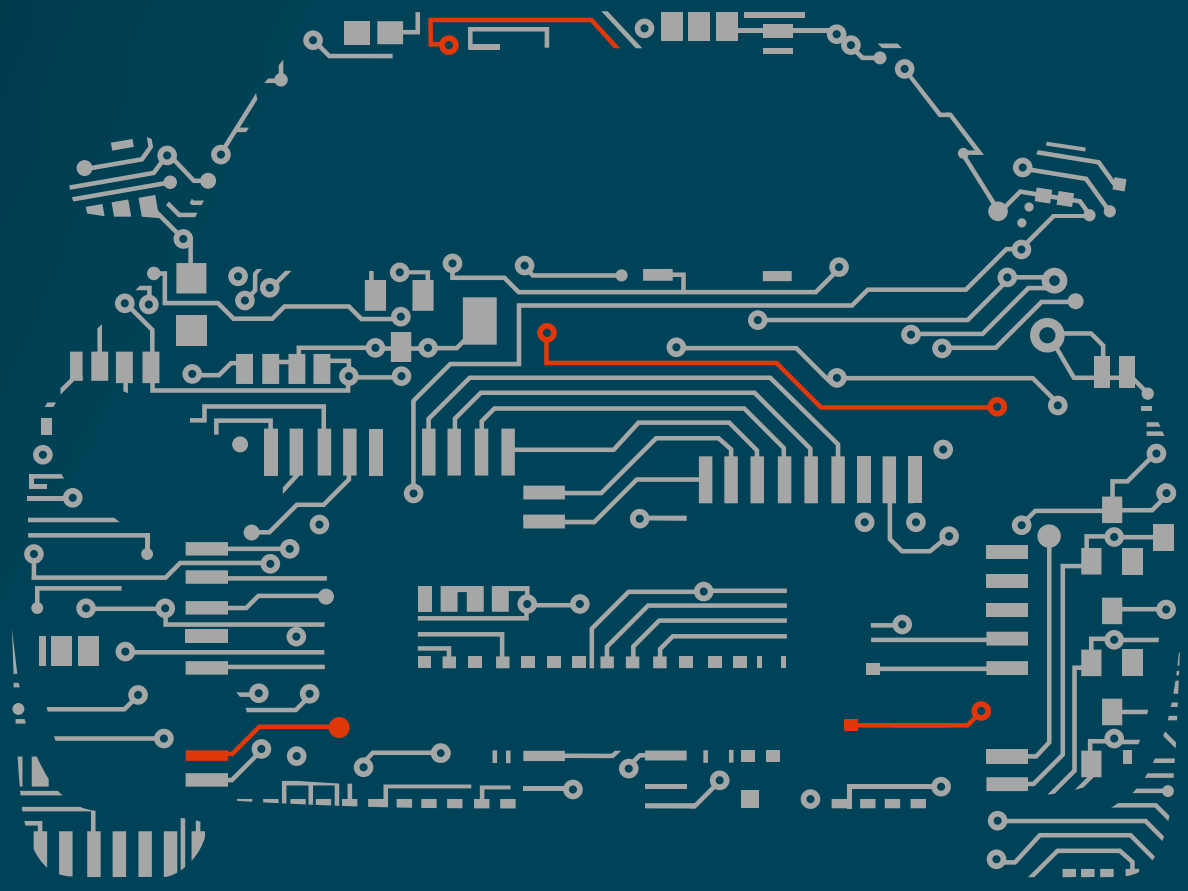
Automotive Selection guide 2019

Discretes, logic and MOSFETs
AEC-Q100/Q101 qualified



nexperia

EFFICIENCY WINS.

Driving efficiency takes **pole position**

Today's cars are undergoing the greatest transformation the industry has seen. Continued electrification is resulting in significant changes from the engine right through to the cloud. A lot of this is because vehicles need to be energy efficient, even as ever more electronic functionality is added to increase our safety and comfort.

Governments across the globe are stipulating mandates to reduce automotive CO_2 emissions to combat climate change and maintain resources. Obviously, the main focus is on the drivetrain – whether that is combustion, hybrid, or full electrical. However innovative technologies and systems for chassis, safety, lighting and body electronics are also helping drive up overall vehicle efficiency and reducing fuel consumption, CO_2 emissions and costs.

Consistently delivering the right functionality, with the right performance, in the right package is how Nexperia is helping 'driving efficiency' win. All our dedicated automotive devices are fully AEC-Q100/Q101 qualified. Our rigorous attention to detail and commitment to automotive quality yields sub-part-per-million (sub-ppm) failure rates.

Our energy- and design-efficient products are backed up by our own dedicated manufacturing facilities along with industry leading, proven supply chains that meet the long-term volume needs of the automotive industry. And along with traditional powertrain, chassis and body electronics our product and package innovation supports new and future system designs, from wireless car safety all the way through to electric vehicles.

So discover our complete dedicated automotive portfolio of Bipolar transistors, Diodes, ESD protection, MOSFETs and Logic devices in the **Nexperia Automotive Selection Guide 2019**. There is also a dedicated section on packages, highlighting the latest package innovations and packing options helping you to save space and weight. We hope this document makes it even easier for you to find the right product for your design.

Dirk Hildebrandt
VP Sales & Marketing Global Automotive

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
- IATF16949 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).

Automotive Selection guide 2019

Discretes, Logic and MOSFETs
AEC-Q100/Q101 qualified

Contents

Discrete, Logic and MOSFET devices for automotive applications

Powertrain 48V

- *DCDC converter 48V:12V*
- *Battery management system*
- *Belt-starter-generator*
- *Electric super charger*
- *Water pump*

Infotainment

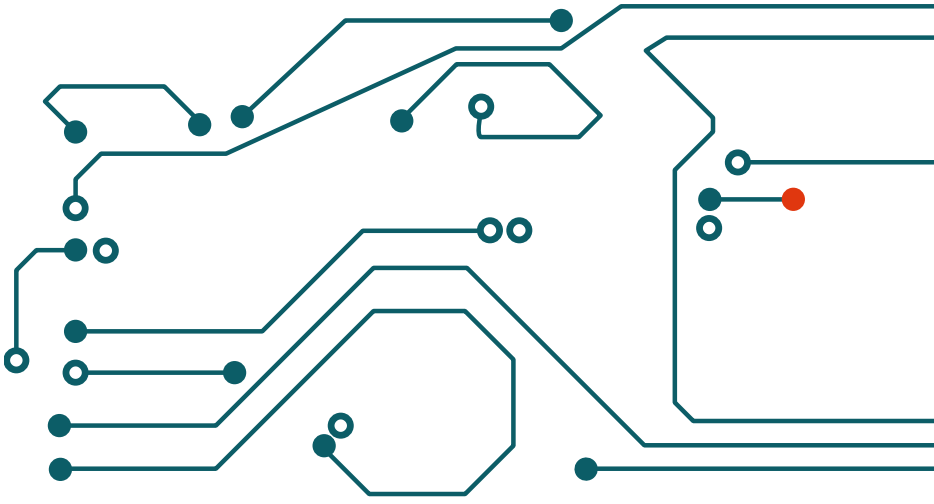
- *Dashboard*
- *Car audio*
- *Connectivity audio*
- *Entertainment*
- *GPS*
- *Car navigation display*

Powertrain 12V ICE

- *Engine control*
- *Fuel pump*
- *Transmission*
- *Alternator, battery, and starter*

Lighting

- *Front LED lighting*
- *LED Daytime running light*
- *Rear LED lighting*
- *Interior LED lighting*

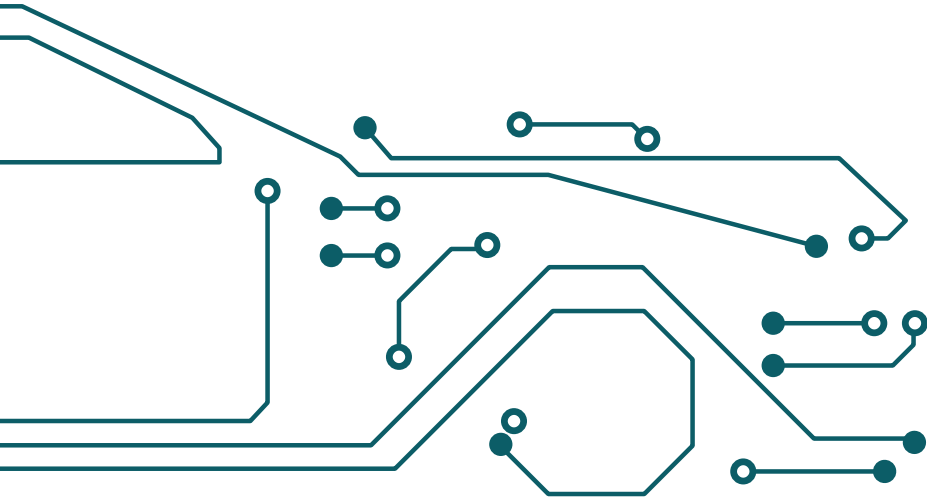


Covering all basic functions enabling automotive electronic applications

- *Switching MOSFETs*
- *ESD / surge protection*
- *Battery protection*
- *Free-wheeling diode*

Networking & Diagnostic

- *CAN*
- *LIN*
- *FlexRay*
- *Ethernet*
- *BroadR-Reach*
- *Bluetooth, WiFi*
- *USB*



Safety and control

- *ADAS (camera, radar, lidar)*
- *Airbag*
- *TPMS*
- *Collision warning*
- *Parking assistant*
- *Back monitor*

Chassis

- *Steering / EPS*
- *Braking / ABS*
- *Electronic Parking Brake*
- *Traction control*
- *Suspension*
- *Roll stabiliation*

Comfort and control

- *Power door*
- *Power window*
- *Climate control*
- *Seat control*
- *Mirrow and wiper control*

- *Flyback diode*
- *DCDC conversion*
- *Voltage regulation*
- *Shift register*
- *I/O expansion*
- *LED drive*

Technology focus: clip-bond packages

Thermally enhanced, space-saving, rugged package solutions

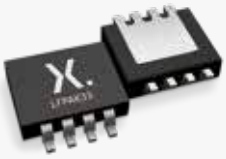
2 Pins
Schottky diodes, PN rectifiers

CFP3
(SOD123W)
2.6 x 1.7 x 1.1

CFP5
(SOD128)
3.8 x 2.6 x 1.0

CFP15
(SOT1289)
5.8 x 4.3 x 0.78

>4 Pins
MOSFETs, Bipolar transistors



LFPAK33
(SOT1210)
3.3 x 3.3 x 0.85

LFPAK56
(SOT669)
5.0 x 6.0 x 1.0

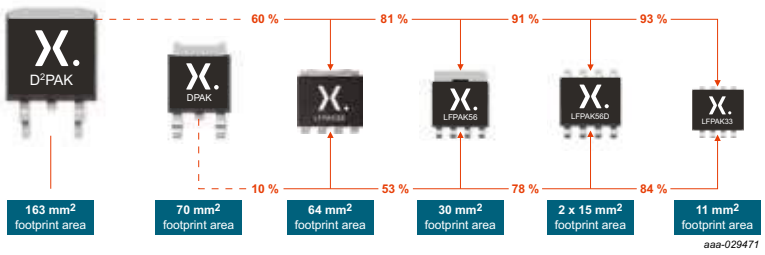
LFPAK56D
(SOT1205)
5.0 x 6.0 x 1.0

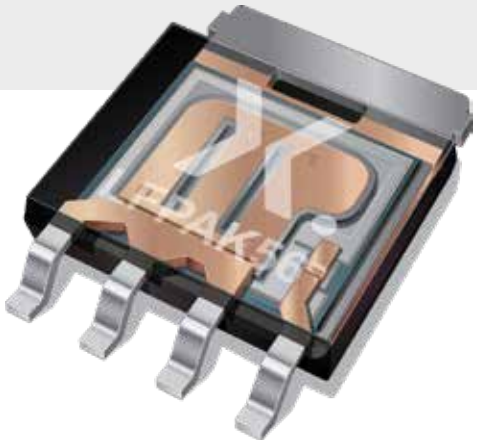
LFPAK88
(SOT1235)
8.0 x 8.0 x 1.75

Miniaturization of Power

- *Solid wireless clip-bond packages for extra rugged and reliable operation*
- *High-temperature use*
- *High power density & efficiency*
- *Space-saving solution for MOSFETs, diodes, bipolar transistors*

LFPAK space efficiency





Technology focus: Leadless package solutions

Leadless D(Q)FN packages with side-wettable flanks, AOI capable. The ultimate space saving solution

2 Pins
Diodes, ESD protection

DFN1006D-2
(SOD882D)
1.0 x 0.6 x 0.37

DFN1608D-2
(SOD1608)
1.6 x 0.8 x 0.37

3 Pins
MOSFETs, bipolar transistors, diodes

DFN1010D-3
(SOT1215)
1.1 x 1.0 x 0.37

DFN2020D-3
(SOT1061D)
2.0 x 2.0 x 0.62

6 Pins
MOSFETs, bipolar transistors

DFN2020D-6
(SOT1118D)
2.0 x 2.0 x 0.62

DFN2020MD-6
(SOT1220)
2.0 x 2.0 x 0.62

>10 Pins
Logic

DHVQFN20
(SOT764-1)
2.5 x 4.5 x 0.85

14 pin
16 pin
20 pin
24 pin
versions

Automotive leadless

- *The ultimate space saving solution for automotive*
- *High board level reliability, robust solder joints*
- *Easy optical inspection, AOI capable*
- *For Logic, ESD protection, diodes, bipolar transistors and MOSFETs*

Electrification of the car

Supported by product portfolio and roadmap

Increased electronic functions *(Braking, steering, fuel injection, auto-matic transmission)*

Better safety

- *Schottkys and FRDs up to 200V with low IR and low VF*
- *MOSFETs with high drain current capability. (ID), Avalanche ruggedness and low RDSon*

Replacement of electric/ mechanical relays

Higher reliability through MOSFETs

- *Power MOSFETs and Bipolar transistors*
- *Space saving, power efficient, low noise*

Increased information sensing & processing *(Networks, infotainment)*

Protection for In-Vehicle Networking

ESD protection devices to safeguard interfaces of communication buses, IVN, infotainment systems (incl. solutions for Type-C connector)

ADAS
(Vision & Safety)

Compact designs through Discretes in advanced packages

- *Schottky rectifiers up to 100V in DFN and CFP packages*
- *Low VCEsat power bipolar transistors in LFPAK (175 °C) to support voltage regulation / core supply*
- *ESD Protection*

Electrification of the powertrain
(e.g. mild hybrids, plug-in hybrids)

48V Power rail

- *DCDC converter 48V:12V*
- *Battery management system*
- *Belt-starter-generator*
- *Electric super charger*
- *Water pump*
- *Power MOSFET 80V and 100V*
- *Schottky rectifier up to 100V*
- *FRD up to 200V*

Bipolar transistors

1

Transistors single NPN

Types in **bold** represent new products

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P_{tot} (mW)					250	200	750	250	250
V_{CEO} (V)	I_C (mA)	h_{FE} min/typ	h_{FE} max	f_T min (MHz)					
25	100	450	1200	100		PMST5089			
30	100	110 - 200	450 - 800	100	BC848B	BC848W			
		350	900	100		PMST5088			
32	100	110 - 420	220 - 800	100	BCW31 / 32 / 33				
		180 - 380	310 - 630	250	BCW60B / C / D				
45	100	110 - 420	220 - 800	100	BC847 / A / B / C	BC847W / AW / BW / CW	BC847AQA / BQA / CQA	BC847AM / BM / CM	BC847AMB / BMB / CMB
		120 - 380	220 - 630	100	BCX70G / H / J / K				
		110 - 200	220 - 450	100	BCW71 / 72				
		500	1250	100	PMBT6429	PMST6429			
50	100	210 - 290	340 - 460	100 - 150	2PD601ART 2PD601ARL 2PD601ASL	2PD601ARW / SW			
		250	650	100	PMBT6428	PMST6428			
60	100	110 - 200	220 - 450	100	BCV71 / 72				
65	100	110 - 200	220 - 450	100	BC846 / A / B	BC846W / AW / BW		BC846BM	BC846BMB
50	150	120 - 200	240 - 400	80	NXP3875Y / G				
	150	120 - 270	270 - 560	100		2PC4081Q / R / S		2PC4617QM / RM	2PC4617QMB / RMB
	200	210	340	100	2PD601BRL				
		290	460	100	2PD601BSL				
45	500	100 - 250	250 - 600	100	BC817 / -16 / -25 / -40	BC817W / -16W / -25W / -40W	BC817-25QA/-40QA		
		100	600	100	BCX19				
50	500	85 - 170	170 - 340	140 - 180	2PD602AQL 2PD602ARL 2PD602ASL	2PD1820AR / S			
60	500	50	-	100		PMSTA05			
80	500	100	-	50	**PMBTA06**	**PMSTA06**			
45	800	100-250	250-600	100	BCW66F/G/H				

Transistors single PNP

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P_{tot} (mW)					250	200	750	250	250
V_{CEO} (V)	I_C (mA)	h_{FE} min/typ	h_{FE} max	f_T min (MHz)					
30	100	125 - 220	500 - 800	100	BC858B	BC858W			
32	100	120 - 215	260 - 500	100	BCW29 / 30				
		180 - 380	310 - 630	100	BCW61B / C / D				
45	100	210 - 290	340 - 460	70 - 80	2PB709ART 2PB709ARL 2PB709ASL	2PB709ARW / SW			
		180 - 380	310 - 630	100	BCX71H / J / K				
		120 - 215	260 - 500	100	BCW69 / 70				
		125 - 420	250 - 800	100	BC857 / A / B / C	BC857W / AW / BW / CW	BC857AQA / BQA / CQA	BC857AM / BM / CM	BC857AMB / BMB / CMB
60	100	120	260	150	BCW89				
65	100	125 - 200	250 - 475	100	BC856 / A / B	BC856W / AW / BW		BC856BM	BC856BMB
100	100	30	-	50	BSS63				
50	150	120 - 270	270 - 560	100		2PA1576Q / R / S		2PA1774QM / RM / SM	2PA1774QMB / RMB / SMB
	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	PMBTA56	PMSTA56			
45	800	100-250	250-600	80	BCW68F/G/H				

High performance transistors (superior power dissipation)

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

Transistors double

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

Medium power transistors high performance (175°C capable)

Package							SOT223 (SC-73)
							
Size (mm)							6.5 x 3.5 x 1.65
P_{tot} (mW)							1700
Polarity	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	h_{FE} min	h_{FE} max	f_T min(MHz)	
NPN	80	7	1	63	250	100	BCP56H
					160	100	BCP56-10H
				100	250	100	BCP56-16H
PNP	80	7	1	63	250	100	BCP53H
					100	100	BCP53-10H
				100	250	100	BCP53-16H

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

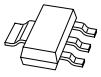
Package							SOT23
							
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							950
Polarity	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	h_{FE} min	h_{FE} max	f_T min(MHz)	
NPN	45	7	0.5	100	250	100	BC817K-16H
				160	400	100	BC817K-25H
				250	600	100	BC817K-40H

