
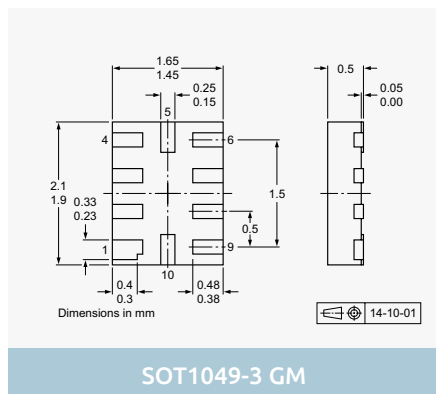
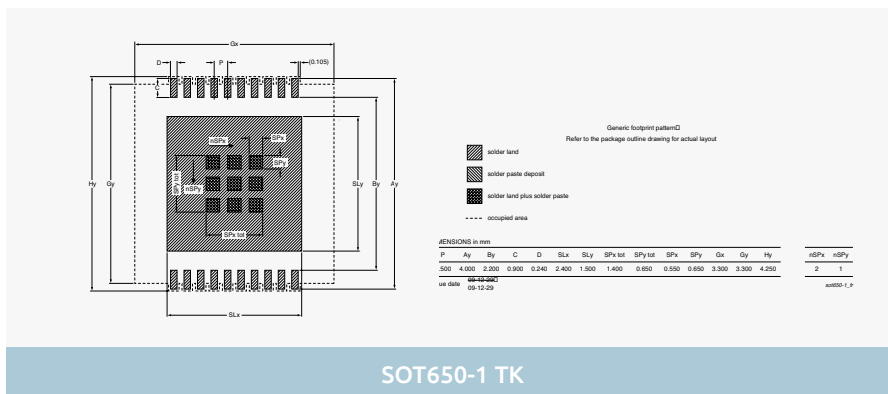
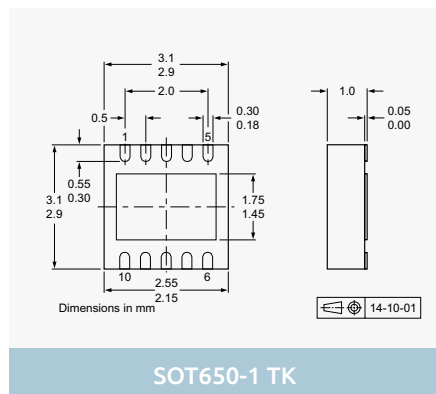
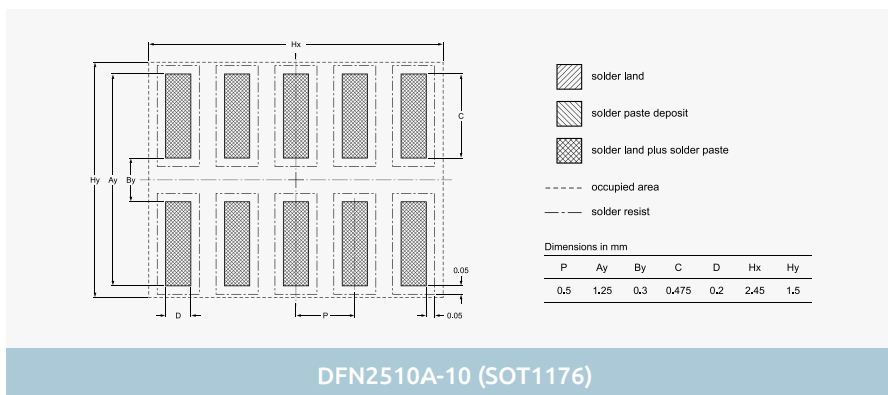
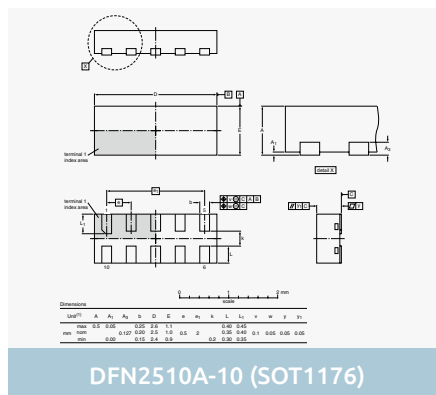
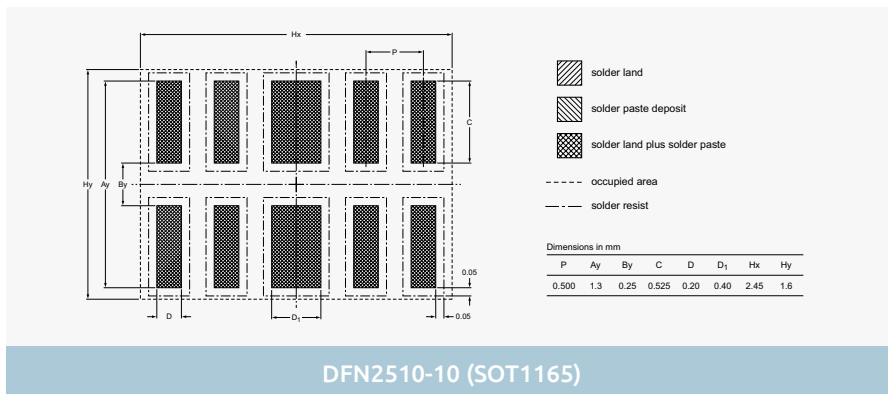
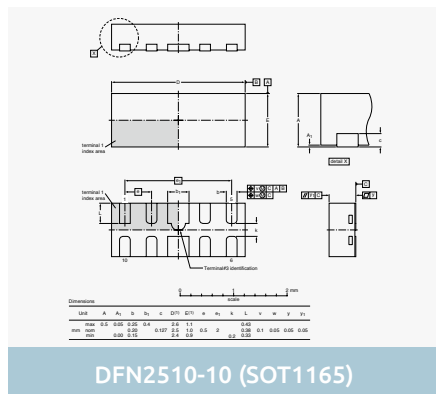
SOT1203 GS