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

Types in **bold** represent new products

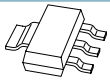
Package							SOT23
							
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							675
Polarity	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	h_{FE} min	h_{FE} max	f_T min(MHz)	
NPN	45	7	0.5	100	250	80	**BC807-16H**
				160	400	80	**BC807-25H**
				250	600	80	**BC807-40H**

Medium power transistors

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

[1] Typical value

High voltage transistors

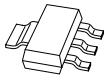
Package						SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	SOT23	SOT323 (SC-70)
										
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)						1700	1300	750	250	200
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)					
NPN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

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

LED driver

Package		SOT457	SOT23
			
Size (mm)		2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0
P_{tot} (mW)		750	480
Vs supply voltage [V]	LED drive current [mA] @ Vs=10V		
18	10		NCR401T
	20		NCR402T
40	10	NCR401U	
	20	NCR402U	
	50	NCR405U	

LED driver NPN

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

Constant current source

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

Darlington transistors

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

Schmitt triggers

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

Low noise transistors

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

Matched pair transistors - part 1

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

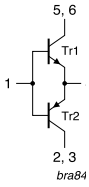
[1] I_{C1} / I_{E2}

Matched pair transistors - part 2

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

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

MOSFET driver

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

Medium frequency transistors

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

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

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	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
P_{tot} (mW)							1700	1650	750	1300
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A				
12	5.3	10.6	300 / 530	0.5	2	18		PBSS301NX		
	5.8	11.6	300 / 530	0.5	2	18	PBSS301NZ			
	6	7	280 / 440	0.5	2	20				
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				
	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				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				
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				
	6.2	15	300 / 500	0.5	2	17		PBSS4041NX		
	7	15	300 / 500	0.5	2	13	PBSS4041NZ			
80	3	6	240 / 360	0.5	2	40			PBSS304ND	
	4	10	250 / 400	0.5	2	25		PBSS4480X		
	4.6	9.2	300 / 470	0.5	2	25		PBSS305NX		
	5.1	10.2	300 / 470	0.5	2	25	PBSS305NZ			
	5.6	7	270 / 425	0.5	2	25				
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				

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

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

Types in **bold** represent new products

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
												
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)							480	350	430	250	250	750
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A						
15	0.5	1	200 / 325	0.01	2	-				PBSS2515M	PBSS2515MB	
20	1	3	350 / 470	0.1	2	110 [2]	PBSS4120T					
	2	5	220 / 330	0.1	2	45	PBSS4320T					
	4.3	8	300 / 550	0.5	2	21	PBSS4021NT					
30	1	1.5	230 / 380	0.5	2	90						PBSS4130QA
		3	300 / 450	0.5	2	120 [2]	PBSS4130T					
	2	3	300 / 450	0.5	2	70	PBSS4230T					
			230 / 380	0.5	2	75						PBSS4230QA
	2.6	5	300 / 500	0.5	2	80	PBSS4032NT [3]					
40	0.5	1	200 / 550	0.01	2	200 [2]				PBSS2540M	PBSS2540MB	
	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

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	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
P_{tot} (mW)							1700	1650	750	1300
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A				
12	5.3	10.6	250 / 400	0.5	2	20		PBSS301PX		
	5.7	11.4	250 / 400	0.5	2	20	PBSS301PZ			
	6	7	220 / 335	0.5	2	20				
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				
	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				PBSS5330PAS
	4.2	10	200 / 350	0.5	2	70		PBSS4032PX [3]		
	4.4	10	200 / 350	0.5	2	70	PBSS4032PZ [3]			
	5.1	10.2	250 / 400	0.5	2	25		PBSS303PX		
	5.3	10.6	250 / 400	0.5	2	25	PBSS303PZ			
	6	7	200 / 335	0.5	2	25				
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				
	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	
	4		180 / 265	0.5	2	40				
		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				
	3.7	7.4	200 / 300	0.5	2	45		PBSS306PX		
	4.1	8.2	200 / 300	0.5	5	45	PBSS306PZ			

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

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

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
												
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)							480	350	430	250	250	750
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A						
15	0.5	1	200 / 260	0.01	2	150				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					
	2		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					
		5	200 / 360	0.5	2	55	PBSS5350T					
	3	3	200 / –	0.5	2	90 [2]	PBSS5250TH					
							PBSS5350TH					
60	1	1.5	120 / 185	0.5	2	125						PBSS5160QA
		2	150 / 250	0.5	5	135		PBSS5160U				
			150 / 250	0.5	5	120	PBSS5160T					
	1.7	2.5	120 / 185	0.5	2	105						PBSS5260QA
	2.7	8	200 / 300	0.5	2	49	PBSS4041PT					
100	1	3	150 / –	0.25	5	93			PBSS9110Y			
			150 / 350	0.5	5	95	PBSS9110T					

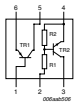
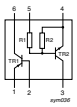
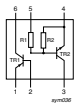
[1] IC / IB = 20 [2] V_{CEsat} (max) [3] Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors double

Package										SOT457 (SC-74)	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)
												
Size (mm)										2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)										750	1300	1300
V_{CEO} (V)	I_C (A)	Polarity	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)			
15	0.5	2 x NPN	200	0.01	2	170 [1]	250	0.5	0.05			
		2 x PNP	200	0.01	2	170 [1]	250	0.5	0.05			
		NPN / PNP	200	0.01	2	170 [1]	250	0.5	0.05			
		NPN / PNP	200	0.01	2	170 [1]	250	0.5	0.05			
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05			PBSS4220PANS
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05			PBSS5220PAPS
	7.5	NPN / NPN	300	0.5	2	15	150	4	0.2			
	6.3	PNP / PNP	250	0.5	2	24	225	4	0.2			
	7.5 / 6.3	NPN / PNP	300 / 250	0.5	2	15 / 24	150 / 225	4	0.2			
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			
	4.8	PNP / PNP	200	0.5	2	70	390	4	0.4			
	5.7 / 4.8	NPN / PNP	300 / 200	0.5	2	57 / 70	250 / 390	4	0.4			
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			
		2 x PNP	200	0.5	2	60	370	2.7	0.27			
		NPN / PNP	300 / 200	0.5	2	50 / 60	340 / 370	2.7	0.27			
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			
	5.9	PNP / PNP	200	0.5	2	35	330	4	0.2			
	6.7 / 5.9	NPN / PNP	300 / 200	0.5	2	20 / 35	190 / 330	4	0.2			
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		2.0 x 1.25 x 0.95
P_{tot} (mW)				750 [1]	600 [1]	300 [2]
V_{CEO} (V)	I_C (A)	V_{CEsat} max (mV); I_C = 0.5 A; I_B = 0.05 A	R1, R2 (kΩ)			
15	0.5	250	2.2			PBLS1501Y
			4.7			PBLS1502Y
			10			PBLS1503Y
			22			PBLS1504Y
20	1	150	2.2		PBLS2001D	
			4.7		PBLS2002D	
			10		PBLS2003D	
			22		PBLS2004D	
	1.8	70	2.2	PBLS2021D		
			4.7	PBLS2022D		
			10	PBLS2023D		
			22	PBLS2024D		
40	0.5	350	2.2			PBLS4001Y
			4.7			PBLS4002Y
			10			PBLS4003Y
			22			PBLS4004Y
			47			PBLS4005Y
	1	170	2.2		PBLS4001D	
			4.7		PBLS4002D	
			10		PBLS4003D	
			22		PBLS4004D	
			47		PBLS4005D	
60	1	180	2.2		PBLS6001D	
			4.7		PBLS6002D	
			10		PBLS6003D	
			22		PBLS6004D	
			47		PBLS6005D	
	1.5	100	2.2	PBLS6021D		
			4.7	PBLS6022D		
			10	PBLS6023D		
			22	PBLS6024D		

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

Low V_{CEsat} (BISS) high voltage transistors

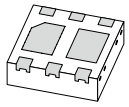
Types in **bold** represent new products

Package				SOT223 (SC-73)	SOT89 (SC-62)	SOT1215	SOT23
							
Size (mm)				6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	1.1 x 1.0 x 0.37	2.9 x 1.3 x 1.0
P_{tot} (mW)				1700	1300	750	250
Polarity	V_{CEO} [max] (V)	I_C (A)	hFE [min]				
NPN	150	0.5	100			PBHV8515QA	
		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
	600	0.5	70	PBHV8560Z			
PNP	140	4	100	PBHV9414Z			
	150	0.5	100			PBHV9515QA	
		1	70				PBHV9115TLH
			100				PBHV9115T
					PBHV9115X		
				PBHV9115Z			
		2	100	PBHV9215Z			
	400	0.25	100				PBHV9040T
					PBHV9040X		
				PBHV9040Z			
		0.5	100	PBHV9540Z	**PBHV9540X**		
	500	0.15	100				PBHV9050T
		0.25	100	PBHV9050Z			
	600	0.1	70	PBHV3160Z			
		0.5	70	PBHV9560Z			

Low V_{CEsat} (BISS) RETs

Package					SOT23	
						
Size (mm)					2.9 x 1.3 x 1.0	
P_{tot} (mW)					250	
V_{CEO} (V)	I_C (mA)		R1 (kΩ)	R2 (kΩ)	NPN	PNP
40	600	R1 = R2	1	1	PBRN113ET	PBRP113ET
			2.2	2.2	PBRN123ET	PBRP123ET
		R1 ≠ 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_{CEO} (V)	I_C (A)	h_{FE} min	h_{FE} max	@ I_C (mA)	@ V_{CE} (V)	R_{CEsat} typ (mΩ)	V_{DS} (V)	V_{GS} (V)	I_D (A)	R_{Dson} typ (mΩ)	
40	2	300	800	100	5	240	30	0.7	0.66	390	PBSM5240PF
		100	-	100	5	240	30	0.7	0.66	390	PBSM5240PFH

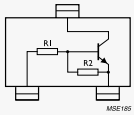
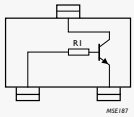
Low V_{CEsat} (BISS) power transistors single

Package						LFPAK56 (SOT669)
						
Size (mm)						5 x 6 x 1.1
P_{tot} (mW)						1250
V_{CEO} (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	3	150 / 250	0.5	10	NPN	PHPT61003NY
		150 / 220	0.5	10	PNP	PHPT61003PY
	6	150 / 250	0.5	10	NPN	PHPT61006NY
		150 / 220	0.5	10	PNP	PHPT61006PY
	10	150 / 250	0.5	10	NPN	PHPT61010NY
		150 / 220	0.5	10	PNP	PHPT61010PY

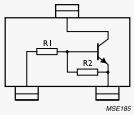
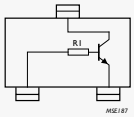
Low V_{CEsat} (BISS) power transistors double

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

RETs 100 mA single - part 1

Package					SOT23		SOT323 (SC-70)	
								
Size (mm)					2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95	
P_{tot} (mW)					250		200	
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP
50	100		1	1		PDTA113ET		PDTA113EU
			2.2	2.2	PDTC123ET	PDTA123ET	PDTC123EU	PDTA123EU
			4.7	4.7	PDTC143ET	PDTA143ET	PDTC143EU	PDTA143EU
			10	10	PDTC114ET	PDTA114ET	PDTC114EU	PDTA114EU
			22	22	PDTC124ET	PDTA124ET	PDTC124EU	PDTA124EU
			47	47	PDTC144ET	PDTA144ET	PDTC144EU	PDTA144EU
			100	100	PDTC115ET	PDTA115ET	PDTC115EU	PDTA115EU
			1	10		PDTA113ZT		PDTA113ZU
			2.2	10	PDTC123YT	PDTA123YT	PDTC123YU	PDTA123YU
			2.2	47	PDTC123JT	PDTA123JT	PDTC123JU	PDTA123JU
			4.7	10	PDTC143XT	PDTA143XT	PDTC143XU	PDTA143XU
			4.7	47	PDTC143ZT	PDTA143ZT	PDTC143ZU	PDTA143ZU
			10	47	PDTC114YT	PDTA114YT	PDTC114YU	PDTA114YU
			22	47	PDTC124XT	PDTA124XT	PDTC124XU	PDTA124XU
			47	10	PDTC144VT	PDTA144VT	PDTC144VU	PDTA144VU
			47	22	PDTC144WT	PDTA144WT	PDTC144WU	PDTA144WU
			2.2	-	PDTC123TT	PDTA123TT	PDTC123TU	PDTA123TU
			4.7	-	PDTC143TT	PDTA143TT	PDTC143TU	PDTA143TU
			10	-	PDTC114TT	PDTA114TT	PDTC114TU	PDTA114TU
			22	-	PDTC124TT	PDTA124TT	PDTC124TU	PDTA124TU
			47	-	PDTC144TT	PDTA144TT	PDTC144TU	PDTA144TU
			100	-	PDTC115TT	PDTA115TT	PDTC115TU	PDTA115TU

RETs 100 mA single - part 2

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

RETs 100 mA double

Package					DFN1010B-6 (SOT1216)			DFN1412-6 (SOT1268)			SOT363 (SC-88)		
													
Size (mm)					1.1 x 1.0 x 0.37			1.4 X 1.2 X 0.5			2.0 x 1.25 x 0.95		
P_{tot} (mW)					350			480			300		
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP
50	100	R1 = R2	2.2	2.2							PUMH20	PUMD20	PUMB20
			4.7	4.7							PUMH15	PUMD15	PUMB15
			10	10	PQMH11	PQMD3	PQMB11	PRMH11	PRMD3	PRMB11	PUMH11	PUMD3	PUMB11
			22	22		PQMD2			PRMD2		PUMH1	PUMD2	PUMB1
			47	47	PQMH2	PQMD12		PRMH2	PRMD12		PUMH2	PUMD12	PUMB2
			100	100							PUMH24	PUMD24	PUMB24
		R1 ≠ R2	2.2	47	PQMH10	PQMD10		PRMH10	PRMD10		PUMH10	PUMD10	PUMB10
			4.7	10							PUMH18	PUMD18	PUMB18
			4.7	47	PQMH13	PQMD13		PRMH13	PRMD13		PUMH13	PUMD13	PUMB13
			10	47	PQMH9			PRMH9			PUMH9	PUMD9	PUMB9
			22	47		PQMD16			PRMD16		PUMH16	PUMD16	PUMB16
			47	22							PUMH17	PUMD17	PUMB17
			47 / 2.2	47 / 47								PUMD48	
		Only R1	2.2	-							PUMH30	PUMD30	PUMB30
			4.7	-							PUMH7	PUMD6	PUMB3
			10	-							PUMH4	PUMD4	PUMB4
			22	-							PUMH19	PUMD19	PUMB19
			47	-							PUMH14	PUMD14	PUMB14

RETs 500 mA single / double

Package					SOT457 (SC-74)		SOT23		SOT323 (SC-70)		SOT1215	
												
Size (mm)					2.9 x 1.5 x 1.0		2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		1.1 x 1.0 x 0.37	
P_{tot} (mW)					750		250		200		750	
V_{CEO} (V)	I_C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	NPN	PNP	NPN	PNP	NPN	PNP
50	500	R1 = R2	1	1			PDTD113ET	PDTB113ET	PDTD113EU	PDTB113EU	PDTD113EQA	PDTB113EQA
			2.2	2.2			PDTD123ET	PDTB123ET	PDTD123EU	PDTB123EU	PDTD123EQA	PDTB123EQA
			4.7	4.7			PDTD143ET	PDTB143ET	PDTD143EU	PDTB143EU	PDTD143EQA	PDTB143EQA
			10	10			PDTD114ET	PDTB114ET	PDTD114EU	PDTB114EU	PDTD114EQA	PDTB114EQA
		R1 ≠ R2	1	10	PIMN31	PIMC31	PDTD113ZT	PDTB113ZT	PDTD113ZU	PDTB113ZU	PDTD113ZQA	PDTB113ZQA
			2.2	10			PDTD123YT	PDTB123YT	PDTD123YU	PDTB123YU	PDTD123YQA	PDTB123YQA
			4.7	10			PDTD143XT	PDTB143XT	PDTD143XU	PDTB143XU	PDTD143XQA	PDTB143XQA
		Only R1	2.2	-			PDTD123TT	PDTB123TT				

3-terminal adjustable shunt regulators

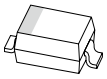
Types in **bold** new products

Type name	Pinning configuration	Tamb(C°)	Vref		Package	Size(mm)	Ptot(mW)	VKA(V)	IK(mA)
TLVH431NCDBZR	Normal pinning	0 to 70	1.5%	1.24	SOT23 	2.9 x 1.3 x 1.0	480	20	80
TLVH431NIDBZR	Normal pinning	-40 to 85							
TLVH431NQDBZR	Normal pinning	-40 to 125							
TLVH431NMQDBZR	Mirrored pinning								
TLVH431NACDBZR	Normal pinning	0 to 70	1%						
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								
TL431MFDT	Mirrored pinning								
TL431ACDBZR	Normal pinning	0 to 70	1%						
TL431AIDBZR	Normal pinning	-40 to 85							
TL431AQDBZR	Normal pinning	-40 to 125							
TL431AFDT	Normal pinning								
TL431AMFDT	Mirrored pinning								
TL431BCDBZR	Normal pinning	0 to 70	0.5%						
TL431BIDBZR	Normal pinning	-40 to 85							
TL431BQDBZR	Normal pinning	-40 to 125							
TL431BFDT	Normal pinning								
TL431BMFDT	Mirrored pinning								

Diodes 2

General purpose Zener diodes

Types in **bold** represent new products

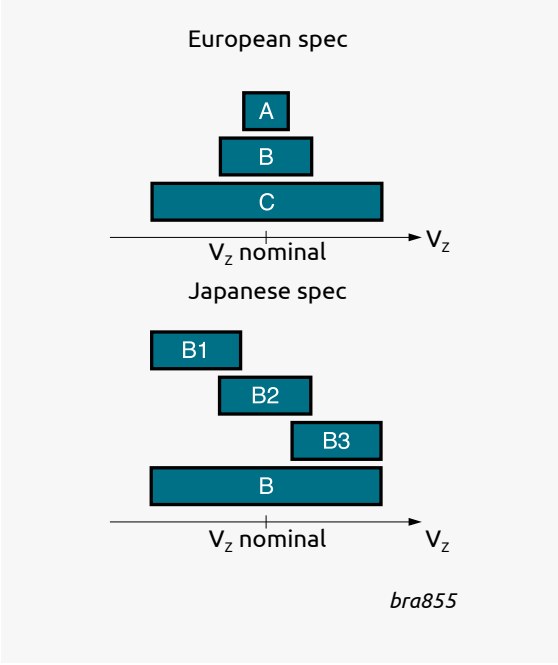
I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Size (mm)	P_{tot} (mW)
400	40	2.4~75	C	Europe	Single		BZV90 series	SOT223 (SC-73) 	6.5 x 3.5 x 1.65	1500
250	40	2.4~75	C	Europe	Single		BZV49 series	SOT89 (SC-62) 	4.5 x 2.5 x 1.5	1000
200	40	2.4~75	B, C	Europe	Dual 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			PLVA600A series			
250	40	2.4~75	B, C	Europe	Single		BZT52 series	SOD123 	2.7 x 1.6 x 1.2	550
200		2.4~36	B	Japan			PDZ-GW series			
250	-	3.0~30	About 2.5%	Special	Single		NZH series	SOD123F 	2.6 x 1.6 x 1.1	830
	40	2.4~75	B, C	Europe			BZT52H series			
200	40	10	B2	Japan	Dual isolated		PZU10DB2 series	SOT353 (SC-88A) 	2.0 x 1.25 x 0.95	300
200	40	2.4~15	C	Europe	Dual c.a.		BZB784 series	SOT323 (SC-70) 	2.0 x 1.25 x 0.95	350
200	40	2.4~75	B, C	Europe	Single		**BZX84W series**			
200	30	100	C	Europe	Back-to-back		BZB100A	SOD323 (SC-76) 	1.7 x 1.25 x 0.95	300
	40	2.4~36	B2	Japan	Single		PDZ-B series			
250	40	2.4~75	B, C	Europe			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	2.4~75	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% Vz tolerance, B1, B2, B3 selections: app. 2% Vz tolerance in sequential intervals
Europe: A selection: app. 1% Vz tolerance, B selection: app. 2% Vz tolerance, C selection: app. 5% Vz tolerance; the selections are in overlapping intervals

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

Zener diodes specifications

Differences in Zener specifications



Japanese spec (PZU, PDZ)

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

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

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

NZX-series in SOD27

	V_z (V)		V_z (V)		V_z (V)
NZX2V1B	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		

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	SOT23	SOT143B	SOT323 (SC-70)	SOT363 (SC-88)	DFN1412-6 (SOT1268)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)
						Size (mm)	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)	**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					
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)	DFN1412-6 (SOT1268)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-2 (SOD882)	DFN1006-3 (SOT883)	DFN1006D-2 (SOD882D)
						Size (mm)	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.4 x 1.2 x 0.5	1.2 x 0.8 x 0.6	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
						P_{tot} (mW)	**250**	**380**	**375**	**200**	**300**	**300**	**300**	**480**	**250**	**325**	**250**	**250**	**250**
100	1	50	500	80	4			BAS16GW	BAS16H			BAS316	BAS16J		BAS516		BAS16L		BAS16LD
							BAS16			BAS16W						BAS16QA			
											BAS16VY								
							BAV70			BAV70W						BAV70QA		BAV70M	
											BAV70S			BAV70SRA					
							BAV99			BAV99W						BAV99QA			
											BAV99S								

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

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	SOT23
							
						Size (mm)	2.9 X 1.3 X 1.0
						P_{tot} (mW)	300
100	1	50	500	80	4		**BAS16TH**
200	1	100	100	200	50		**BAS21TH**

General purpose, switching diodes >= 100V

Types in **bold** represent new products

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOT457 (SC-74)	SOT23	SOT143B	SOD123	SOD123F	SOT323 (SC-70)	SOT353 (SC-88A)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOD523 (SC-79)	DFN1006D-2 (SOD882(D))	DFN1010D-3 (SOT1215)
																			
						Size (mm)	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48 (1.0 x 0.6 x 0.37)	1.1 x 1.0 x 0.37
						P_{tot} (mW)	**250**	**250**	**250**	**380**	**375**	**200**	**255**	**300**	**300**	**300**	**250**	**250**	**325**
100	1	100	100	100	50			BAS19											
150	1	100	100	150	50			BAS20											
≥ 200	1	100	100	150	50					BAS21GW	BAS21H				BAS321	BAS321J	**BAS521B**	BAS21LL (LD)	**BAV21QA**
				200	50			BAS21				BAS21W							
									BAV23										
													BAS21PG						
								BAV23A				BAS21AW							
								BAV23C											**BAV23QA**
								BAV23S				BAS21SW							
							BAS21AVD												
							BAS21VD												
300	1.1	100	150	250	50											BAS21J	BAS521		
								BAS101											
								BAS101S											
									BAW101										
														BAW101S					

Controlled avalanche switching diodes

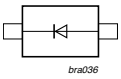
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_d max (pF)	t_{rr} max (ns)	Package	SOT23	SOT143B
										
								Size (mm)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
								P_{tot} (mW)	250	250
60	1	200	100	9	600	2.5	6			BAS56
90	1	200	100	10	600	35	50		BAS29	
									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	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006-2 (SOD882)
														
					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	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)	250	380	375	250	250	250	305	250	250
75	1	10	5	3			BAS116GW	BAS116H		BAS416	BAS716			BAS116L
						BAS116						BAS116QA		
						BAV199			BAV199W					
						BAW156								
						BAV170						BAV170QA	BAV170M	
125	1	100	1	1.5 typ										

Recovery rectifiers - Automotive qualified

Types in **bold** represent new products

V_R max (V)	V_F max (V)	(@ I_F (A)	I_R max (µA)	(@ V_R (V)	trr max (ns)	Package	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) @ 1cm²	1050	950
200	0.93	1	0.2	200	25	 bra036		**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 recovery rectifiers automotive grade types

PNE 200 10 E R

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

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

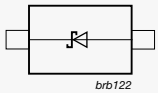
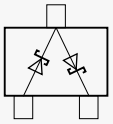
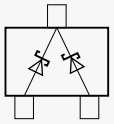
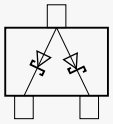
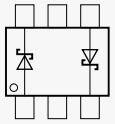
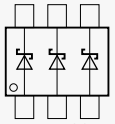
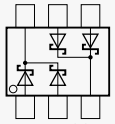
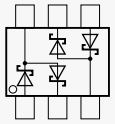
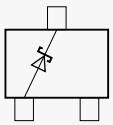
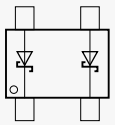
Cont. Forward current:
10 = 1.0 A
20 = 2.0 A
30 = 3.0 A

configuration:
E = single die

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

General purpose Schottky diodes <= 250 mA

IF max (mA)	VR max (V)	VF max (mV)	@ IF (mA)	IR max (µA)	@ VR (V)	Package	SOT23	SOT143B	SOD123	
										
						Size (mm)	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)	250	250	357	
70	70	750	10	0.1	50	Single	BAS70			
						Dual series	BAS70-04			
						Dual c.c.	BAS70-05			
						Dual c.a.	BAS70-06			
						Dual isolated		BAS70-07		
						Triple isolated				
						Quad 2x series				
120	40	370	1	0.5	30	Single				
		500	10	1	30	Single	BAS40			
						Dual series	BAS40-04			
						Dual c.c.	BAS40-05			
						Dual c.a.	BAS40-06			
						Dual isolated		BAS40-07		
						Quad c.c./c.c.				
						Quad 2x series				
200	30	300	10	30	10	Single				
		340	10	2	25	Single	BAT754			
						Dual series	BAT754S			
						Dual c.c.	BAT754C			
						Dual c.a.	BAT754A			
						Triple isolated				
		400	10	2	25	Single	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				
		420	30	0.5	25	Single				
						Dual series				
						Dual c.c.				
						Dual c.a.				
	50	450	10	5	40	Single				
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			

	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1006-2 (SOD882)/ DFN1006-3 (SOT883)
							
	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
	375	250	300	385	400	275	250
	BAS70H	BAS70W			1PS76SB70	1PS79SB70	BAS70L
		BAS70-04W					
		BAS70-05W					
		BAS70-06W					
			BAS70-07S				
			BAS70XY				
					RB751V40	RB751S40	RB751CS40
	BAS40H	BAS40W			1PS76SB40	1PS79SB40	BAS40L
		BAS40-04W					
		BAS40-05W					
		BAS40-06W					
			1PS88SB48				
			BAS40XY				
						1PS79SB31	
			BAT754L				
	BAT54H	BAT54W		BAT54J	1PS76SB10	1PS79SB10	BAT54L
		BAT54SW					
		BAT54CW					BAT54CM
		BAT54AW					
			BAT74S				
			BAT54XY				
						RB521S30	RB521CS30L
						RB520S30	RB520CS30L
					1PS76SB21		
						1PS79SB30	
		BAT854W					
		BAT854SW					
		BAT854CW					
		BAT854AW					
	BAT46WH			BAT46WJ			

Low capacitance Schottky diodes

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

[1] Diodes have matched capacitance

Medium power low VF Schottky rectifiers single >= 200 mA - leadless DFN packages

I_F max (A)	V_R max (V)	V_F max (mV) @ IF max	I_R max (mA) @ V_R max	Package	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	
							
				Size (mm)	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62	
				P_{tot} (mW) @ 1 cm²	960	960	
				Optimization			
0.1	30	840	0.0008	Low I_R			
0.2	20	420	0.045	Low V_F			
		490	0.0035	Low I_R			
	30	470	0.08	Low V_F			
		480	0.05	low V_F			
		520	0.015	Low I_R			
		535	0.009	Low I_R			
	40	525	0.08	Low V_F			
		600	0.0065	Low I_R			
		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			
		620	0.0035	Low I_R			
	30	500	0.5	low V_F			
		630	0.08	Low V_F			
		670	0.015	Low I_R			
		720	0.009	Low I_R			
	40	590	0.01	low I_R			
		820	0.08	Low V_F			
		880	0.0065	Low I_R			
1	20	375	1.9	low V_F	PMEG2010EPA	PMEG2010EPAS	
		415	0.6	low V_F			
		490	0.2	low V_F			
	30	480	1.25	Low V_F			
		565	0.045	Low I_R			
	40	505	0.115	Low V_F			
		600	0.02	low I_R			
		610	0.04	Low I_R			
	60	625	0.65	Low V_F			
		730	0.03	Low I_R			
1.5	20	420	0.9	low V_F			
	40	610	0.03	low I_R			
2	20	420	1.9	low V_F	PMEG2020EPA	PMEG2020EPAS	
		450	0.9	low V_F			
	30	470	2.5	low V_F	PMEG3020EPA	PMEG3020EPAS	
	40	535	0.1	low V_F	PMEG4020EPA	PMEG4020EPAS	
	60	530	0.2	low V_F			
		575	0.25	low V_F	PMEG6020EPA	PMEG6020EPAS	

Types in **bold** represent new products

DFN1608D-2 (SOD1608)	DFN1006-2 (SOD882)	DFN1006D-2 (SOD882D)	DFN0603-2 (SOD972E)
			
1.6 x 0.8 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	0.63 x 0.33 x 0.25
780	565	660	570
			PMEG3001EEF
	PMEG3002AEL	PMEG3002AELD	
			PMEG3002EEF
	PMEG4002EL	PMEG4002ELD	
	PMEG6002EL	PMEG6002ELD	
		PMEG2005BELD	
PMEG2005EPK			
	PMEG2005AEL	PMEG2005AELD	
	PMEG2005EL	PMEG2005ELD	
	PMEG3005EL	PMEG3005ELD	
			PMEG3005EEF
PMEG4005EPK			
PMEG2010EPK			
		PMEG2010BELD	
PMEG4010EPK			
PMEG2015EPK			
PMEG4015EPK			
PMEG2020EPK			
PMEG4020EPK			

Medium power low VF Schottky rectifiers single >= 200 mA

Types in **bold** represent new products

I_F max (A)	V^R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	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			PMEG40T10ER[1]
	60	530	0.06	Low V_F		PMEG6010EP	PMEG6010ER
				Low V_F			PMEG6010ETR
		590	0.0008	Low V_F/Low I_R		**PMEG60T10ELP[1]**	
		600	0.00065	Low V_F/Low I_R			**PMEG60T10ELR[1]**
		660	0.0003	Low I_R			PMEG6010ELR
	100	770	0.00015	Low I_R			PMEG10010ELR
2	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
		515	0.022	Low V_F/Low I_R		PMEG40T20EP[1]	PMEG40T20ER[1]
	60	530	0.2	Low V_F		PMEG6020EP	PMEG6020ER
				Low V_F		PMEG6020ETP	PMEG6020ETR
		620	0.0012	Low V_F/Low I_R		**PMEG60T20ELP[1]**	PMEG60T20ELR[1]
		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		PMEG40T30EP[1]	PMEG40T30ER[1]
		540	0.1	Low I_R			PMEG4030ER
	45	480	0.044	Low V_F/Low I_R	PMEG045T030EPD[1]		
	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	
		620	0.0018	Low VF/Low IR		**PMEG60T30ELP[1]**	**PMEG60T30ELR[1]**
		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		PMEG40T50EP[1]	
	45	490	0.3	Low V_F	PMEG045V050EPD		
		525	0.044	Low V_F/Low I_R	PMEG045T050EPD[1]		
	60	560	0.4	Low V_F	PMEG060V050EPD		
		690	0.0018	Low VF/Low IR		**PMEG60T50ELP[1]**	
6	100	840	0.00045	Low I_R	PMEG100V060ELPD		
8	100	850	0.0005	Low I_R	PMEG100V080ELPD		

[1] Trench process

Medium power low VF Schottky rectifiers single >= 200 mA

I_F max (A)	V^R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)
							
				Size (mm)	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
				P_{tot} (mW) @ 1 cm²	2150	1050	950
				Optimization			
10	45	490	0.6	Low V_F	PMEG045V100EPD		
		540	0.5	Low V_F	PMEG45A10EPD		
		545	0.08	Low V_F/Low I_R	PMEG045T100EPD[1)]		
	60	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	PMEG045T150EIPD[1)]		
	50	500	1	Low V_F	PMEG050V150EPD		
		550	0.1	Low I_R	PMEG050T150EPD[1)]		

[1)] Trench process

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

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	SOT457 (SC-74)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)
												
				Size (mm)	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6
				P_{tot} (mW) @ 1 cm²	540	420	660	830	400	830	570	500
				Optimization								
0.2	30	480	0.05	Low V_f						PMEG3002EJ		PMEG3002AEB
	40	600	0.01	Low I_r						PMEG4002EJ		PMEG4002EB
	60	600	0.1	Low V_f						PMEG6002EJ		PMEG6002EB
0.5	20	390	0.2	Low V_f		PMEG2005ET	PMEG2005EGW	PMEG2005EH		PMEG2005EJ	PMEG2005AEA	
		480	0.03	Low I_r								PMEG2005EB
	30	430	0.15	Low V_f		PMEG3005ET	PMEG3005EGW	PMEG3005EH		PMEG3005EJ	PMEG3005AEA	
		500	0.5	Low V_f								PMEG3005EB
	40	470	0.1	Low V_f		PMEG4005ET	PMEG4005EGW	PMEG4005EH		PMEG4005EJ	PMEG4005AEA	
		550	1.1	Low V_f		BAT720			1PS70SB20			
		640	0.008	Low I_r						PMEG4005CEJ	PMEG4005CEA	
0.75	40	740	0.008	Low I_r							BAT165A	
1	20	430	0.2	Low V_f		PMEG2010AET		PMEG2010AEH				
		500	0.2	Low V_f		PMEG2010ET		PMEG2010EH		PMEG2010EJ	PMEG2010BEA	
		550	0.07	Low I_r						PMEG2010AEJ	PMEG2010EA BAT760	
		620	1.5	Low V_f								PMEG2010AEB
	30	450	1	Low V_f	1PS74SB23							
		520	0.1	Low I_r				PMEG3010CEH		PMEG3010CEJ		
		560	0.15	Low V_f		PMEG3010ET	PMEG3010EGW	PMEG3010EH		PMEG3010EJ	PMEG3010BEA	
		680	0.5	Low V_f								PMEG3010EB
	40	570	0.05	Low I_r			PMEG4010CEGW	PMEG4010CEH		PMEG4010CEJ		
		640	0.05	Low V_f		PMEG4010ET	PMEG4010EGW	PMEG4010EH		PMEG4010EJ	PMEG4010BEA	
		840	0.008	Low I_r							PMEG4010CEA	
	60	660	0.05	Low I_r			PMEG6010CEGW	PMEG6010CEH		PMEG6010CEJ		
1.5	20	660	0.2	Low I_r				PMEG2015EH		PMEG2015EJ	PMEG2015EA	
	30	500	1	Low V_f				PMEG3015EH		PMEG3015EJ		
2	10	460	3	Low V_f				PMEG1020EH		PMEG1020EJ	PMEG1020EA	
	20	525	0.2	Low V_f				PMEG2020EH		PMEG2020EJ	PMEG2020AEA	
	30	620	1	Low V_f			PMEG3020EGW	PMEG3020EH		PMEG3020EJ		
3	10	530	3	Low V_f				PMEG1030EH		PMEG1030EJ		

Medium power low VF Schottky rectifiers dual >= 200 mA

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

Nomenclature of automotive grade Schottky rectifier in medium-power packages

PMEG 40 10 A E T P

- **NEXPERIA MEGA** Schottky rectifier
- Max. reverse voltage in V
  e.g. 40 = 40 V
- Cont. forward current in A
  e.g. 10 = 1.0 A
- Variant number (optional)
- Internal configuration:
  - A = CA
  - B = CC
  - E = single
  - P = double, parallel
  - R = tripple, antiparallel
  - S = series
  - V = tripple
  - W = CA and CC
  - X = 2 x series
  - Y = 2 x CC
  - Z = 2 x CA
- Variant letter (optional):
  T = high temperature
- Package indicator:
  - A SOD323
  - B SOD523
  - D SOT457
  - GW SOD123
  - H SOD123F
  - L SOD882
  - LD SOD882D
  - ML SOD923
  - P SOD128
  - PA SOT1061
  - PD SOT1289
  - PK SOD1608
  - R SOD123W
  - T SOT23

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

PMEG 100 V 080 E L PD

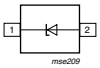
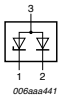
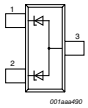
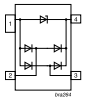
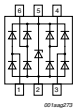
- **NEXPERIA MEGA** Schottky rectifier
- Max. reverse voltage in V
  e.g. 100 = 100 V
- Variant letter (design)
  V = planar design
  T = trench design
- Cont. forward current in A
  e.g. 080 = 8.0 A
- Internal configuration:
  E = single die
- Variant letter (optional):
  L = low leakage current
- Package indicator:
  PD = SOT1289


x1000r/min
MPH
km/h
TRIP A
525.4

3

ESD protection, TVS, filtering and signal conditioning

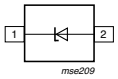
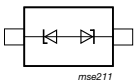
Low capacitance ESD protection for high-speed interfaces

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									
0	1	5	0.4	0.55	10			PESD5V0F1BLD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37
								PESD5V0F1BRLD		
1	0	5	0.95	1.15	8			PESD5V0X1ULD		
			1.55	1.75	15			PESD5V0X1UALD		
		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		
2	1	5	0.9	1.3	9			PESD5V0X1BQ	SOT663 	1.6 x 1.2 x 0.55
								PESD5V0X1BT	SOT23 	2.9 x 1.3 x 1.0
	0	80	0.6	0.75	30			NUP1301U	SOT323 	2.0 x 1.25 x 0.95
								NUP1301	SOT23 	2.9 x 1.3 x 1.0
			2.3	2.75				NUP1301QA	SOT1215 	1.1 x 0.9 x 0.4
3	0	5.5	1	1.5	8			PRTR5V0U2X	SOT143B 	2.9 x 1.3 x 1.0
			1.8	-	12			PRTR5V0U2AX		
4	0	5.5	1	-	8			PRTR5V0U4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0