SOT1203 GS

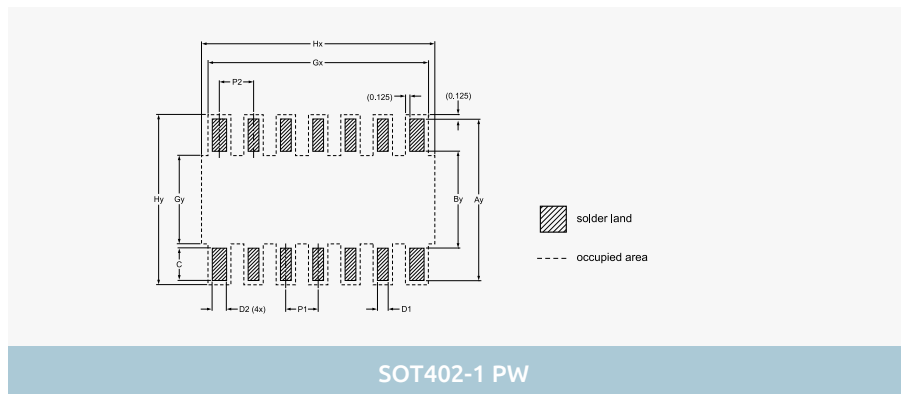
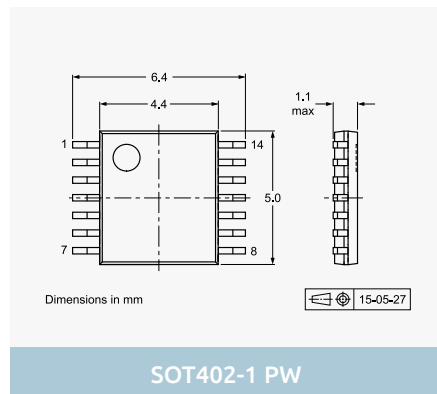
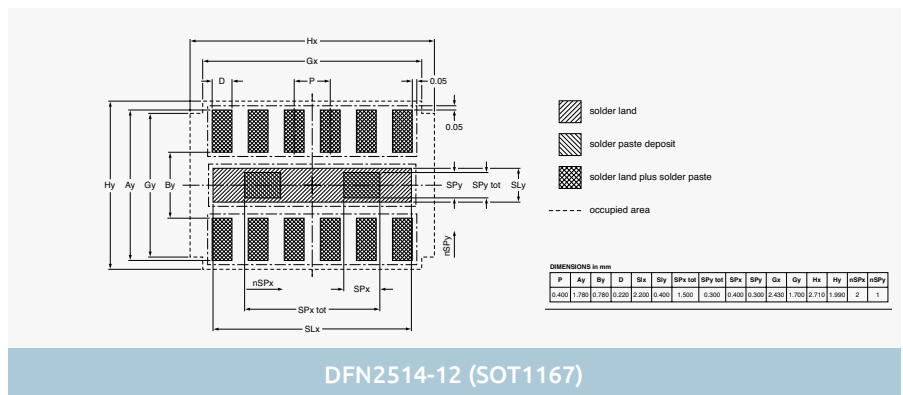
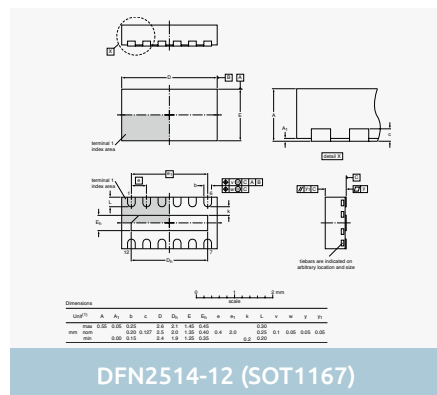
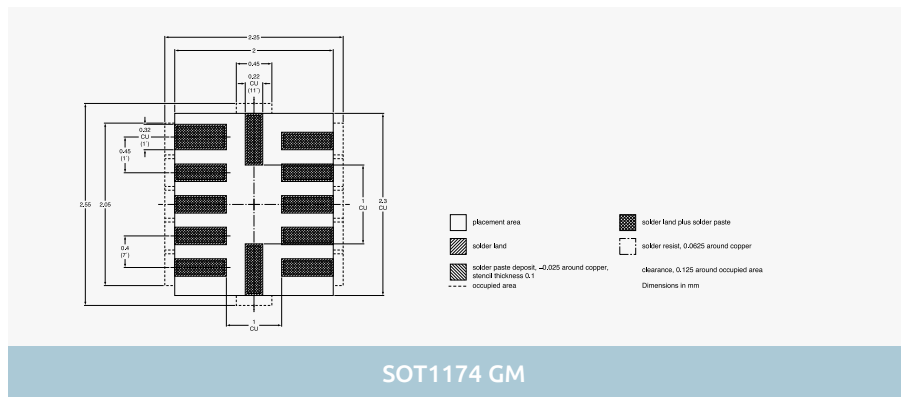
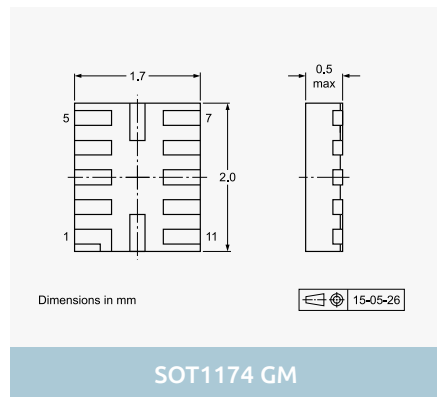
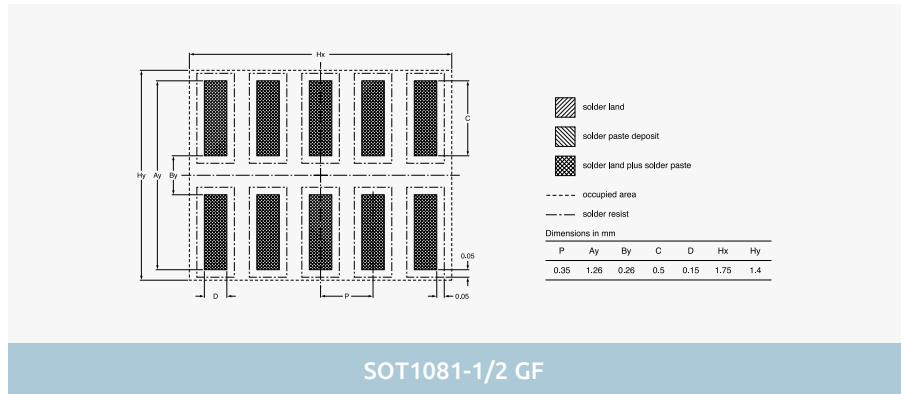
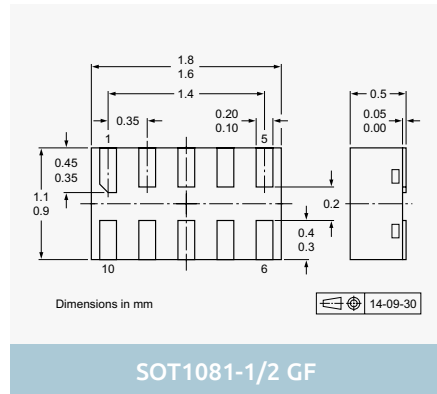
Dimensions in mm

More than 8-pin SMD packages



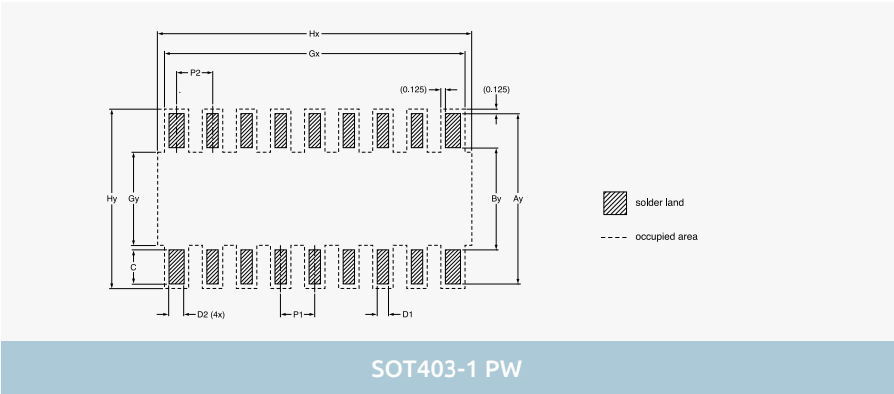
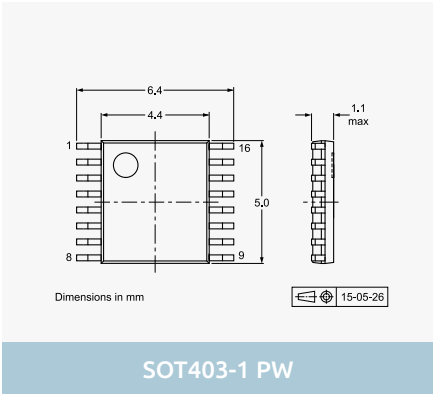
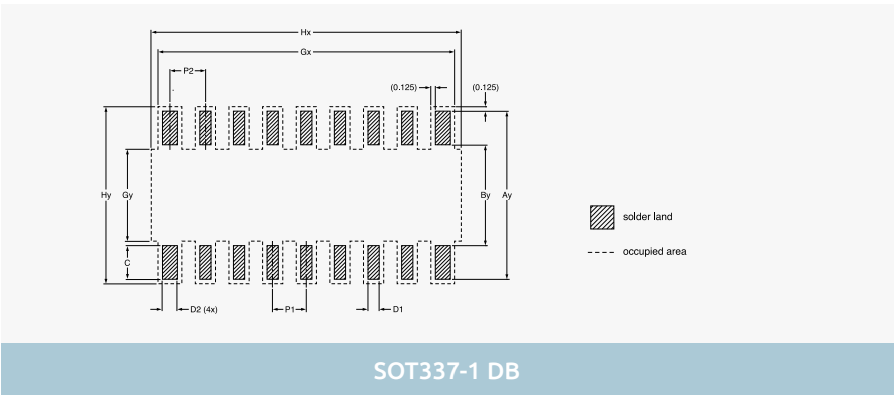
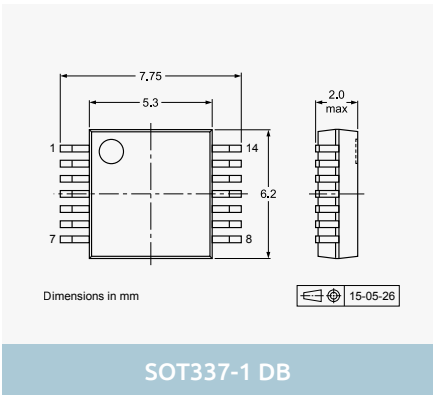
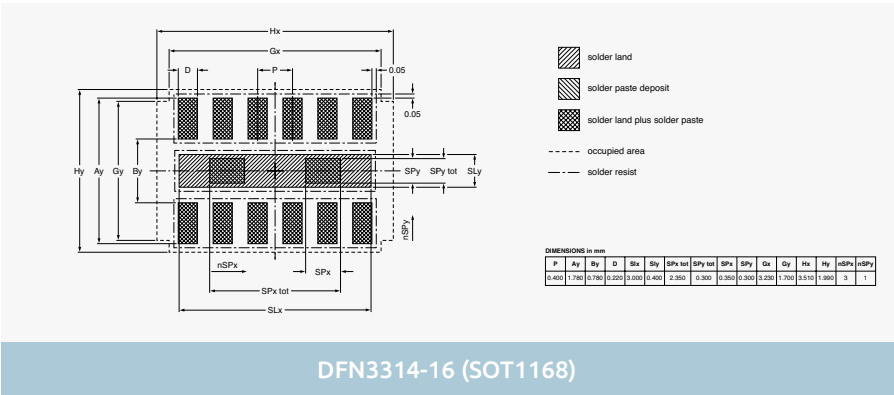
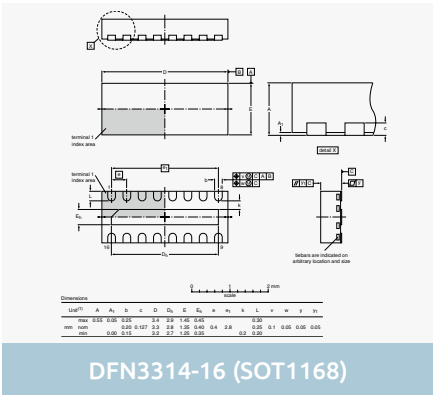
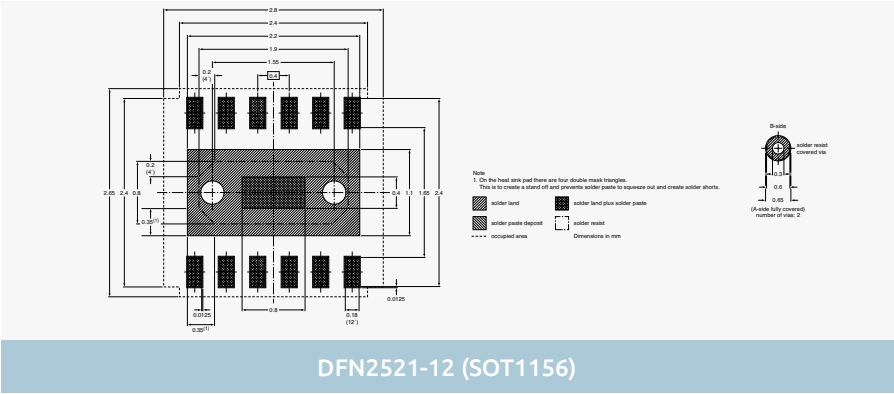
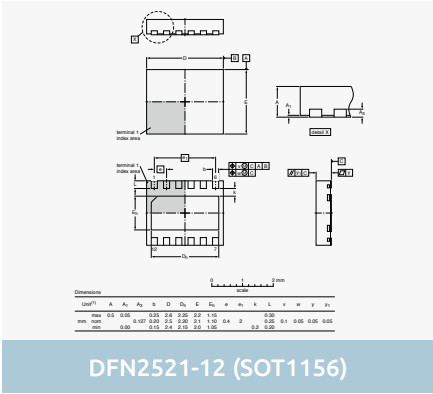
Dimensions in mm