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

General purpose ESD protection devices

Types in **bold** represent new products

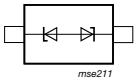
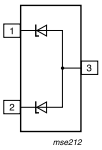
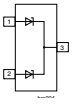
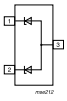
Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	P_{pp} max (W) [1]	ESD rating max (kV) [2]	I_R max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
1	0	5	25	30	42	26	0.1		PESD5V0L1ULD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.4
			152	200	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		
		5	480	530	890	30	4		PESD5V0S1UJ	SOD323F (SC-90) 	1.7 x 1.25 x 0.7
		12	160	180	600	30	0.1		PESD12VS1UJ		
		36	18	30	150	30	0.01		PESD36VS1UJ		
0	1	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		
		4.5	6.6	78	-	30	0.05		PTVS4V5D1BL	DFN1006-2 (SOD882) 	1.0 X 0.6 X 0.48
		5.5	70	84	-	30	0.05		**PTVS5V5D1BL**		

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

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

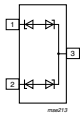
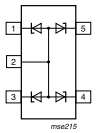
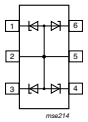
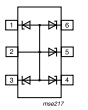
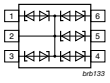
General purpose ESD protection devices

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	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	20	25	-	30	0.05		**PESD3V3T1BLD**	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37
			11	13	45	30	0.01		PESD5V0V1BLD		1.7 x 1.25 x 0.95
			35	45	130	30	0.1		PESD5V0S1BLD		
			11	13	45	30	0.01		PESD5V0V1BB	SOD523 (SC-79) 	1.2 x 0.8 x 0.6
			35	45	130	30	0.1		PESD5V0S1BB		
			11	13	45	30	0.01		PESD5V0V1BA	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
			35	45		30	0.1		PESD5V0S1BA		
			2.9	3.5	-	10	0.1		PESD5V0U1BLD	DFN1006D-2 (SOD882D) 	
									PESD5V0U1BB	SOD523 (SC-79) 	
									PESD5V0U1BA	SOD323 (SC-76) 	
2	1	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		

[1] 8 / 20 µs exponential decay waveform according to IEC 61000-4-2 [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	2	3.3	101	-	350	30	2		PESD3V3L2BT	SOT23 	2.9 x 1.3 x 1
		5	75	-		30	1		PESD5V0L2BT		
		12	19	-	200	30	0.05		PESD12VL2BT		
		15	16	-		30	0.05		PESD15VL2BT		
		24	11	-		23	0.05		PESD24VL2BT		
		5	35	45	130	30	0.1		PESD5V0S2BT		
			2.9	3.5	-	10	0.1		PESD5V0U2BT		
4	3	3.3	22	28	30	20	0.3		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	45	75	-	15	0.1		BZA408B		
			2.9	3.5	-	10	0.1		PESD5V0U4BW	SOT665 	1.6 x 1.2 x 0.55
5	4	3.3	22	28	25	20	0.3		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		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 61000-4-2 (contact discharge)

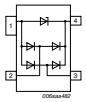
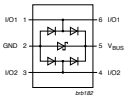
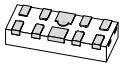
Audio interface protection

Types in **bold** represent new products

Lines	V_{RWM} (V)	V_{BR} min (V)	V_{BR} max (V)	C_D typ (pF)	C_D max (pF)	I_{PPM} 8/20µs (A)	V_{CL} 8/20µs @ I_{ppm} (V)	V_{ESD} (hV)	Configuration	Type	Package
1	4.5	4.7		65	78	34	13.2	30		PTVS4V5D1BL	DFN1006-2 (SOD882) 
	5.5	5.6	7.6	70	84	35	12.2	30		**PTVS5V5D1BL**	
	5	5.5	9.5	70	90	28	11.5	30		PESD5V0S2BQA	DFN1010D-3 (SOT1215) 
				35	45	12	14	30		PESD5V0S1BLD	DFN1006D-2 (SOD882D) 
		5.8	7.8	11	13	4.8	12.5	30		PESD5V0V1BLD	

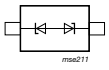
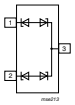
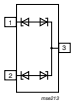
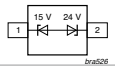
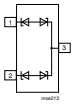
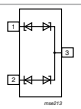
Automotive high-speed network protection

Types in **bold** represent new products

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

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

Automotive in-vehicle network bus line protection

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

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

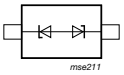
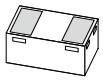
Charger port protection

Types in **bold** represent new products

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

Antenna protection (NFC, WiFi,…)

Types in **bold** represent new products

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	0.35	0.5	10		PESD18VF1BL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
	24	0.3	0.45	10		PESD30VF1BL		
1	30	0.27	-	10		**PESD30VF1BL**		

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

USB protection

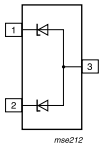
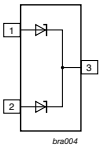
Interface	Number of protected lines	R_{line}	C_{line} (pF)	Remark	Type	Package	Size (mm)
USB2.0 (Plastic package)	2	-	1.0	ESD protection for up to 2 ultra high-speed datalines	PRTR5V0U2X	SOT143B 	2.9 x 1.3 x 1.0
			1.8	ESD protection for up to 2 ultra high-speed datalines with 12 kV ESD robustness	PRTR5V0U2AX		
	4		0.8	Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4Y	SOT363 (SC-88) 	2.0 x 1.25 x 0.95
			1	Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
				Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	IP4220CZ6		
				Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	PRTR5V0U4D		

TVS diodes, compact

Types in **bold** represent new products

P_{PPM} 10/1000µs	V_{RWM} (V)	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
	5.5	5.6	7.6	35	12.2	-	-	**PTVS5V5D1BL**		
	7.5	8.33	9.21	178	19.7	23.3	12.9	PTVS7V5U1UPA	DFN2020-3 (SOT1061) 	2.0 x 2.0 x 0.62
	10	11.1	12.3	148	23	17.6	17	PTVS10VU1UPA		
	12	13.3	14.7	131	25.2	15.1	19.9	PTVS12VU1UPA		
	15	16.7	18.5	111	28.8	12.3	24.4	PTVS15VU1UPA		
	18	20	22.1	97	32	10.3	29.2	PTVS18VU1UPA		
	20	22.2	24.5	98.5	38.7	9.2	32.5	PTVS20VU1UPA		
	22	24.4	26.9	88.5	41	8.4	35.5	PTVS22VU1UPA		
	24	26.7	29.5	79	44.2	7.7	38.8	PTVS24VU1UPA		
	26	28.9	31.9	69	43.5	7	43	PTVS26VU1UPA		

TVS diodes, 24 W/40 W

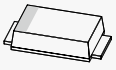
Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV) [1]	C_{line} typ (pF)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	3	5.32	5.6	5.88	20	30	210	8	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		

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	SOD123W 	2.6 x 1.7 x 1.0
400	5.0	6.40	6.70	7.00	10	9.2	43.5	5	400	PTVS5V0S1UR	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		

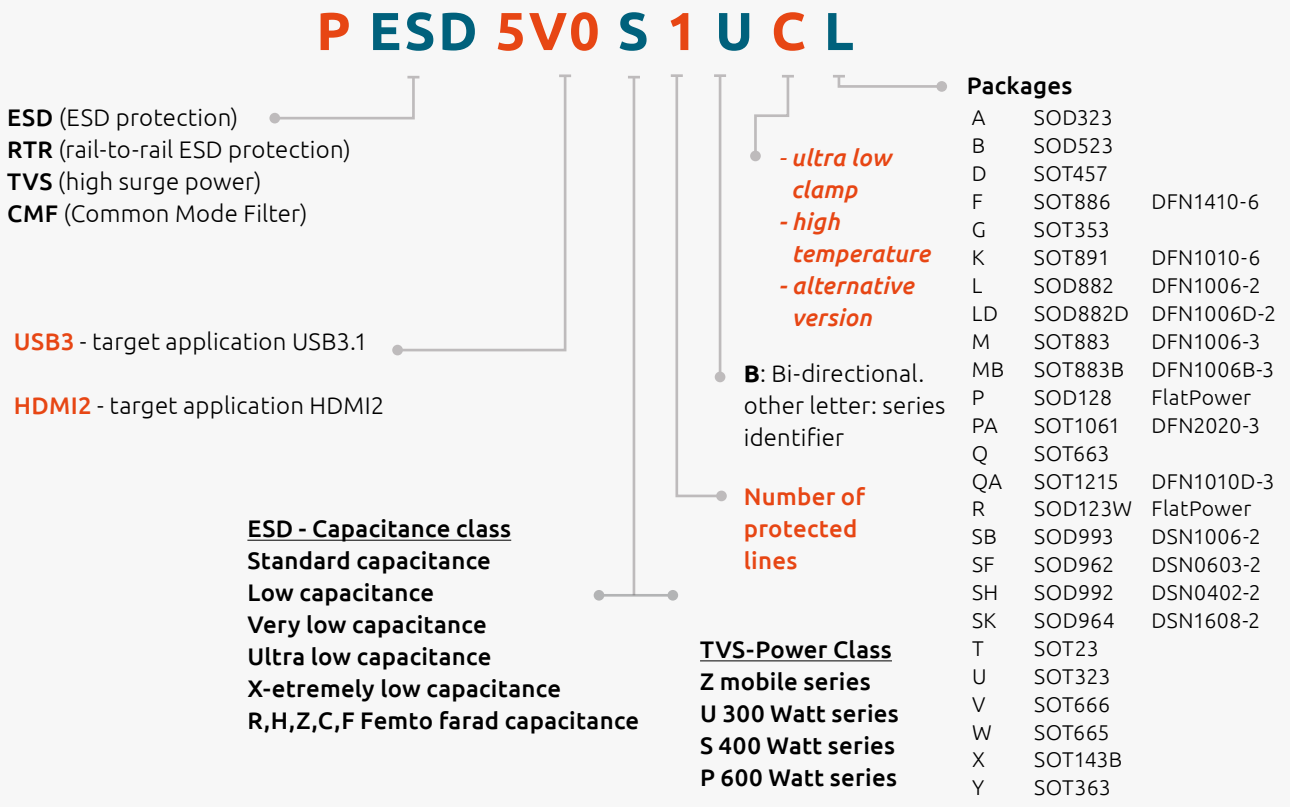
[1] 10 / 1000 µs according to IEC 61643-321

TVS diodes, 600 W

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

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

Nomenclature - protection devices



MOSFETs 4

Automotive grade MOSFETs nomenclature

BUK 7 Y 3R0 - 40 H

Segment
'BUK' for automotive grade

Gate drive
6 = Intermediate level
7 = Standard level
9 = Logic level

Package
5 = TO-220
6 = D²PAK
D = DFN2020MD-6
E = I²PAK
J = LFPAK56E
K = LFPAK56D
M = LFPAK33
S = LFPAK88
Y = LFPAK56

TrenchMOS technology
A = Generation 2
B = Generation 3
C = Generation 4
E = Generation 6
H = Generation 9
P = P-channel

Voltage rating
V_{DS} rating

3R0 = $R_{DS(on)}$ [max] < 3mΩ at 25°C

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)
D²PAK (SOT404) 	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
LFPAK56; Power-SO8 (SOT669) 	BUK9Y07-30B	30	6	7	75	1.42
	BUK7Y07-30B	30	7		75	1.42
	BUK9Y11-30B	30	9	11	59	2
	BUK7Y10-30B	30	10		67	1.76
	BUK9Y22-30B	30	19	22	38	2.53
	BUK7Y20-30B	30	20		40	2.53
LFPAK56D (SOT1205) 	BUK9K5R1-30E	30	4.4	5.3	40	2.21
	BUK9K5R6-30E	30	4.7	5.8	40	2.36
	BUK7K5R1-30E	30	5.1		40	2.21
	BUK7K5R6-30E	30	5.6		40	2.36
LFPAK33 (SOT1210) 	BUK9M5R2-30E	30	4.1	5.2	70	1.89
	BUK9M6R6-30E	30	5.3	6.6	70	2
	BUK9M10-30E	30	7.8	10	54	2.75
	BUK9M17-30E	30	14	17	37	3.4

N-channel 40V automotive power MOSFETs

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

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78) 	BUK751R8-40E	40	1.8		120	0.43
	BUK752R3-40E	40	2.3		120	0.51
	BUK753R1-40E	40	3.1		100	0.64
	BUK758R3-40E	40	7.4		75	1.56
LFPAK88 (SOT1235) 	**BUK7S0R7-40H**	40	0.7		425	0.29
	BUK7S0R9-40H	40	0.9		375	0.31
	BUK7S1R0-40H	40	1		325	0.39
D²PAK (SOT404) 	BUK961R6-40E	40	1.4	1.6	120	0.43
	BUK761R6-40E	40	1.6		120	0.43
	BUK761R7-40E	40	1.6		120	0.46
	BUK762R0-40E	40	2		120	0.51
	BUK962R6-40E	40	2.4	2.8	100	0.57
	BUK762R6-40E	40	2.6		100	0.57
	BUK963R1-40E	40	2.7	3.1	100	0.64
	BUK762R9-40E	40	2.9		100	0.64
	BUK964R1-40E	40	3.5	4.1	75	0.82
	BUK764R0-40E	40	4		75	0.82
	BUK965R4-40E	40	4.4	5.4	75	1.09
	BUK765R3-40E	40	4.9		75	1.09
	BUK768R1-40E	40	7.2		75	1.56
I²PAK (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) 	**BUK9J0R9-40H**	40	0.9	1.2	220	0.3
	BUK7J1R0-40H	40	1		220	0.3
	BUK7J1R4-40H	40	1.4		120	0.38
LFPAK56; Power-SO8 (SOT669) 	**BUK9Y1R3-40H**	40	1.3	1.8	120	0.38
	BUK7Y1R4-40H	40	1.4		190	0.38
	BUK9Y1R6-40H	40	1.6	2.2	120	0.51
	BUK7Y1R7-40H	40	1.7		120	0.51
	BUK9Y1R9-40H	40	1.9	2.6	120	0.69
	BUK7Y2R0-40H	40	2		120	0.69
	BUK9Y2R4-40H	40	2.4	3.2	120	0.79
	BUK9Y3R0-40E	40	2.5	3	100	0.77
	BUK7Y2R5-40H	40	2.5		120	0.79
	BUK9Y2R8-40H	40	2.8	3.9	120	0.87
	BUK7Y3R0-40H	40	3		120	0.87
	BUK7Y3R5-40H	40	3.5		120	1.3
	BUK7Y3R5-40E	40	3.5		100	0.9
	BUK9Y3R5-40E	40	3.6	3.8	100	0.9
	BUK9Y4R4-40E	40	3.7	4.4	100	1.02
	BUK7Y4R4-40E	40	4.4		100	1.02
	BUK9Y7R6-40E	40	6	7.6	79	1.58
	BUK7Y7R6-40E	40	7.6		79	1.58
	BUK9Y12-40E	40	10	12	52	2.31
	BUK7Y12-40E	40	12		52	2.31
	BUK9Y21-40E	40	17	21	33	3.33
	BUK7Y21-40E	40	21		33	3.33
	BUK9Y29-40E	40	25	29	25	4.03
	BUK7Y29-40E	40	29		26	4.03

N-channel 40V automotive power MOSFETs

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

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205) 	BUK7K6R2-40E	40	5.8		40	2.21
	BUK9K6R2-40E	40	6	6.2	40	2.21
	BUK9K6R8-40E	40	6.1	7.2	40	2.36
	BUK7K6R8-40E	40	6.8			2.36
	BUK9K8R7-40E	40	8	9.4	30	2.84
	BUK7K8R7-40E	40	8.5			2.84
	BUK9K18-40E	40	16	20	30	3.96
	BUK7K18-40E	40	19		24	3.96
	BUK9K25-40E	40	24	29	18	4.68
	BUK7K25-40E	40	25			4.68
LFPAK33 (SOT1210) 	**BUK7M3R3-40H**	40	3.3			
	BUK9M3R3-40H	40		3.3		
	BUK7M4R3-40H	40	4.3			
	BUK9M4R3-40H	40		4.3		
	BUK7M5R0-40H	40	5			
	BUK9M5R0-40H	40		5		
	BUK7M6R0-40H	40	6			
	BUK9M6R0-40H	40		6		
	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M6R7-40H	40	6.7			
	BUK9M6R7-40H	40		6.7		
	BUK7M8R0-40E	40	8		69	2
	BUK7M8R5-40H	40	8			
	BUK9M8R5-40H	40		8		
	BUK7M10-40E	40	10		56	2.43
	BUK7M12-40E	40	12		48	2.75
	BUK7M9R5-40H	40	9.5			
	BUK9M9R5-40H	40		9.5		
	BUK7M21-40E	40	21		33	3.4
	BUK7M11-40H	40	11			
	BUK9M11-40H	40		11		
	BUK7M45-40E	40	45		19	4.8
	BUK9M14-40E	40	11	14	44	2.75
	BUK9M24-40E	40	20	24	30	3.4
	BUK7M15-40H	40	15			
	BUK9M15-40H	40		15		
	BUK7M20-40H	40	20			
	BUK9M20-40H	40		20		
	BUK9M52-40E	40	40	52	18	4.8
	BUK9M7R2-40E	40	5.8	7.2	70	1.89
	BUK9M9R1-40E	40	7.3	9.1	64	2
	BUK9M11-40E	40	9	11	53	2.43

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	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
	BUK9628-55A	55	25	28	42	1.5
	BUK9635-55A	55	32	35	34	1.8
	BUK7635-55A	55	35		35	1.7
	BUK9675-55A	55	68	75	20	2.4
	BUK7675-55A	55	75		20	2.4
	BUK962R5-60E	60	2.3	2.5	120	0.43
	BUK762R4-60E	60	2.4		120	0.43
	BUK962R8-60E	60	2.5	2.8	120	0.46
	BUK762R6-60E	60	2.6		120	0.46
	BUK963R3-60E	60	3	3.3	120	0.51
	BUK763R1-60E	60	3.1		120	0.51
	BUK964R2-60E	60	3.9	4.2	100	0.57
	BUK763R9-60E	60	3.9		100	0.57
	BUK964R8-60E	60	4.4	4.8	100	0.64
	BUK764R4-60E	60	4.5		100	0.64
	BUK966R5-60E	60	5.9	6.5	75	0.82
	BUK766R0-60E	60	6		75	0.82
	BUK969R0-60E	60	8	9	75	1.09
	BUK768R3-60E	60	8.3		75	1.09
	BUK9614-60E	60	13	14	56	1.56
	BUK7613-60E	60	13		58	1.56
I²PAK (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

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56; Power-SO8 (SOT669) 	BUK9Y4R8-60E	60	4.1	4.8	100	0.63
	BUK7Y4R8-60E	60	4.8		100	0.63
	BUK9Y6R0-60E	60	5.2	6	100	0.77
	BUK9Y7R2-60E	60	5.6	7.2	100	0.9
	BUK7Y6R0-60E	60	6		100	0.77
	BUK7Y7R2-60E	60	7.2		100	0.9
	BUK9Y8R7-60E	60	7.5	8.7	86	1.02
	BUK7Y8R7-60E	60	8.7		87	1.02
	BUK9Y15-60E	60	13	15	53	1.58
	BUK7Y15-60E	60	15		53	1.59
	BUK9Y25-60E	60	22	25	34	2.31
	BUK7Y25-60E	60	25		34	2.31
	BUK9Y43-60E	60	38	43	22	3.33
	BUK7Y43-60E	60	43		22	3.33
	BUK9Y59-60E	60	52	59	17	4.03
	BUK7Y59-60E	60	59		17	4.03
LFPAK56D (SOT1205) 	BUK7K12-60E	60	9.3			2.21
	BUK7K13-60E	60	10		40	2.36
	BUK9K12-60E	60	11	12	35	2.21
	BUK9K13-60E	60	12	13	40	2.36
	BUK7K17-60E	60	14		30	2.84
	BUK9K17-60E	60	16	17	26	2.84
	BUK7K35-60E	60	30		21	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK7K52-60E	60	45		15	4.68
	BUK9K52-60E	60	49	55	16	4.68
LFPAK33 (SOT1210) 	BUK7M9R9-60E	60	9.9		60	1.89
	BUK9M12-60E	60	11	12	54	1.89
	BUK7M12-60E	60	12		53	2
	BUK9M15-60E	60	13	15	47	2
	BUK7M15-60E	60	15		43	2.43
	BUK9M19-60E	60	17	19	38	2.43
	BUK7M19-60E	60	19		36	2.75
	BUK9M24-60E	60	21	24	32	2.75
	BUK7M33-60E	60	33			3.4
	BUK9M42-60E	60	37	42	22	3.4
	BUK7M42-60E	60	42		20	4.17
	BUK9M53-60E	60	46	53	17	4.17
	BUK7M67-60E	60	67		14	4.8
	BUK9M85-60E	60	73	85	13	4.8
SOT223 	BUK9832-55A/CU	55	29	32		
	BUK9880-55A/CU	55	73	80		
	BUK7880-55A/CU	55	80			
	BUK98150-55A/CU	55	137	150		
	BUK78150-55A/CU	55	150			

N-channel 75V-80V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (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
D²PAK (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
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	12	4.03
	BUK7Y98-80E	80	98		12	4.03
LFPAK56D (SOT1205) 	BUK7K15-80E	80	15		23	2.21
	BUK7K17-80E	80	17		21	2.36
	BUK7K23-80E	80	23		17	2.21
	BUK9K20-80E	80	17	19	23	2.84
	BUK9K22-80E	80	19	22	21	2.36
	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 (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78) 	BUK755R4-100E	100	5.2		120	0.43
D²PAK (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
I²PAK (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 (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205) 	BUK7K29-100E	100	25		29.5	2.21
	BUK9K29-100E	100	27	29	30	2.21
	BUK7K32-100E	100	28		29	2.36
	BUK9K32-100E	100	31	33	26	2.36
	BUK7K45-100E	100	38		21	2.84
	BUK9K45-100E	100	42	45	21	2.84
	BUK7K89-100E	100	83		13	3.96
	BUK9K89-100E	100	85	89	13	3.96
	BUK7K134-100E	100	121		9.8	4.68
	BUK9K134-100E	100	154	159	8.5	4.68
LFPAK33 (SOT1210) 	BUK9M34-100E	100	34	34	29	1.89
	BUK9M43-100E	100	43	44	26	1.88
	BUK9M120-100E	100	119	120	12	3.4
	BUK9M156-100E	100	150	156	9.3	4.17
SOT223 	BUK98180-100A/CU	100	173	180	4.6	
	BUK9875-100A/CU	101	72	75	7	

P-channel 30V-60V automotive power MOSFETs

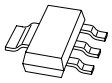
Types in **bold red** are in development

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56 	**BUK6Y12-30P**	30	12	67	1.4
	BUK6Y20-30P	30	20	41	2.3
	BUK6Y15-40P	40	15	63	1.4
	BUK6Y25-40P	40	25	40	2.3
	BUK6Y32-60P	60	32	39	1.4
	BUK6Y57-60P	60	57	23	2.3

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

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (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	
		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	-	
		20	5.5	1	2.5	2	17	22	-	-	
			3.9	1	2.5	2	30	39	-	-	
			3.7	1	2.5	2	54	70	-	-	
	40	15	19	1.4	2.1	-	18	22	-	-	
		20	19	1.3	2.7	-	17	22	-	-	
			19	2.4	4	-	18	-	-	-	
			2.7	1	2.5	1	64	79	-	-	
			2.5	1	2.5	1	95	120	-	-	
	60	20	13	1.3	2.7	-	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	-	-	
			9	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	-	-	
			2.8	1.3	2.7	2	80	92	-	-	
			1.9	1.3	2.7	2	175	195	-	-	
			1.1	1.3	2.7	2	345	390	-	-	
	100	20	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	
			2	0.5	1.1	-	-	100	155	210	
			2.3	0.45	0.95	-	-	120	150	200	
		12	10.3	0.47	0.9	2	-	19	22	28	
			5	0.47	0.9	2.3	-	28	31	36	
			5.3	0.75	1.25	2	-	28	42	-	
			5	0.47	0.9	2	-	39	45	56	
			5.7	0.75	1.25	2	-	41	56	-	
			3.5	0.75	1.25	-	-	48	71	-	
			3.3	0.75	1.25	2	-	67	99	-	
			2.4	1	2.5	2	-	97	147	-	
	30	20	8.8	1	2.5	-	24	32	-	-	
			4.2	1	3	2	35	47	-	-	
	40	20	1.5	1	2.5	1	180	220	-	-	
			14	1.4	2.7	-	30	45			
	60	20	8	1.9	3.2	-	95	125			

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	DFN2020MD-6 (SOT1220)	DFN2020D-6 (SOT1118D)	DFN1010D-3 (SOT1215)
						
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65	1.1 x 1.0 x 0.37
	1700	600	250	1250	1250	1000
			PMV28UNEA			
				PMPB10XNEA		
				PMPB12UNEA		
			PMV20XNEA	PMPB20XNEA		
				PMPB13XNEA		
				PMPB29XNEA		
					PMDPB56XNEA	
			PMV25ENEA			
			PMV50ENEA			
			PMV100ENEA			
				BUK9D23-40E		
				BUK6D23-40E		
				BUK7D25-40E		
			PMV65ENEA			
			PMV130ENEA			
				BUK6D43-60E		
				PMPB55ENEA		
			PMV55ENEA			
				PMPB85ENEA		
			PMV120ENEA			
			PMV230ENEA			
			PMV450ENEA			
				PMPB95ENEA		
				PMPB215ENEA		
						PMXB360ENEA
	PMT280ENEA		PMV280ENEA			
	PMT560ENEA					
				PMPB15XPA		
			PMV27UPEA			
			NX2301P			
			BSH205G2			
				PMPB20XPEA		
				PMPB29XPEA		
			PMV30XPEA			
				PMPB43XPEA		
		PMN42XPEA				
			PMV48XPA			
			PMV65XPEA			
			PMV100XPEA			
				PMPB27EPA		
			PMV50EPEA	PMPB50EPEA		
			PMV250EPEA			
				BUK6D43-40P		
				BUK6D120-60P		

MOSFETs

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

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	30	8	0.4	0.6	1.1	2	-	1000	1400	2000	
	60	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 (mΩ) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	30	12	4	0.75	1.25	2	-	55	72	-	
N	20	8	0.73	0.5	0.95	2	-	290	420	600	
P			0.5	0.5	1.3	2	-	670	1200	1800	

Small-signal MOSFETs complementary

Package	Type	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	V_{GSth} min (V)	V_{GSth} max (V)
SOT363 (SC-88) (2.0 x 1.25 x 0.95) 	NX3008CBKS	N	30	8	0.35	0.6	1.1
		P	30	8	0.2	0.6	1.1

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

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

	t_{on} typ (ns)	t_{off} typ (ns)	QG typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =					
					10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-


AIRBAG

Logic 5

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						•	•	•	
74AHCU04-Q100	Hex inverter; unbuffered	2.0 - 5.5	± 8	2.4	-40~125	•	•	•						
74ALVC125-Q100	Quad buffer/line driver (3-state)	1.65 - 3.6	± 24	1.8	-40~85	•	•	•						
74ALVC541-Q100	Octal buffer/line driver (3-state)	1.65 - 3.6	± 24	2.3	-40~85						•	•	•	
74HC05-Q100	Hex inverter; open-drain	2.0 - 6.0	5.2	11	-40~125	•	•	•						
74HC04-Q100	Hex inverter	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•						
74HCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 4.0	8.0	-40~125	•	•	•						
74HC125-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125	•	•							
74HC126-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125	•	•							
74HC240-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	9.0	-40~125						•	•	•	
74HC244-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•	•	•	
74HC365-Q100	Hex buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125				•	•				
74HCT365-Q100	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HC366-Q100	Hex inverter/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125				•	•				
74HCT366-Q100	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
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									•
74LVCU04A-Q100	Hex inverter; unbuffered	1.2 - 3.6	± 24	2.0	-40~125	•	•							
74LVT04-Q100	Hex inverter	2.7 - 3.6	-20 / +32	2.6	-40~85	•	•							
74LVT244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74LVTH244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74VHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74VHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74VHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74VHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
HEF4049B-Q100	Hex inverter/line driver	3.0 - 15.0	-3 / +20	20	-40~85				•					
HEF4050B-Q100	Hex buffer/line driver	3.0 - 15.0	-3 / +20	40	-40~85				•					
HEF4069UB-Q100	Hex inverter; unbuffered	3.0 - 15.0	± 3.4	15	-40~85	•	•							

Counters/Frequency dividers

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74HC161-Q100	Presettable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	± 5.2	19	-40~125				•	•	
74HC163-Q100	Presettable synchronous 4-bit binary counter; synchronous reset	2.0 - 6.0	± 5.2	17	-40~125				•	•	
74HCT163-Q100	Presettable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC193-Q100	Presettable synchronous 4-bit binary up/down counter	2.0 - 6.0	± 5.2	20	-40~125				•	•	
74HCT193-Q100	Presettable synchronous 4-bit binary up/down counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC393-Q100	Dual 4-bit binary ripple counter	2.0 - 6.0	± 5.2	12	-40~125	•	•	•			
74HCT393-Q100	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125	•	•	•			
74HC4017-Q100	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	± 5.2	18	-40~125				•	•	•
74HCT4017-Q100	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125				•		•
74HC4020-Q100	14-stage binary ripple counter	2.0 - 6.0	± 5.2	11	-40~125				•	•	•
74HCT4020-Q100	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	15	-40~125				•	•	•
74HC4024-Q100	7-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40~125	•	•				
74HC4040-Q100	12-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40~125				•	•	•
74HCT4040-Q100	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	16	-40~125				•	•	•
74HC4060-Q100	14-stage binary ripple counter with oscillator	2.0 - 6.0	± 5.2	31	-40~125				•	•	•
74HCT4060-Q100	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	± 4.0	31	-40~125				•		•
74HC4520-Q100	Dual 4-bit synchronous binary counter	2.0 - 6.0	± 5.2	24	-40~125				•		
74HCT4520-Q100	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	± 4.0	24	-40~125				•		
74LV393-Q100	Dual 4-bit binary ripple counter	1.0 - 3.6	± 6	12	-40~125	•	•				
HEF4017B-Q100	5-stage Johnson decade counter	3.0 - 15	± 2.4	40	-40~85				•		
HEF4020B-Q100	14-stage binary ripple counter	3.0 - 15	± 2.4	30	-40~85				•		
HEF4040B-Q100	12-stage binary ripple counter	3.0 - 15	± 2.4	35	-40~85				•		
HEF4060B-Q100	14-stage binary ripple counter with oscillator	3.0 - 15	± 2.4	50	-40~85				•		
HEF4541B-Q100	Programmable timer	3.0 - 15	- 4/ + 2.7	38	-40~85	•					
HEF4520B-Q100	Dual 4-bit synchronous binary counter	3.0 - 15	± 2.4	15	-40~85				•		

Bus switches

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} (°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} (°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	•	•	•
74LVC11-Q100	Triple 3-input AND gate	1.2 - 3.7	± 24	3.7	-40~125	•	•	
74LVC32A-Q100	Quad 2-input OR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74VHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74VHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•

Gates

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
74VHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74VHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	
74VHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
HEF4001B-Q100	Quad 2-input NOR gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4011B-Q100	Quad 2-input NAND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4030B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4070B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4081B-Q100	Quad 2-input AND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4082B-Q100	Dual 4-input AND gate	3.0 - 15	± 2.4	25	-40~85	•		

Latches/Registered drivers

Type number	Description	Features				Package (suffix)						
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74AHC573-Q100	Octal D-type transparent latch (3-state)	2.0 - 5.5	± 8	4.2	-40~125				•	•	•	
74AHCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.9	-40~125				•	•	•	
74HC259-Q100	8 bit addressable latch	2.0 - 6.0	± 5.2	18	-40~125	•	•	•				
74HCT259-Q100	8 bit addressable latch; TTL-enabled	4.5 - 5.5	± 4	20	-40~125	•	•	•				
74HC373-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	12	-40~125				•	•	•	
74HCT373-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	14	-40~125				•	•	•	
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

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

Multivibrators

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

Schmitt-triggers

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

Shift registers

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	I_O (mA)	t_{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				•	•			
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				•	•	•		

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)
74VHC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	± 8	4.0	-40~125				•	•	•		
74VHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
HEF4014B-Q100	8-bit shift register with synchronous parallel enable	3.0 - 15	± 2.4	40	-40~85				•				
HEF4021B-Q100	8-bit shift register with asynchronous parallel load	3.0 - 15	± 2.4	40	-40~85				•	•			
HEF4094B-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	3.0 - 15	± 2.4	50	-40~85				•	•			
HEF4794B-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85				•				
HEF4894B-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85							•	•
NPIC6C595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596A-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	2.3 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C4894-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.5 - 15	-100	105	-40~125							•	•

Transceivers

Type number	Description	Features				Package (suffix)			
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74AHC245-Q100	Octal transceiver (3-state)	2.0 - 5.5	± 8	3.5	-40~125	•	•	•	
74AHCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 8	5.0	-40~125	•	•	•	
74AVC16245-Q100	16-bit transceiver (3-state)	1.2 - 3.6	± 12	2.0	-40~85				•
74HC245-Q100	Octal transceiver (3-state)	2.0 - 6.0	± 7.8	7.0	-40~125	•	•	•	
74HCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 6	10	-40~125	•	•	•	
74LVC245A-Q100	Octal transceiver (3-state)	1.2 - 3.6	± 24	2.9	-40~125	•	•	•	
74LVCH245A-Q100	Octal transceiver with bus hold (3-state)	1.2 - 3.6	± 24	2.9	-40~125	•	•	•	
74LVC162245A-Q100	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	± 12	3.3	-40~125				•

Q100 mini logic functions and packages

Analog switches

Type number	Description	Features					Package (suffix)						
		Configuration	V_{CC} (V)	R_{ON} (Ω)	R_{ON}(FLAT) (Ω)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT886 (GM)	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						•	•

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)	SOT886 (GM)	SOT1202 (GS)	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	•	•						
74AHCT1G04-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	•							
74AHCT1G17-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	•	•						
74AHCT1G125-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	•	•						
74AHCT1G126-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							•	•
74AHCT2G125-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							•	•
74AHCT2G126-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							•	•
74AHCT2G241-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							•	•
74AHCT3G04-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)	SOT886 (GM)	SOT1202 (GS)	SOT505-2 (DP)	SOT765-1 (DC)
74HC2G04-Q100	Dual inverter	2.0 - 6.0	± 5.2	8.0	-40~125			•	•				
74HCT2G04-Q100	Dual inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125			•	•				
74HC2G34-Q100	Dual buffer	2.0 - 6.0	± 5.2	9.0	-40~125			•	•				
74HCT2G34-Q100	Dual buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125			•	•				
74HC2G125-Q100	Dual buffer/line driver (3-state)	2.0 - 6.0	± 5.2	10	-40~125							•	•
74HCT2G125-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 4.0	12	-40~125							•	•
74HC3G04-Q100	Triple inverter	2.0 - 6.0	± 5.2	8.0	-40~125							•	•
74HCT3G04-Q100	Triple inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125							•	•
74HC3G07-Q100	Triple buffer; open-drain	2.0 - 6.0	5.2	9.0	-40~125							•	•
74HCT3G07-Q100	Triple buffer; open-drain; TTL-enabled	4.5 - 5.5	4	9.0	-40~125							•	•
74HC3G34-Q100	Triple buffer	2.0 - 6.0	± 5.2	9.0	-40~125							•	•
74HCT3G34-Q100	Triple buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125								•
74LVC1G04-Q100	Single inverter	1.65 - 5.5	± 32	2.0	-40~125	•	•						
74LVC1G06-Q100	Single inverter; open-drain	1.65 - 5.5	32	2.3	-40~125	•	•						
74LVC1G07-Q100	Single buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•				•		
74LVC1G34-Q100	Single buffer	1.65 - 5.5	± 32	2.0	-40~125	•	•						
74LVC1G125-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.1	-40~125	•	•			•			
74LVC1G126-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.0	-40~125	•	•						
74LVC1GU04-Q100	Single inverter; unbuffered	1.65 - 5.5	± 32	1.6	-40~125	•	•						
74LVC2G04-Q100	Dual inverter	1.65 - 5.5	± 32	2.7	-40~125			•	•		•		
74LVC2G06-Q100	Dual inverter; open-drain	1.65 - 5.5	32	2.3	-40~125			•	•				
74LVC2G07-Q100	Dual buffer; open-drain	1.65 - 5.5	32	2.6	-40~125			•	•				
74LVC2G125-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.3	-40~125							•	•
74LVC2G126-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.4	-40~125							•	•
74LVC2G240-Q100	Dual inverter/line driver (3-state)	1.65 - 5.5	± 32	2.5	-40~125							•	•
74LVC2G241-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.6	-40~125							•	•
74LVC2GU04-Q100	Dual inverter; unbuffered	1.65 - 5.5	± 32	2.3	-40~125			•	•	•			
74LVC3G04-Q100	Triple inverter	1.65 - 5.5	± 32	2.7	-40~125							•	•
74LVC3G07-Q100	Triple buffer; open-drain	1.65 - 5.5	32	2.1	-40~125							•	•
74LVC3G34-Q100	Triple buffer	1.65 - 5.5	± 32	2.2	-40~125							•	•

Digital decoders/Demultiplexers

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

Digital multiplexers

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)	SOT886 (GM)
74AUP1G157-Q100	Low-power 2-input multiplexer	1.1 - 3.6	± 1.9	3.2	-40~125			•
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)	SOT833-1 (GT)
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)	SOT886 (GM)	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	•	•					
74AHCT1G00-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	•	•					
74AHCT1G02-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	•	•					
74AHCT1G08-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	•	•					
74AHCT1G32-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	•	•					
74AHCT1G86-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						•	•
74AHCT2G00-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						•	•
74AHCT2G08-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						•	•
74AHCT2G32-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	ual 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)	SOT886 (GM)	SOT505-2 (DP)	SOT765-1 (DC)	SOT1203 (GS)
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)	SOT886 (GM)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125	•	•					
74AHCT1G14-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						•	•
74AHCT3G14-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)	SOT886 (GM)	SOT1202 (GS)	SOT505-2 (DP)	SOT765-1 (DC)	SOT833-1 (GT)	SOT1203 (GS)	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						•			