More than 8-pin SMD packages



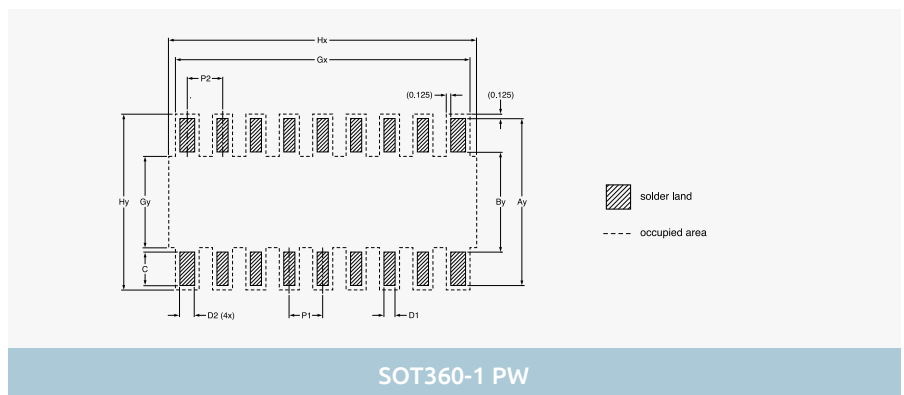
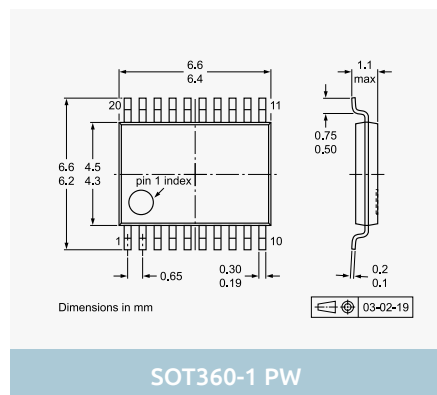
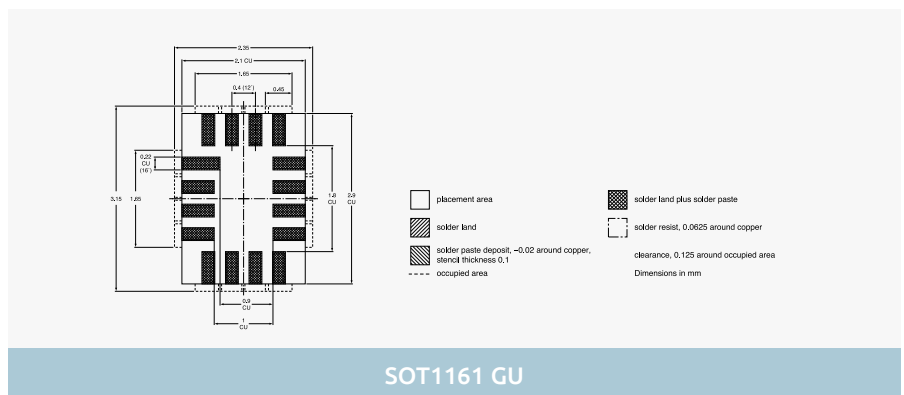
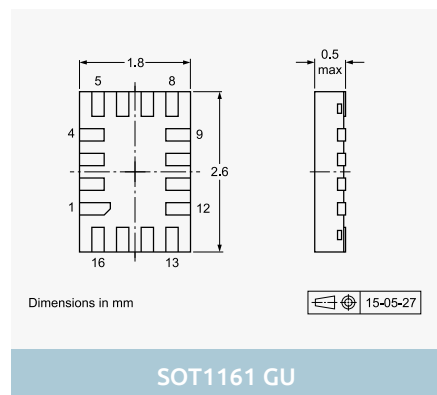
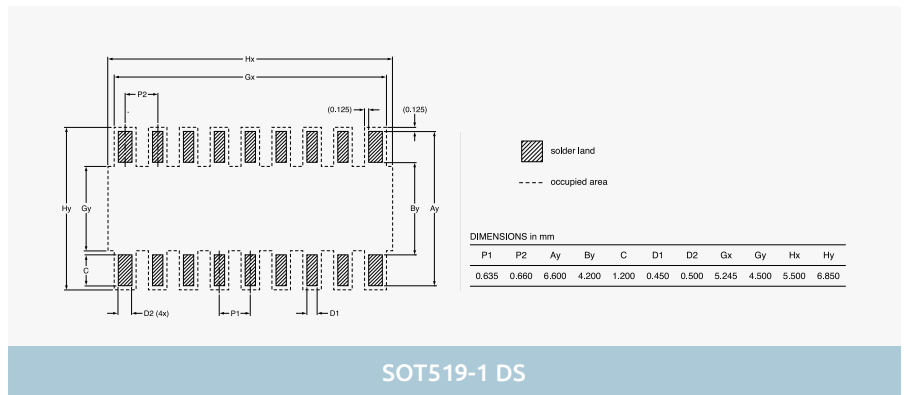
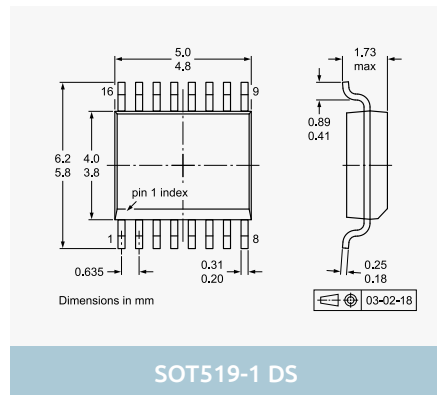
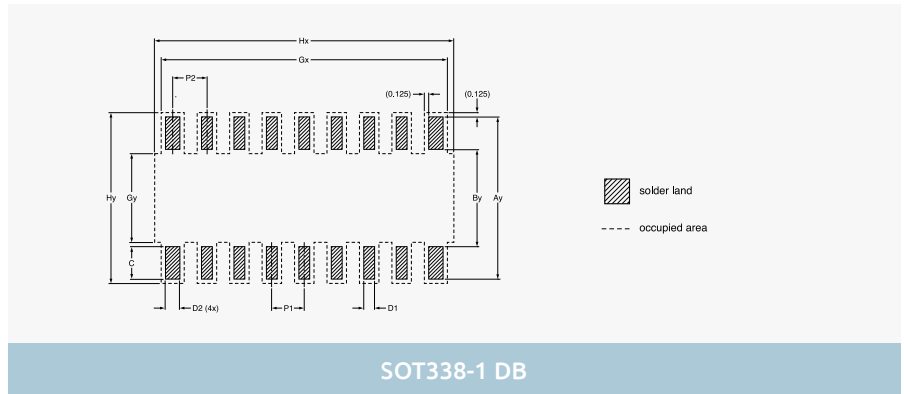
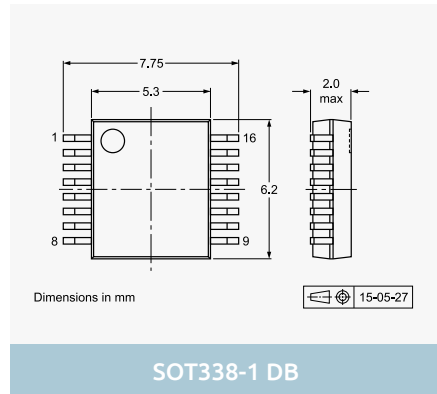
Dimensions in mm

More than 8-pin SMD packages



Dimensions in mm

More than 8-pin SMD packages



Dimensions in mm

More than 8-pin SMD packages

Dimensions in mm

Top View Dimensions:

- Overall width: 7.4
- Width of central body: 7.0
- Pin 1 offset: 2.0
- Pin 10 offset: 1.1
- Pin 1 diameter: 1.0
- Pin 10 diameter: 1.0
- Pin pitch: 0.65
- Pin 1 to center: 0.38
- Pin 10 to center: 0.25

Side View Dimensions:

- Maximum height: 2
- Height of central body: 1.03
- Height of pin 1: 0.63
- Pin 1 diameter: 0.20
- Pin 10 diameter: 0.09

Pin 1 index

03-02-19

Legend:

- solder lands
- solder paste
- solder resist
- occupied area

Dimensions in mm

The drawing shows the mechanical specifications of the SOT724-1 package. The top view (left) indicates a rectangular package with a total width of 6.0 mm and a total length of 8.7 mm. The mounting tab width is 1.73 mm maximum. The distance between the mounting tabs is 3.9 mm. The package has 10 pins on one side and 11 pins on the other. The side view (right) shows the package height of 2.0 mm and the pin pitch of 1.1 mm.