Nomenclatures standard logic functions

74 XXX XXX XXX

Logic family
AHC(T)
ALVC
ALVT
AUP
AVC(M)
CBT(D)
CBTLV(D)
HC(T)
HEF4000B
LV
LVC
LVT
NPIC
VHC(T)
XC7

Function number

Package type
BQ DQFN
BX DQFN
D SO
DB SSOP
DC VSSOP
DG TSSOP
DGG TSSOP
DL SSOP
DP TSSOP
FC BGA
EV BGA
GU DQFN
P TSSOP
T SO
TS SSOP
TT TSSOP

Nomenclatures mini logic functions

74 XXX XG XT XXX XXX

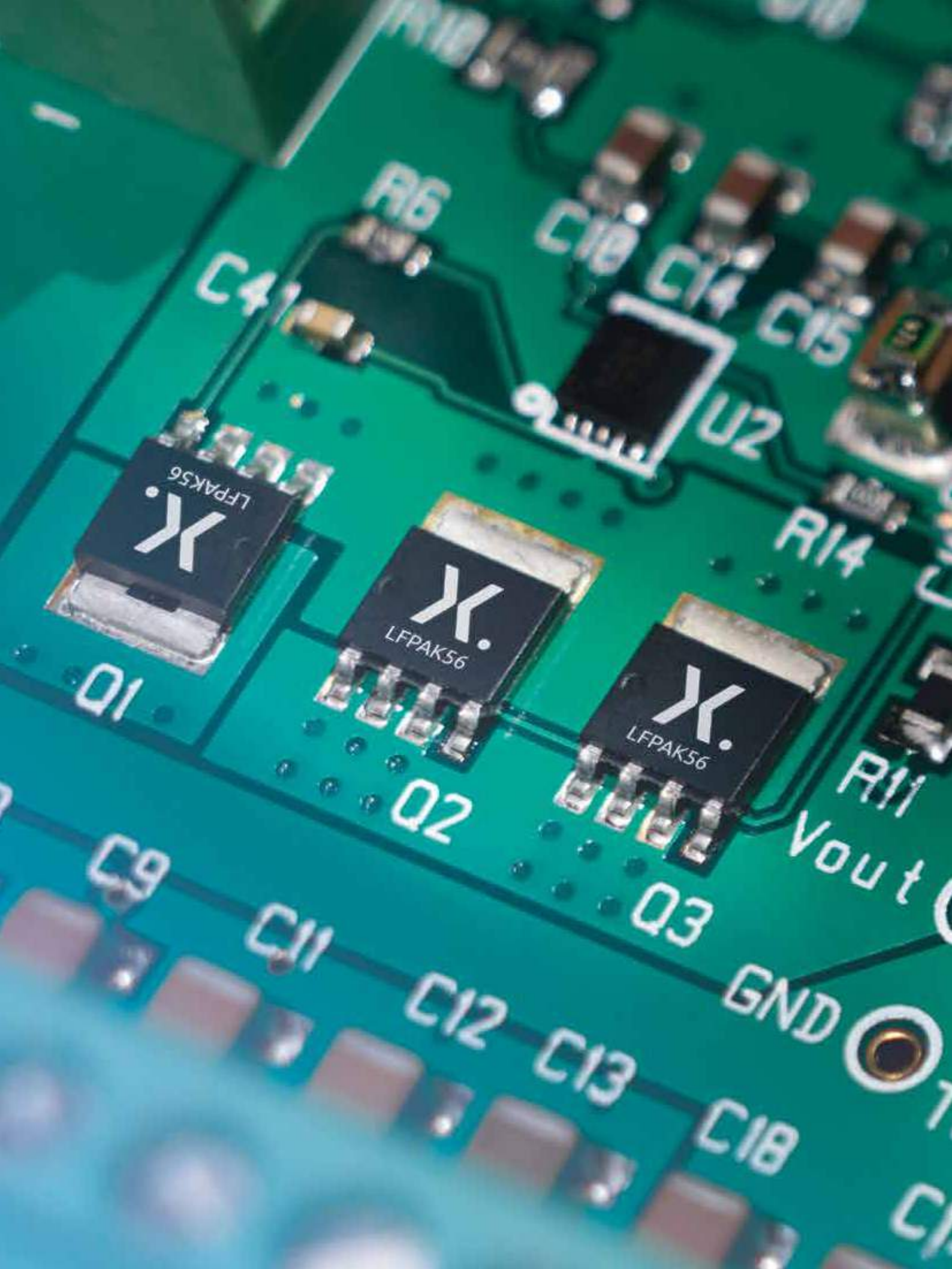
Logic family
AHC(T)
AUP
AVC(M)
AXP
CBT(D)
CBTLV(D)
HC(T)
LVC
XC7

Gate format
1G Single-gate
2G Dual-gate
3G Triple-gate

Translator format
1T Single-translator
2T Dual-translator
3T Triple-translator
4T Quad-translator

Function number

Package type
DC PicoGate
DP PicoGate
GD MicroPak
GF MicroPak
GM MicroPak
GN MicroPak
GS MicroPak
GT MicroPak
GV PicoGate
GW PicoGate
GX MicroPak


R6
C10
C14
C15
C4
U2
R14
LFPAK56
LFPAK56
LFPAK56
Q1
Q2
Q3
R11
Vout
C9
C11
C12
C13
C18
GND

Packages 6

Package details and packing methods SMD

Package details							Packing methods																						
									Packing quantity and ordering code (12NC ending)																				
Pins	Package	Package size (l x w x h) (mm)	Package outer dimensions (lxw) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (dxw) (mm)	800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000
2	DFN1006D-2 (SOD882D)	1 x 0.6 x 0.4	1 x 0.6	0.6	0.65		2 mm pitch. 8 mm tape and reel	180 × 8													-315				
	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5	1 x 0.6	0.6	0.65		2 mm pitch. 8 mm tape and reel	180 × 8													-315				
	DFN1608D-2 (SOD1608)	1.6 x 0.8 x 0.37	1.6 x 0.8	1.28	0.94		2 mm pitch. 8 mm tape and reel	180 × 8											-315						
	SC-90 (SOD323F)	1.7 x 1.25 x 0.7	2.65 x 2.35	6.23	2.2		4 mm pitch. 8 mm tape and reel	180 × 8							-115									-145	
								286 x 8													-135				-301
	SOD323	1.7 x 1.25 x 0.95	2.65 x 2.35	6.23	1.3		4 mm pitch. 8 mm tape and reel	180 × 8							-115									-145	
								286 x 8													-135				
	SOD123F	2.6 x 1.6 x 1.1	3.5 x 2.1	7.35	2.8		4 mm pitch. 8 mm tape and reel	180 × 8							-115										
	CFP3 (SOD123W)	2.6 x 1.7 x 1	3.5 x 2.1	7.35	2.8		4 mm pitch. 8 mm tape and reel	180 × 8							-115										
	SOD123	2.675 x 1.6 x 1.15	3.6 x 2.1	7.56	3.27		4 mm pitch. 8 mm tape and reel	180 × 8							-115										
								330 x 8													-118				
	CFP5 (SOD128)	3.8 x 2.5 x 1	4.7 x 2.5	11.75	4		4 mm pitch. 12 mm tape and reel	180 × 12							-115										
3	DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37	1 x 0.6	0.6	0.35		2 mm pitch. 8 mm tape and reel	180 × 8													-315				
	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48	1 x 0.6	0.6	0.35		2 mm pitch. 8 mm tape and reel	180 × 8													-315				
	DFN1010D-3 (SOT1215)	1.1 x 1 x 0.37	1.1 x 1	1.1	0.75		4 mm pitch. 8 mm tape and reel	180 × 8									-147								
	D2PAK (SOT404A)	11 x 10 x 4.3	15.3 x 10	153	2.54		16 mm pitch. 24 mm tape and reel	330 x 24	-118																
	D2PAK (SOT404)	11 x 10 x 4.3	15.3 x 10	153	2.54		16 mm pitch. 24 mm tape and reel	330 x 24	-118																
	SC-70 (SOT323)	2 x 1.25 x 0.95	2.1 x 2	4.2	1.3		4 mm pitch. 8 mm tape and reel	180 × 8							-115						-135				-300
	DFN2020-3 (SOT1061)	2 x 2 x 0.65	2 x 2	4	1.3		4 mm pitch. 8 mm tape and reel	180 x 8							-115 -147										
								330 x 8													-135				
	DFN2020D-3 (SOT1061D)	2 x 2 x 0.65	2 x 2	4	1.3		4 mm pitch. 8 mm tape and reel	180 × 8							-115										
	TO-236AB (SOT23)	2.9 x 1.3 x 1	2.3 x 1.3	2.99	1.9		4 mm pitch. 8 mm tape and reel	180 × 8							-215									-185	
								286 x 8													-235				-300
	CFP15 (SOT1289)	5.8 x 4.3 x 0.78	6.5 x 4.3	27.95	2.13		8 mm pitch. 12 mm tape and reel	180 × 12			-146														
								330 x 12									-139								
4	SOT143B	2.9 x 1.3 x 1	2.9 x 2.3	6.67	1.9		4 mm pitch. 8 mm tape and reel	180 × 8							-215										
								286 x 8													-235				
	LFPAK56E; Power-SO8 (SOT1023)	4.58 x 5.13 x 1.03	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 × 12			-115														
	LFPAK56; Power-SO8 (SOT669)	4.9 x 4.45 x 1	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 × 12			-115														
	SC-73 (SOT223)	6.5 x 3.5 x 1.65	7 x 6.5	45.5	4.6		8 mm pitch. 12 mm tape and reel	180 × 12		-115															
								330 x 12								-135									
	LFPAK88 (SOT1235)	6.3 x 8 x 1.75	8 x 8	64	2		12 mm pitch. 16 mm tape and reel	330 x 16						-118											

Package details and packing methods SMD

Package details							Packing methods																							
Pins	Package	Package size (l x w x h) (mm)	Package outer dimensions (lxw) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (dxw) (mm)	Packing quantity and ordering code (12NC ending)																					
									800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000
5	TSSOP5 (SOT353)	2 x 1.25 x 0.95	2.1 x 2	4.2	1.3		4 mm pitch. 8 mm tape and reel	180 × 8							-115													
								286 × 8													-135						
	TSSOP5 (SOT353-1)	2.1 x 1.25 x 0.95	2.1 x 2	4.2	0.65		4 mm pitch. 8 mm tape and reel	180 × 8							-125													
	TSOP5 (SOT753)	2.9 x 1.5 x 1	2.9 x 2.75	8	0.95		4 mm pitch. 8 mm tape and reel	180 × 8							-125													
6	XSON6 (SOT891)	1 x 1 x 0.5	1 x 1	1	0.35		4 mm pitch. 8 mm tape and reel	180 × 8									-125											
	DFN1010B-6 (SOT1216)	1.1 x 1.0 x 0.37	1.1 x 0.8	0.88	0.75		4 mm pitch. 8 mm tape and reel	180 × 8									-147											
	XSON6 (SOT886)	1.45 x 1 x 0.5	1.45 x 1	1.45	0.5		4 mm pitch. 8 mm tape and reel	180 × 8									-115 -125 -132											
	TSSOP6 (SOT363)	2.1 x 1.25 x 0.95	2.1 x 2	4.2	0.65		4 mm pitch. 8 mm tape and reel	180 × 8							-125						-135						
	DFN2020-6 (SOT1118)	2 x 2 x 0.65	2 x 2	4	0.65		4 mm pitch. 8 mm tape and reel	180 × 8							-115													
	DFN2020D-6 (SOT1118D)	2 x 2 x 0.65	2 x 2	4	0.65		4 mm pitch. 8 mm tape and reel	180 × 8							-115													
	DFN2020MD-6 (SOT1220)	2 x 2 x 0.65	2 x 2	4	0.65		4 mm pitch. 8 mm tape and reel	180 × 8							-125													
	TSOP6 (SOT457)	2.9 x 1.5 x 1	2.9 x 2.75	7.98	0.95		4 mm pitch. 8 mm tape and reel	180 × 8							-115						-135						
8	VSSOP8 (SOT765-1)	2 x 2.3 x 1	2 x 3.1	6.2	0.5		4 mm pitch. 8 mm tape and reel	180 × 8							-125													
	LFPAK33 (SOT1210)	2.7 x 3.4 x 0.9	3.3 x 3.3	10.9	0.65		8 mm pitch. 12 mm tape and reel	180 × 12			-115																	
	TSSOP8 (SOT505-2)	3.0 x 3.0 x 1.1	3 x 4	12	0.65		4 mm pitch. 12 mm tape and reel	180 × 12							-125													
	LFPAK56D (SOT1205)	4.7 x 5.3 x 1.05	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 × 8			-115																	
	SO8 (SOT96-1)	4.9 x 3.9 x 1.75	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 × 12		-115		-112		-118													
10	DFN2510-10 (SOT1165-1)	2.5 x 1 x 0.5	2.5 x 1	2.5	0.5		4 mm pitch. 8 mm tape and reel	180 × 8									-115											
	TSSOP10 (SOT552-1)	3 x 3 x 1.1	3 x 4.9	14.7	0.5		8 mm pitch. 12 mm tape and reel	330 × 12						-118													
14	DHVQFN14 (SOT762-1)	3.0 x 2.5 x 1	3 x 2.5	7.5	0.5		4 mm pitch. 12 mm tape and reel	180 × 12							-115													
	TSSOP14 (SOT402-1)	5 x 4.4 x 1.1	6.4 x 5	32	0.65		8 mm pitch. 12 mm tape and reel	330 x 12					-112	-118													
	SO14 (SOT108-1)	8.65 x 3.9 x 1.75	8.65 x 6	51.9	1.27		8 mm pitch. 16 mm tape and reel	330 × 16						-118													
16	DHVQFN16 (SOT763-1)	3.5 x 2.5 x 1.0	3.5 x 2.5	8.8	0.5		4 mm pitch. 12 mm tape and reel	180 × 12							-115													
	TSSOP16 (SOT403-1)	5 x 4.4 x 1.1	5 x 6.4	32	0.65		8 mm pitch. 12 mm tape and reel	330 x 12					-112	-118													
	SO16 (SOT109-1)	9.9 x 3.9 x 1.35	9.9 x 6	59.4	1.27		8 mm pitch. 16 mm tape and reel	330 × 16		-652				-139													

Package details and packing methods SMD

Package details							Packing methods																								
Pins	Package	Package size (l x w x h) (mm)	Package outer dimensions (lxw) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (dxw) (mm)	Packing quantity and ordering code (12NC ending)																						
									800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000				
20	SO20 (SOT163-1)	12.8 x 7.5 x 2.65	12.8 x 10.3	131.8	1.27		12 mm pitch. 24 mm tape and reel	330 × 24				-652																		
	DHVQFN20 (SOT764-1)	4.5 x 2.5 x 1.0	4.5 x 2.5	11.3	0.5		4 mm pitch. 12 mm tape and reel	180 x 12							-115														
	TSSOP20 (SOT360-1)	6.5 x 4.4 x 1.1	6.5 x 6.4	41.6	0.65		8 mm pitch. 16 mm tape and reel	330 x 16				-112		-118		-134														
24	SO24 (SOT137-1)	15.4 x 7.5 x 2.65	15.4 x 10.3	158.6	1.27		12 mm pitch. 24 mm tape and reel	330 × 16		-118	-112																			
	DHVQFN24 (SOT815-1)	5.5 x 3.5 x 1	5.5 x 3.5	19.3	0.5		8 mm pitch. 12 mm tape and reel	330 x 12							-118														
	TSSOP24 (SOT355-1)	7.8 x 4.4 x 1.1	7.8 x 6.4	49.9	0.65		8 mm pitch. 16 mm tape and reel	330 × 16				-112		-118																
48	TSSOP48 (SOT362-1)	12.8 x 6.1 x 1.2	12.5 x 8.1	101.2	0.5		12 mm pitch. 24 mm tape and reel	330 x 24		-112		-118																		
	TVSOP48 (SOT480-1)	9.7 x 4.4 x 1.1	9.7 x 6.4	62.1	0.4		8 mm pitch. 16 mm tape and reel	330 × 16			-112																			
56	TSSOP56 (SOT364-1)	14 x 6.1 x 1.2	14 x 8.1	113.4	0.5		12 mm pitch. 24 mm tape and reel	330 × 24		-112		-518																		

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
3	SOT78 (TO-220)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	1000 pcs
	I2PAK (SOT226)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	1000 pcs

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
µ8FL	ON Semi	LFPAK33 (SOT1210)	8
µQFN-10L	ST	DFN2510A-10 (SOT1176)	10
µQFN-2L	ST	DFN1006-2 (SOD882)	2
6 Lead DFN	ON Semi	DFN2020-6 (SOT1118)	6
CMAK/ CMPAK	Renesas	SOT323	3
CMPAK/ CMAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CP4	Toshiba	SOT143B	4
CS6	Toshiba	DFN1010-6 (SOT891)	6
CST3	Toshiba	DFN1006-3 (SOT883)	3
CST3	Toshiba	DFN1006B-3 (SOT883B)	3
CTS2 (fSC)	Toshiba	DFN1006-2 (SOD882)	2
CTS2 (fSC)	Toshiba	DFN1006D-2 (SOD882D)	2
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ON Semi	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK-3	ON Semi	D2PAK (SOT404)	3
DFN1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1006H4-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1411*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
DFN-5	ON Semi	LFPAK56 (SOT669)	4
DFN-8	ON Semi	LFPAK56D (SOT1205)	8
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
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
EMT3	Rohm	DFN1006-3 (SOT883)	3
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
ESM	Toshiba	DFN1006-3 (SOT883)	3
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
H2PAK-2	ST	D2PAK (SOT404)	3
HSMT8	Rohm	LFPAK33 (SOT1210)	8
HSON-8	Renesas	LFPAK56 (SOT669)	4
HSON-8 Dual	Renesas	LFPAK56D (SOT1205)	8
HSOP8 (Dual)	Rohm	LFPAK56D (SOT1205)	8
HSOP8 (Single)	Rohm	LFPAK56 (SOT669)	4
HSOP8 (Single)	Rohm	LFPAK56E (SOT1023)	4
HUML2020L8 (Dual)	Rohm	DFN2020-6 (SOT1118)	6
HUML2020L8 (Single)	Rohm	DFN2020MD-6 (SOT1220)	6
I2PAK	ON Semi	I2PAK (SOT226)	3
I2PAK	ST	I2PAK (SOT226)	3