Dimensions in mm

15-05-27

The drawing shows a top-down view of the SOT724-1 DS package. It features a central rectangular area with a grid of solder lands. Dimensions are indicated by arrows and labels: Hx (total width), Gx (width of the central area), Hy (total height), Gy (height of the central area), C (width of the left lead), D1 (width of the bottom lead), D2 (width of the top lead), D2 (4x) (width of the top lead for 4x), P1 (pitch of the bottom lead), P2 (pitch of the top lead), and (0,125) (offset of the top lead). A legend indicates that hatched areas represent 'solder land' and dashed lines represent 'occupied area'.

DIMENSIONS in mm										
P1	P2	Ay	By	C	D1	D2	Gx	Gy	Hx	Hy
0.635	0.660	6.600	4.200	1.200	0.450	0.500	6.515	4.500	9.300	6.850

The drawing shows the mechanical specifications for the SOT815-1 BQ package. The top view is a rectangle with a total width of 5.5 mm and a central width of 4.1 mm. It features 11 pins on the top edge (pins 2 to 11) and 11 pins on the bottom edge (pins 23 to 14). Pins 1 and 24 are located on the left side. The side view shows a package height of 3.5 mm, with a maximum width of 1.0 mm. The distance from the top edge to the first pin is 1.2 mm, and the distance between the top and bottom pin rows is 2.1 mm. A dimension of 0.2 mm is shown for the pin thickness. A note at the bottom right indicates a reference to a standard drawing: 15-05-26.

Dimensions in mm

[illegible]

The drawing shows the mechanical specifications of the SOT137-1 D package. The top view (left) indicates a total width of 10,325 mm and a central width of 7,5 mm. The pin pitch is 2,5 mm. The pin 1 is located at the top left. The side view (right) shows a maximum height of 2,65 mm. The package is marked with a symbol consisting of a square with a circle and a cross, and the date code 15-05-26.