Type	Competitor	Nexperia	Pins/ Leads
KMD2	Rohm	DFN1608D-2 (SOD1608)	2
LDPAK(S)-(1)	Renesas	D2PAK (SOT404)	3
LFPAK	Renesas	LFPAK56 (SOT669)	5
LFPAK56, HSON-8	Renesas	LFPAK56E (SOT1023)	4
LG A 1.0 x 0.6mm	Texas Instruments	DFN1006B-3 (SOT883B)	3
LLP1006-2L	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2L	Vishay	DFN1006D-2 (SOD882D)	2
LLP1006-2M	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2M	Vishay	DFN1006D-2 (SOD882D)	2
LLP75-7L	Vishay	DFN1616-6 (SOT1189)	6
LPDS/LPTS	Rohm	D2PAK (SOT404)	3
LPTS	Rohm	D2PAK (SOT404)	3
LPTS/LPDS	Rohm	D2PAK (SOT404)	3
M-Flat	Toshiba	SOD128	2
Micro 3	Int. Rectifier	SOT23	3
Micro 6	Int. Rectifier	SOT457	6
MiCRO FOOT 0.8 x 0.8*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
MiCRO FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6
MicroFET	Fairchild	DFN2020MD-6 (SOT1220)	6
MicroFET 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
MP-25(K)	Renesas	TO-220 (SOT78)	3
MP-25SK	Renesas	I2PAK (SOT226)	3
MP-25ZT	Renesas	D2PAK (SOT404)	3
MPAK	Renesas	SOT23	3
MPAK	Renesas	SOT23	3
MPAK-4R	Renesas	SOT143B	4
MPT3	Rohm	SOT89	3
PG-TD SON-8	Infineon	LFPAK56 (SOT669)	5
PG-TD- SON-8	Infineon	LFPAK56E (SOT1023)	4
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO220-3	Infineon	TO-220 (SOT78)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power- Di5060-8	Diodes Inc	LFPAK56E (SOT1023)	4
PowerFLAT (6x5)	ST	LFPAK56E (SOT1023)	4
PowerFLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
PowerFLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
PowerFLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDI5	Diodes Inc.	CFP15 (SOT1289)	3
PowerFLAT (6 x 5)	ST	LFPAK56 (SOT669)	5
PowerFLAT (6 x 5)	ST	LFPAK56D (SOT1205)	5
PowerPAK 1212-8	Vishay	LFPAK33 (SOT1210)	8
PowerPAK 8x8L	Vishay	LFPAK88 (SOT1235)	4
PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPAK SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SO-8	Vishay	LFPAK56 (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8(L)	Vishay	LFPAK56E (SOT1023)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8
PW-Mini	Toshiba	SOT89	3
S08	Vishay	SOT96	8
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC70-3	AOS	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	AOS	SOT363	6
SC70-6	Fairchild	SOT363	6
SC70-6	Vishay	SOT363	6
SC70-6L	Semtech	SOT363	6
SC74 TSOP6	Infineon	SOT457	6
SC-74 TSOP-6	ON Semi	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC-88	ON Semi	SOT363	6
SC88/SC 7 0-6/SOT 363 6 LEAD	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC89-3	Fairchild	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Vishay	DFN1006-3 (SOT883)	3
S-Flat	Toshiba	SOD123F	2

Type	Competitor	Nexperia	Pins/ Leads
S-Flat	Toshiba	SOD123W	2
SLP1006P2	Semtech	DFN1006-2 (SOD882)	2
SLP1006P2T	Semtech	DFN1006D-2 (SOD882D)	2
SLP1006P3	Semtech	DFN1006-3 (SOT883)	3
SLP1006P3T	Semtech	DFN1006B-3 (SOT883B)	3
SLP1510N6	Semtech	DFN1410-6 (SOT886)	6
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1610P4	Semtech	DFN2510A-10 (SOT1176)	10
SLP1616P6	Semtech	DFN1616-6 (SOT1189)	6
SLP1713P8	Semtech	DFN1714-8 (SOT1166)	8
SLP1713P8	Semtech	DFN1714U-8 (SOT983)	8
SLP2513P12	Semtech	DFN2514-12 (SOT1167)	12
SLP3313P16	Semtech	DFN3314-16 (SOT1168)	16
SM6 VS-6	Toshiba	SOT457	6
SMA flat	ST	SOD128	2
SMD TO-263	Renesas	D2PAK (SOT404)	3
SMD6/SMT6	Rohm	SOT457	6
SMD6/SMZ6	Rohm	SOT457	6
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC TO-277A	Vishay	CFP15 (SOT1289)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPAK56 (SOT669)	5
SO-8 FL, DFN-5	ON Semi	LFPAK56E (SOT1023)	4
SO-8FL Dual	ON Semi	LFPAK56D (SOT1205)	8
SO-8FL Dual	ON Semi	LFPAK56 (SOT669)	4
SOD-123	ST	SOD123F	2
SOD-123-FL	ON Semi	SOD123F	2
SOD-123-FL	ON Semi	SOD123W	2
SOD323	Infineon	SOD323	2
SOD323	Semtech	SOD323	2
SOD323	Vishay	SOD323	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ON Semi	SOD323	2
SOD-323	ST	SOD323	2
SOD882	ST	DFN1006-2 (SOD882)	2
SOD882T	ST	DFN1006D-2 (SOD882D)	2
SOD923-2*	ON Semi	DFN1006-2 (SOD882)	2
SOIC-8 NB	ON Semi	SOT96	8
SON 2x2	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SON 3x3*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SOP / DSOP Advance	Toshiba	LFPAK56E (SOT1023)	4
SOP / DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP8	Rohm	SOT96	8

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
SOP-8	Renesas	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT063*	ON Semi	DFN1010B-6 (SOT1216)	6
SOT-143	Diodes Inc.	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT223	Diodes Inc.	SOT223	4
SOT223	Fairchild	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Vishay	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	Infineon	SOT223	4
SOT-223	ON Semi	SOT223	4
SOT-223	ON Semi	SOT223	4
SOT-223	ST	SOT223	4
SOT23	AOS	SOT23	3
SOT23	Diodes Inc.	SOT23	3
SOT23	Infineon	SOT23	3
SOT23	ON Semi	SOT23	3
SOT23	Semtech	SOT23	3
SOT23	ST	SOT23	3
SOT23	Vishay	SOT23	3
SOT-23	Diodes Inc.	SOT23	3
SOT-23	ON Semi	SOT23	3
SOT23-3	AOS	SOT23	3
SOT23-3	Diodes Inc.	SOT23	3
SOT23-3	ON Semi	SOT23	3
SOT23-5	AOS	SOT457	6
SOT23-5	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	ST	SOT457	6
SOT23-6L	Semtech	SOT457	6
SOT23F	Diodes Inc.	SOT23	3
SOT23F	Toshiba	SOT23	3
SOT26	Diodes Inc.	SOT457	6
SOT323	Diodes Inc.	SOT323	3
SOT323	Fairchild	SOT323	3
SOT323	Infineon	SOT323	3
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	SOT323	3
SOT353	Diodes Inc.	SOT353	5
SOT353	Diodes Inc.	SOT363	6
SOT353	Vishay	SOT353	5
SOT363	Diodes Inc.	SOT363	6
SOT363	Infineon	SOT363	6
SOT-363	Diodes Inc.	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3

Type	Competitor	Nexperia	Pins/ Leads
SOT523F	Fairchild	DFN1006-3 (SOT883)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Diodes Inc.	SOT89	3
SOT89	Infineon	SOT89	3
SOT-89	ON Semi	SOT89	3
SOT89-3L	Diodes Inc.	SOT89	3
SOT963	ON Semi	DFN1010-6 (SOT891)	6
SOT963*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
SRP-F	Renesas	SOD123W	2
SS CSP2	Toshiba	DFN1006-3 (SOT883)	3
SSD3/SST3	Rohm	SOT23	3
SSM	Toshiba	DFN1006-3 (SOT883)	3
SSOT3	Fairchild	SOT23	3
SSOT6	Fairchild	SOT457	6
SSOT6 FLMP	Fairchild	SOT457	6
SST3	Rohm	SOT23	3
SST3/SSD3	Rohm	SOT23	3
Stmite flat	ST	SOD123W	2
T0263	Diodes Inc.	D2PAK(SOT404)	3
T0263-3	Infineon	D2PAK (SOT404)	3
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO220	Infineon	TO-220 (SOT78)	3
TO-220	ST	TO-220 (SOT78)	3
TO-220	Toshiba	TO-220 (SOT78)	3
TO-220	Vishay	TO-220 (SOT78)	3
TO220-3	Diodes Inc.	TO-220 (SOT78)	3
TO-220-3	ON Semi	TO-220 (SOT78)	3
TO-220-3L	ON Semi	TO-220 (SOT78)	3
TO-220AB	Vishay	TO-220 (SOT78)	3
TO-220F-3FS	ON Semi	TO-220 (SOT78)	3
TO-220FM	Rohm	TO-220 (SOT78)	3
TO-220S	Renesas	D2PAK (SOT404)	3
TO-220SM	Toshiba	D2PAK (SOT404)	3
TO262	Infineon	I2PAK (SOT226)	3
TO-262	Renesas	I2PAK (SOT226)	3
TO-262	Vishay	I2PAK (SOT226)	3
TO-262-2L	ON Semi	I2PAK (SOT226)	3
TO-262-3L	ON Semi	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	3
TO-263	Renesas	D2PAK-7 (SOT427)	7
TO-263	Renesas	D2PAK (SOT404)	3
TO-263	Vishay	D2PAK (SOT404)	3
TO-263 3-lead	Vishay	D2PAK (SOT404)	3
TO-263-2L	ON Semi	D2PAK (SOT404)	3
TO-263AB	Vishay	D2PAK (SOT404)	3

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
To-LL	Infineon	LFPAK88 (SOT1235)	4
To-LL	ON Semi	LFPAK88 (SOT1235)	4
TSLP-2-1	Infineon	DFN1006-2 (SOD882)	2
TSLP-2-7/-17	Infineon	DFN1006D-2 (SOD882D)	2
TSLP-3-1, -15	Infineon	DFN1006B-3 (SOT883B)	3
TSLP-3-4	Infineon	DFN1006-3 (SOT883)	3
TSLP-9-1	Infineon	DFN2510A-10 (SOT 1176)	10
TSMT5*	Rohm	SOT457	6
TSMT6	Rohm	SOT457	6
TSNP-2-2	Infineon	DFN1608D-2 (SOD 1608)	2
TSON Advance	Toshiba	LFPAK33 (SOT1210)	8
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	SOT457	6
TSOP6	Vishay	SOT457	6
TSOP-6	Renesas	SOT457	6
TSOP-6/ TSOP6	Vishay	SOT457	6
TSST8*	Rohm	DFN2020MD-6 (SOT1220)	6
TUMT3	Rohm	SOT323	3
TUMT5*	Rohm	DFN2020-6 (SOT1118)	6
TUMT6*	Rohm	DFN2020-6 (SOT1118)	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
UDFN10 2.5 x 1, 0.5P	ON Semi	DFN2510A-10 (SOT1176)	10
UDFN12 2.5 x 1.35, 0.4P	ON Semi	DFN2514-12 (SOT1167)	12
U-DFN2020-3 Type B 2.0 x 2.0 x 0.6	Diodes Inc.	DFN2020-3 (SOT1061)	3
U-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6B	Toshiba	DFN2020MD-6 (SOT1220)	6
UF6	Toshiba	SOT363	6
UF6/ USV/ US6	Toshiba	SOT363	6
UMD2	Rohm	SOD323F	2
UMD3/UMT3	Rohm	SOT323	3
UMD5/UMT5	Rohm	SOT353	5
UMD6/ UMT6	Rohm	SOT363	6
UMLP 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
UMT3	Rohm	SOT323	3
UMT3F*	Rohm	SOT323	3
UMT5/ UMD5	Rohm	SOT353	5
UMT6	Rohm	SOT363	6
UMT6/ UMD6	Rohm	SOT363	6
UPAK (SOT89)	Renesas	SOT89	3
URP	Renesas	SOD323	2

Type	Competitor	Nexperia	Pins/ Leads
US6	Toshiba	SOT363	6
US6/ UF6/ USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
US-Flat	Toshiba	SOD323F	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5
USV	Toshiba	SOT363	6
USV/ US6/ UF6/	Toshiba	SOT363	6
VESM*	Toshiba	DFN1010D-3 (SOT1215)	3
VML0806*	Rohm	DFN1006B-3 (SOT883B)	3
VML1006	Rohm	DFN1006-3 (SOT883)	3
VMN2*	Rohm	DFN1006-2 (SOD882)	2
VMN2*	Rohm	DFN1006D-2 (SOD882D)	2
VMN3*	Rohm	DFN1006-3 (SOT883)	3
VMT3*	Rohm	DFN1010D-3 (SOT1215)	3
VMT6*	Rohm	DFN1010B-6 (SOT1216)	6
VS6	Toshiba	SOT457	6
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WDFN-8	ON Semi	LFPAK33 (SOT1210)	8
WLL-2-2	Infineon	DSN0402B-2 (SOD992B)	2
WLP1.5x 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
WLPI.Ox 1.0*	Texas Instruments	DFN1010D-3 (SOT1215)	3
WLPI.Ox 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
X1 -DFN 1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X1-DFN1212-3*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X1-DFN1616-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-DFN0806-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X2-DFN1006-2	Diodes Inc.	DFN1006D-2 (SOD882D)	2
X2-DFN1006-3	Diodes Inc.	DFN1006B-3 (SOT883B)	3
X2-DFN1010-3	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X2-DFN1310-6*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
X2-DFN2015-3*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
XDFN3	ON Semi	DFN1006-3 (SOT883)	3
XI-DFN1006-2	Diodes Inc.	DFN1006-2 (SOD882)	2

Types with * show footprint compability only

Package cross reference matrix

Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P_{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
2	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
	SOD123F		2.6 x 1.6 x 1.1	830			S-Flat	SOD-123-FL			PowerDI123	SOD-123		
	SOD123W		2.6 x 1.7 x 1.0	900		PMDU	S-Flat	SOD-123-FL	SRP-F		PowerDI123	Stmite flat		
	SOD128		3.8 x 2.5 x 1.0	1000		PMDT	M-Flat					SMA flat		
	SOD323	SC-76	1.7 x 1.25 x 0.95	400			USC	SOD-323	URP	SOD323	SOD-323	SOD-323	SOD323	SOD323
	SOD323F	SC-90	1.7 x 1.25 x 0.7	830		UMD2	US-Flat				PowerDI323			
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)	HUSON3	2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DFN2020D-3 (SOT1061D)		2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	D2PAK (SOT404)		11.0 x 11.0 x 4.3			LPDS/ LPTS	TO-220SM D2PAK	D2PAK D2PAK 3 TO-263-2L	TO-220S / SMD TO-263 LDPAK(S)-(1) MP-25Z	D2PAK, PG-T0263-3	T0263 (D2PAK)	D2PAK, H2PAK-2	TO-263 3-lead TO-263AB / D2PAK TO-263	
	SOT23		2.9 x 1.3 x 1.0	250		SSD3/ SST3	S-Mini TSM	SOT-23	MPAK	SOT23	SOT-23	SOT23	SOT23	SOT23
	SOT323	SC-70	2.0 x 1.25 x 0.95	200		UMD3/ UMT3 TUMT3	USM	SC-70	CMAK/ CMPAK	SOT323	SOT-323	SOT-323	SC-70 3 leads	SOT-323
	TO-220 (SOT78)		15.6 x 10 x 4.4			TO-220FM	TO-220	TO-220-3L, TO-220F-3FS, TO-220-3	MP-25(K)	PG-TO220-3, TO220	TO220-3	TO-220	TO-220, TO-220AB	
	I2PAK (SOT226)		11 x 10 x 4.3					I2PAK, TO-262-2L, TO-262-3L	MP-25SK, TO-262	PG-TO262-3, TO262		I2PAK	TO-262	
4	SOT143B		2.9 x 1.3 x 1.0	250			CP4		MPAK-4R	SOT143	SOT-143			SOT-143
	LFPAK56 (SOT669)	Power-S08	4.9 x 4.45 x 1.0	3950		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK56, HSON-8	PG-TD-SON-8	Power-Di5060-8	Power-FLAT (6x5)	PowerPAK SO-8(L)	
	LFPAK56E (SOT1023)		6.2 x 5.3 x 1.1	500W		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK56, HSON-8	PG-TD-SON-8	Power-Di5060-8	Power-FLAT (6x5)	PowerPAK SO-8(L)	
	SOT223	SC-73	6.5 x 3.5 x 1.65	1700				SOT-223		SOT223	SOT-223		SOT223	
	LFPAK88 (SOT1235)		8 x 8 x 1.6					To-LL		To-LL			PowerPAK 8x8L	
5	SOT353	SC-88 A	2.0 x 1.25 x 0.95	300		UMD5/ UMT5	USV	SC-88 A	CMPAK-5C0		SOT353		SOT353	SC70-5L

Types in brackets (…) show footprint compatibility only

Package cross reference matrix

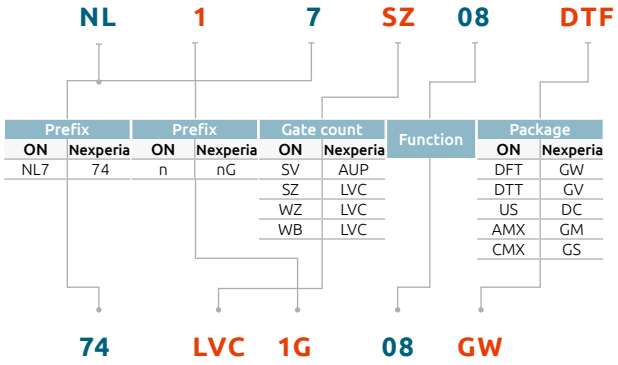
Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P_{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
6	DFN1010-6 (SOT891)	XSON6	1.0 x 1.0 x 0.48				CS6	SOT963						
	DFN1010B-6 (SOT1216)		1.1 x 1.0 x 0.37	350		(VMT6)	(FS6)	(SOT063)			(SOT963)			
	DFN1410-6 (SOT886)	XSON6	1.45 x 1.0 x 0.48	250										SLP1510N6
	DFN1616-6 (SOT1189)	HXSON6	1.6 x 1.6 x 0.48					UDFN 1.6 x 1.6					LLP75-/L	SLP1616P6
	DFN2020-6 (SOT1118)		2.0 x 2.0 x 0.62	1300		HU-ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020-6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN2020D-6 (SOT1118D)		2.0 x 2.0 x 0.62	1300		HU-ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020-6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN-2020MD-6 (SOT1220)		2.0 x 2.0 x 0.62	1250		HU-ML2020L8 (Single)	UDFN6B	UDFN-6 WDFN6			UDFN2020-6 Type E		PowerPAK SC-70 Thin PowerPAK SC-70	
	SOT363	SC-88	2.0 x 1.25 x 0.95	300		UMD6/ UMT6	US6 UF6 USV	SC-88	CMPAK-6	SOT363	SOT-363		SC70-6	SC70-6L
	SOT457	SC-74	2.9 x 1.5 x 1.0	750		SMD6/ SMT6	SM6 VS-6	SC-74 TSOP-6	TSOP-6	SC74 TSOP6	SOT23-6 SOT26		TSOP6 TSOP-6	SOT23-6L
8	LFPAK33 (SOT1210)		3.3 x 3.3 x 0.85	790		HSMT8	TSON Advance	µ8FL, WDFN-8		PG-TSD-SON-8	Power DI3333-8	Power FLAT 3.3 x 3.3	PowerPAK 1212-8	
	LFPAK56D (SOT1205)		4.9 x 4.45 x 1.0	680		HSOP8 (Dual)		SO-8FL Dual, DFN-8	HSON-8 dual	PG-TD-SON-8	Power DI5060-8	Power FLAT 5x6 Dual	PowerPAK SO-8L Dual	
	SOT96	S08	4.9 x 3.9 x 1.75	1500		SOP8	FM8	SOIC-8 NB	SOP-8				S08	
	DFN1714-8 (SOT 1166)	HUSON8	1.7 x 1.35 x 0.52											SLP1713P8
	DFN1714U-8 (SOT983)	HXSON8	1.7 x 1.35 x 0.48					UDFN 1.7 x 1.35, 0.4P						SLP1713P8
10	DFN2510-10 (SOT1165)	XSON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2510A-10 (SOT1176)	XSON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2626-10 (SOT1197)		2.6 x 2.6 x 0.48					UDFN10 2.6 x 2.6, 0.5P						SLP2626P10
12	DFN2512-12 (SOT1158)	HXSON12	2.5 x 1.2 x 0.48					UDFN12, 2.5 x 1.2, 0.4P						
	DFN2514-12 (SOT1167)	HUSON12	2.5 x 1.35 x 0.53					UDFN12, 2.5 x 1.35, 0.4P						SLP2513P12
16	DFN3312-16 (SOT1159)	HXSON16	3.3 x 1.2 x 0.48					UDFN 16, 3.5 x 1.2, 0.4P						
	DFN3314-16 (SOT1168)	HUSON16	3.3 x 1.35 x 0.53											SLP3313P16

Types in brackets (…) show footprint compatibility only

Competitive cross reference - Logic

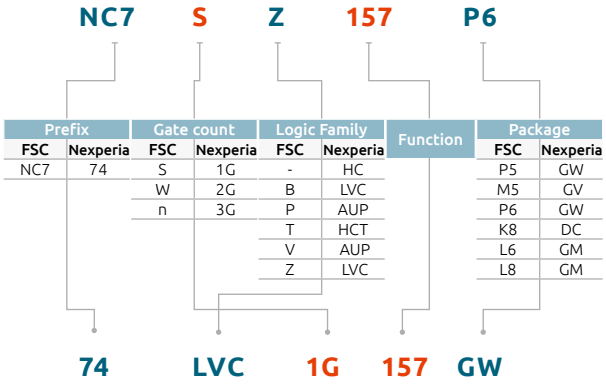
This cross reference allows you to match a competitor's part number to a Nexperia part number. Once you have the equivalent part number, check the Nexperia website www.nexperia.com/logic to confirm that the particular configuration is released.