Dimensions in mm

10,325

7,5

2,5

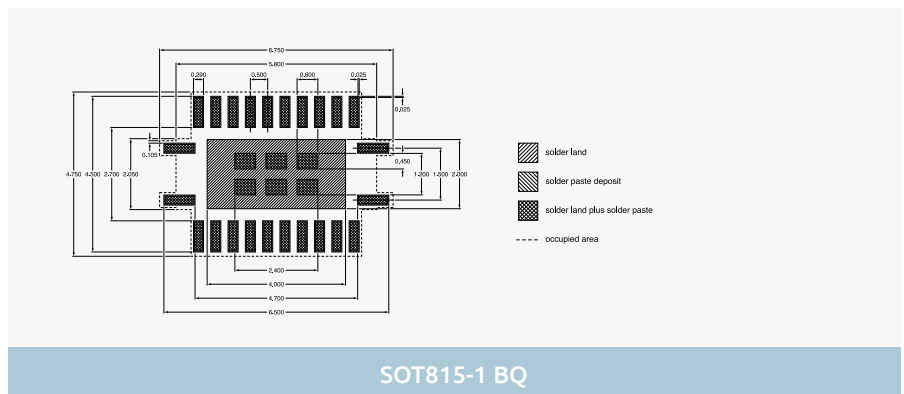
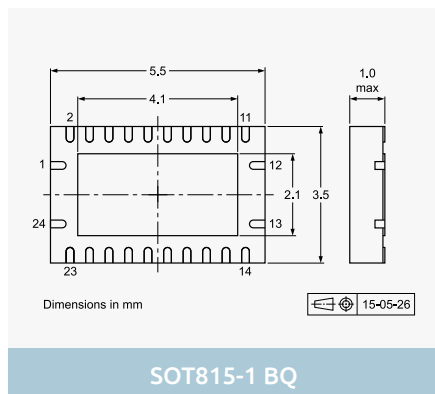
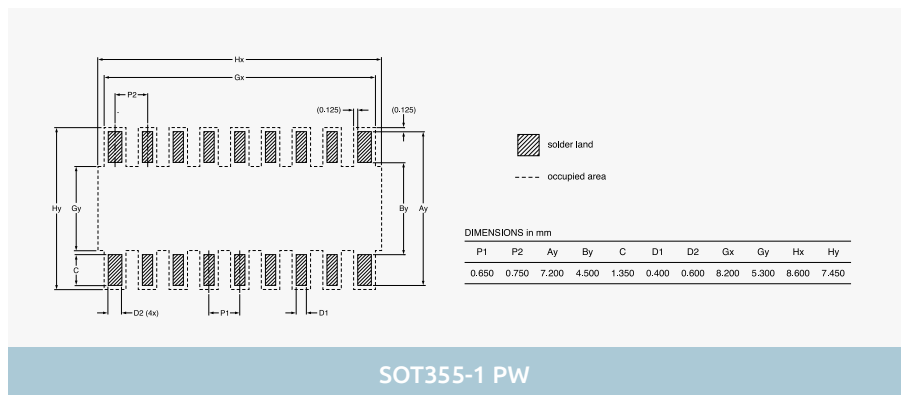
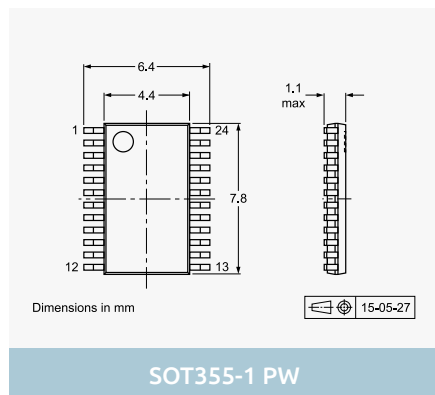
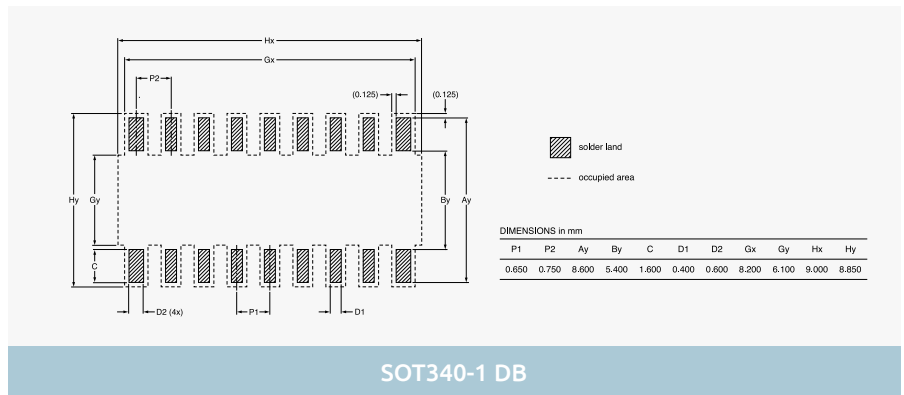
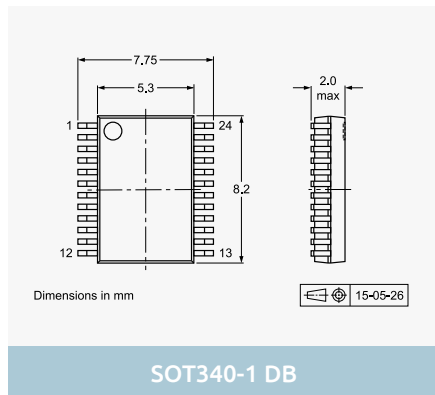
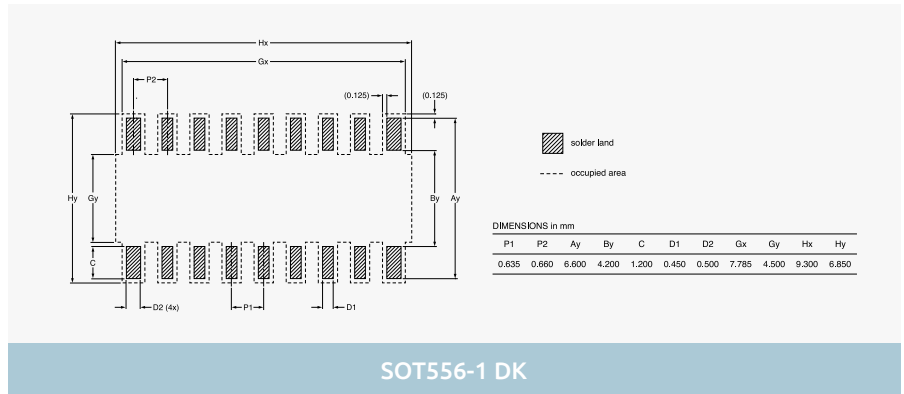
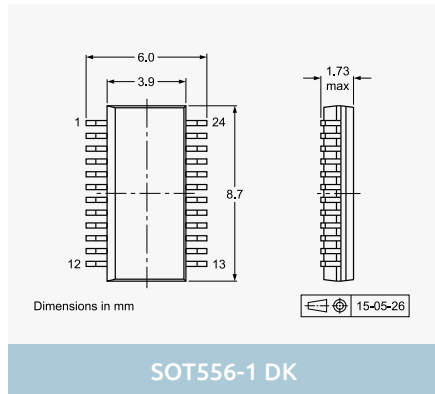
2,65 max

15-05-26

The drawing shows the top and bottom views of the SOT137-1 D package. The top view includes dimensions Hx, Gx, P2, (0.125), and (0.125). The bottom view includes dimensions Hy, Gy, C, D2 (4x), P1, and D1. A legend indicates that hatched areas represent 'solder land' and dashed lines represent 'occupied area'.

DIMENSIONS in mm										
P1	P2	Ay	By	C	D1	D2	Gx	Gy	Hx	Hy
1.270	1.320	11.200	6.400	2.400	0.700	0.800	15.120	8.600	17.000	11.450

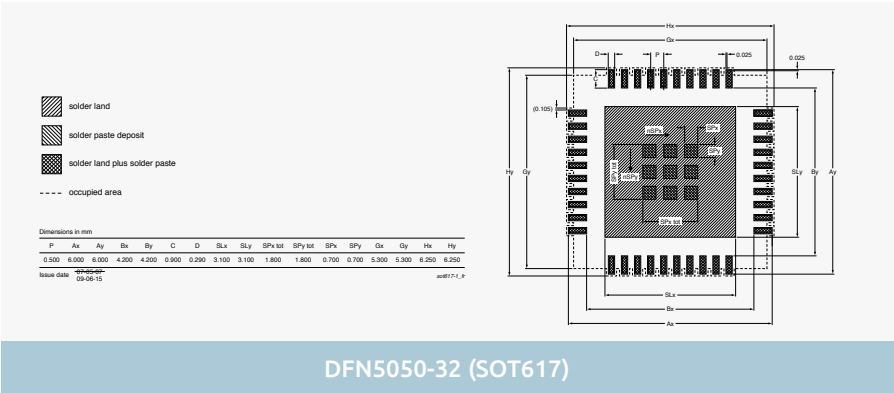
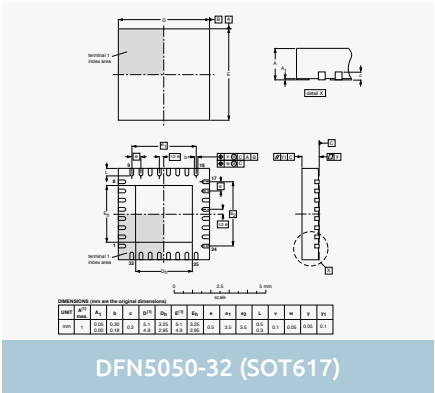
More than 8-pin SMD packages



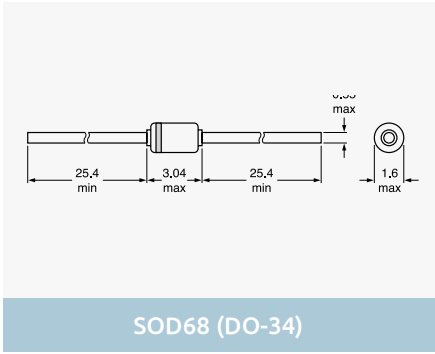
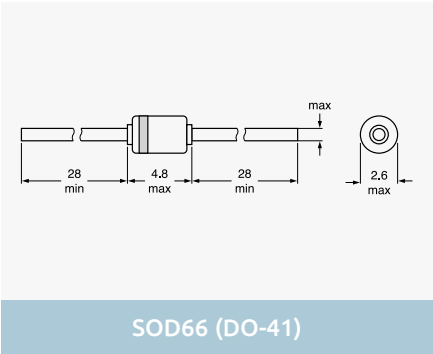
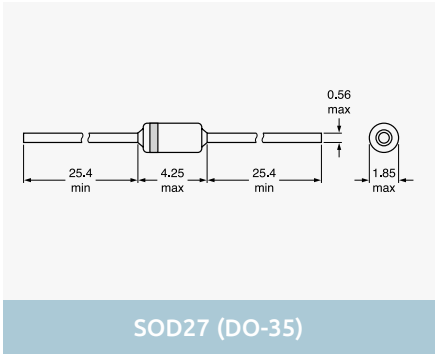
Dimensions in mm

Minimized outline drawings and reflow soldering footprint

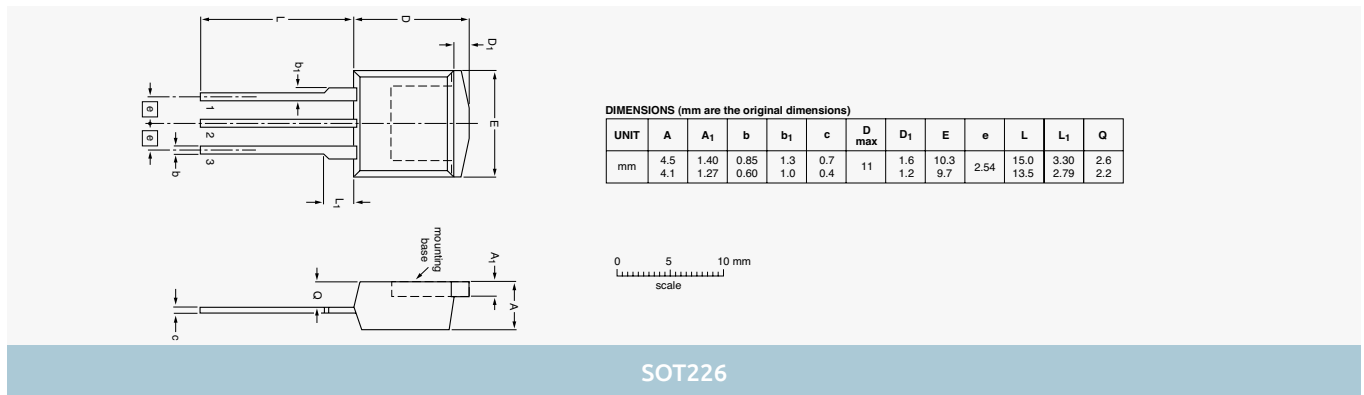
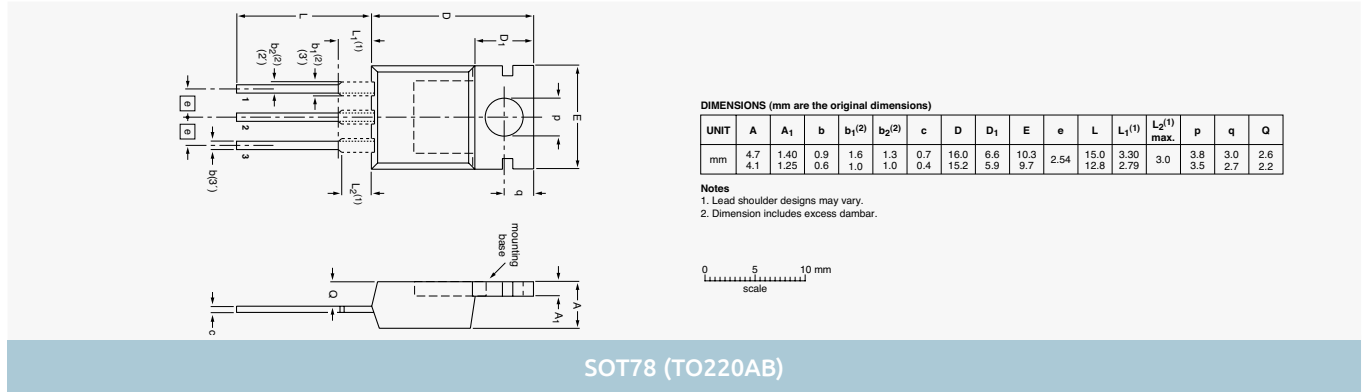
More than 8-pin SMD packages



Glass diodes



Single-ended and through-hole packages



Dimensions in mm

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Date of release:

January 2018

Printed:

In the Netherlands

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