On semiconductor low pin count logic



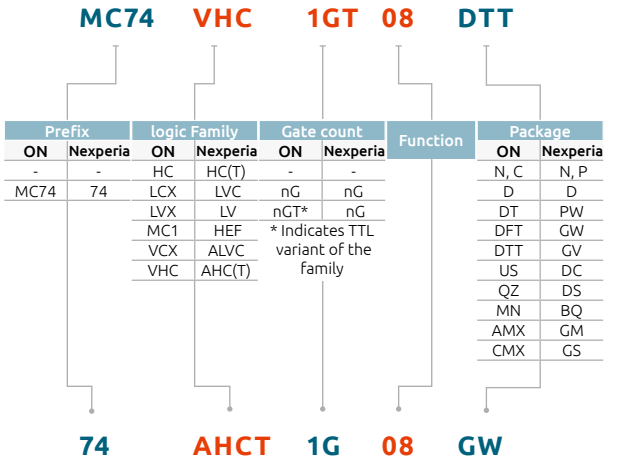
Prefix		Prefix		Gate count		Function	Package	
ON	Nexperia	ON	Nexperia	ON	Nexperia		ON	Nexperia
NL7	74	n	nG	SV	AUP		DFT	GW
				SZ	LVC		DTT	GV
				WZ	LVC		US	DC
				WB	LVC		AMX	GM
							CMX	GS

Fairchild semiconductor tiny logic



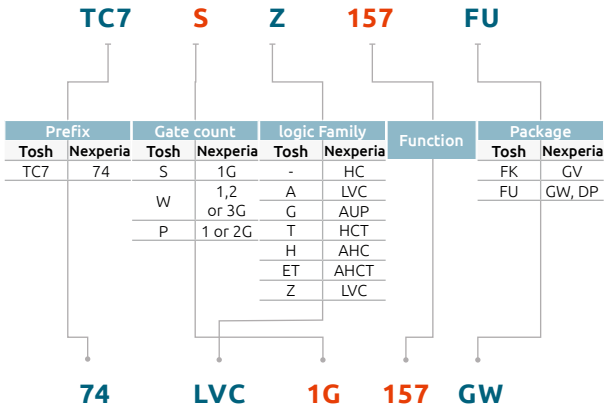
Prefix		Gate count		Logic Family		Function	Package	
FSC	Nexperia	FSC	Nexperia	FSC	Nexperia		FSC	Nexperia
NC7	74	S	1G	-	HC		P5	GW
		W	2G	B	LVC		M5	GV
		n	3G	P	AUP		P6	GW
				T	HCT		K8	DC
				V	AUP		L6	GM
				Z	LVC		L8	GM

On semiconductors logic



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

Toshiba one gate



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

Competitive cross reference - Logic

Fairchild semiconductor standard logic

MM74 LCX 157 MTD

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

74 LVC 157 PW

Toshiba standard logic

TC74 LCX 125 FT

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

74 LVC 125 PW

Texas instruments logic

SN74 LVC 1G 08 DCK

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

74 LVC 1G 08 GW

IDT logic

74 FCT 244 PY

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

74 ABT 244 DB

Diodes Inc. logic

74 LVC 1G 08 FW4

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

74 LVC 1G 08 GW

Renesas logic

HD74 HC 1G 08 CM

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

74 HC 1G 08 GW

Product orientation (tape and reel pack)

2 pin packages

Orientation in tape	Package	Packing 12NC ending
	DFN1006-2 (SOD882)	315
	DFN1006D-2 (SOD882D)	315
	DFN1608D-2 (SOD1608)	315
	DSN0402B-2 (SOD992B)	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

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

Orientation in tape	Package	Packing 12NC ending
	DFN1010D-3 (SOT1215)	147
	DFN2020-3 (SOT1061)	115, 135
	DFN2020D-3 (SOT1061D)	115, 135
	SOT89	115, 135
	SOT89	115, 135
	D2PAK (SOT404)	118

Orientation in tape		
	SOT89	147
	CFP15 (SOT1289)	139, 146

4 pin packages

Orientation in tape	Package	Packing 12NC ending
	LFPAK56 (SOT669)	115
	LFPAK56E (SOT1023)	115
	LFPAK88 (SOT1235)	118

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

Orientation in tape	Package	Packing 12NC ending
		

Orientation in tape	Package	Packing 12NC ending
		

5 pin packages

Orientation in tape	Package	Packing 12NC ending
		

Orientation in tape	Package	Packing 12NC ending
	SOT753	125
	UMTS (SOT353-1)	125
	SO5 (SOT753)	125

Orientation in tape	Package	Packing 12NC ending
	SOT353	115, 135

Orientation in tape	Package	Packing 12NC ending
		

Packing methods

6 pin packages

Orientation in tape	Package	Packing 12NC ending
	DFN1410-6 (SOT886)	115
	DFN1616-6 (SOT1189)	115
	DFN2020MD-6 (SOT1220)	184
	LFPAK33 (SOT1210)	115
	LFPAK56D (SOT1205)	115
	XSON6 (SOT886)	125

Orientation in tape	Package	Packing 12NC ending
	DFN1412-6 (SOT1268)	147
	DFN2020-6 (SOT1118)	115
	DFN2020D-6 (SOT1118D)	115
	DFN2020MD-6 (SOT1220)	115
	SOT363	115, 135
	SOT457	115, 135
	DFN0606B-6	147

Orientation in tape	Package	Packing 12NC ending
	DFN1010-6 (SOT891)	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

Orientation in tape	Package	Packing 12NC ending
		

multi I/O pin packages

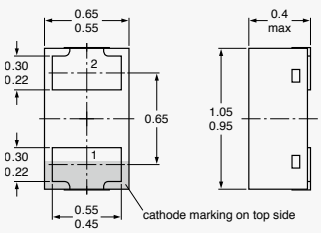
Orientation in tape	Package	Packing 12NC ending
	DFN2110-9 (SOT1178)	115
	DFN2111-7 (SOT1358)	471
	DFN2510A-10 (SOT1176)	115
	DFN2520-9 (SOT1333)	132
	SO8 (SOT96-1)	118
	XQFN10 (SOT1337-1)	115
	TSSOP10 (SOT552-1)	118
	DHVQFN14 (SOT762-1)	115
	TSSOP14 (SOT402-1)	118
	SSOP16 (SOT519-1)	118
	TSSOP16 (SOT403-1)	118
	SO16 (SOT109-1)	118
	TSSOP20 (SOT360-1)	118
	SO20 (SOT163-1)	118
	DHXQFN20 (SOT1045-2)	115
	DHVQFN20 (SOT764-1)	115
	SO24 (SOT137-1)	118
	DHVQFN24 (SOT815-1)	118
	TSSOP24 (SOT355-1)	118
	TSSOP48 (SOT362-1)	118
	TSSOP48 (SOT480-1)	118
	TSSOP56 (SOT364-1)	118

Orientation in tape	Package	Packing 12NC ending
		

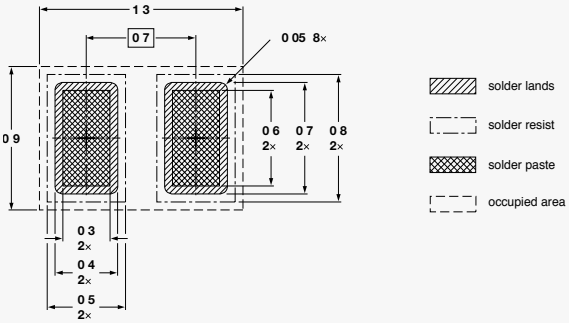
Orientation in tape	Package	Packing 12NC ending
	VSSOP8 (SOT765-1)	125
	TSSOP8 (SOT505-2)	125

Orientation in tape	Package	Packing 12NC ending
		

2-pin SMD packages



DFN1006D-2 (SOD882D)



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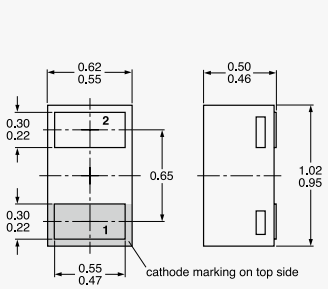

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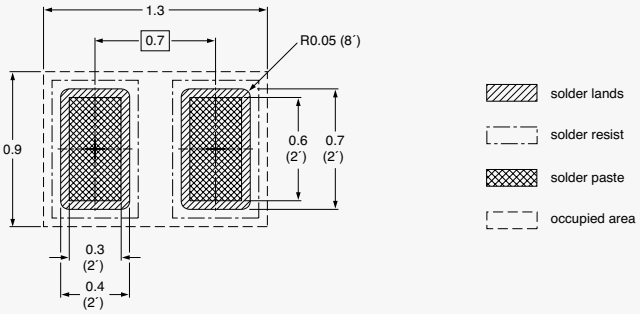

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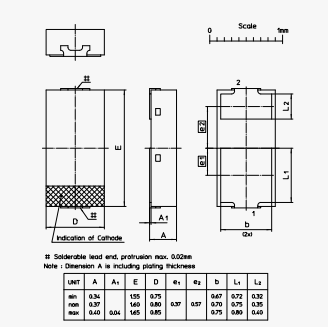
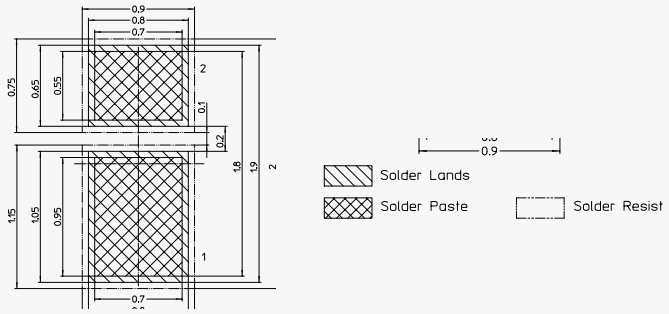
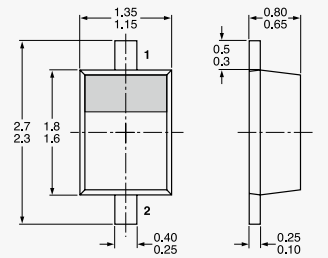


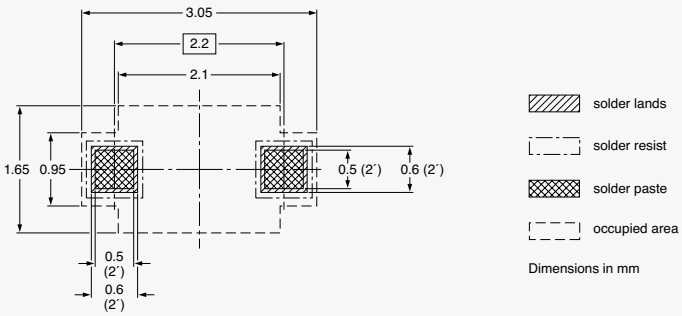
DFN1608D-2 (SOD1608)



DFN1608D-2 (SOD1608)



SC-90 (SOD323F)

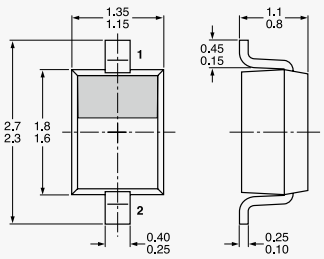


SC-90 (SOD323F)

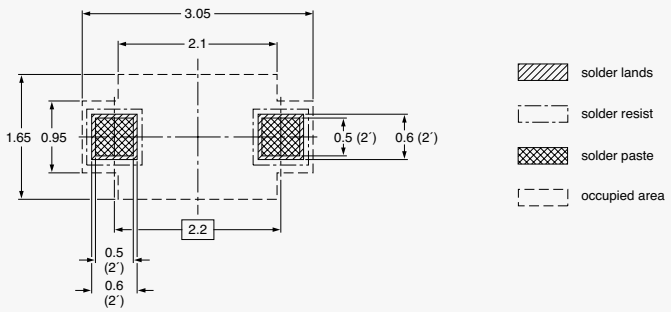
Dimensions in mm

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

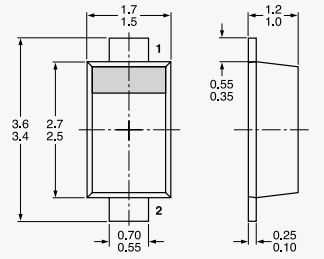
2-pin SMD packages



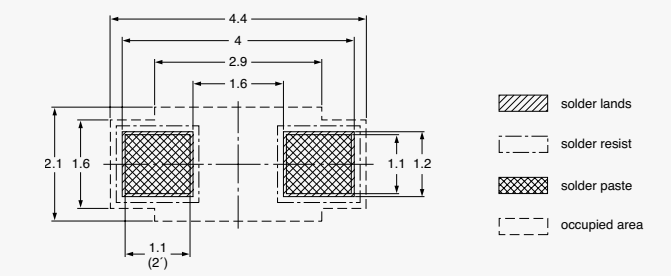
SOD323



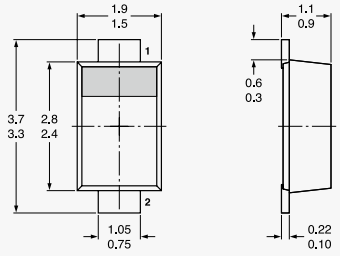
SOD323



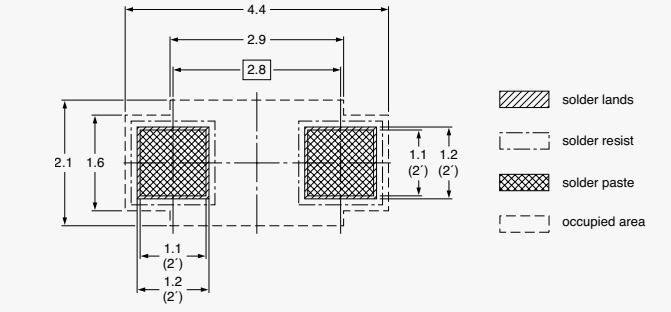
SOD123F



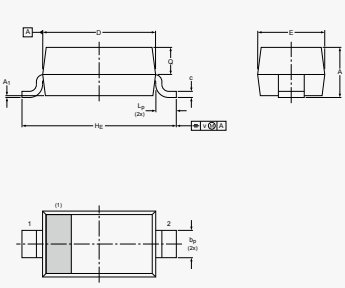
SOD123F



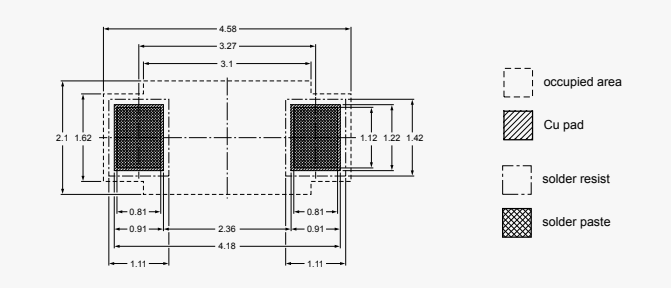
CFP3 (SOD123W)



CFP3 (SOD123W)



SOD123

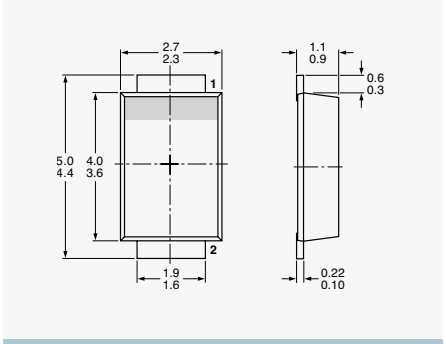


SOD123

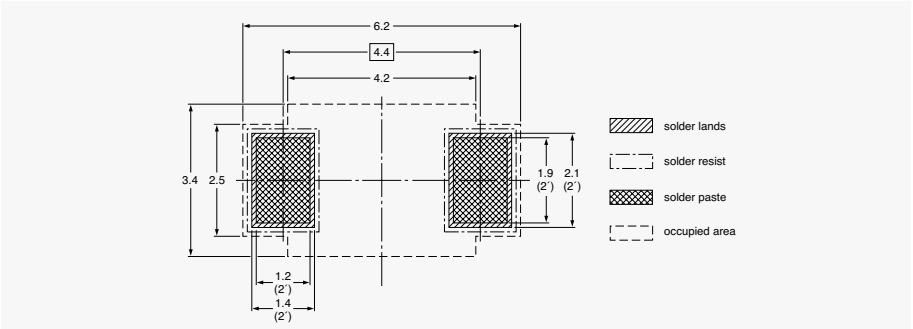
Dimensions in mm

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

2-pin SMD packages

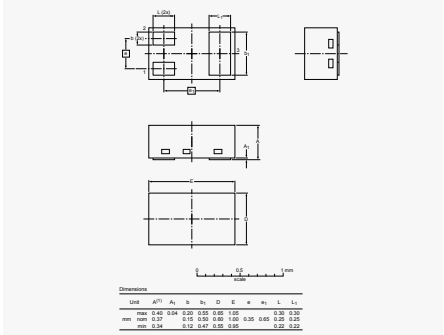


CFP5 (SOD128)

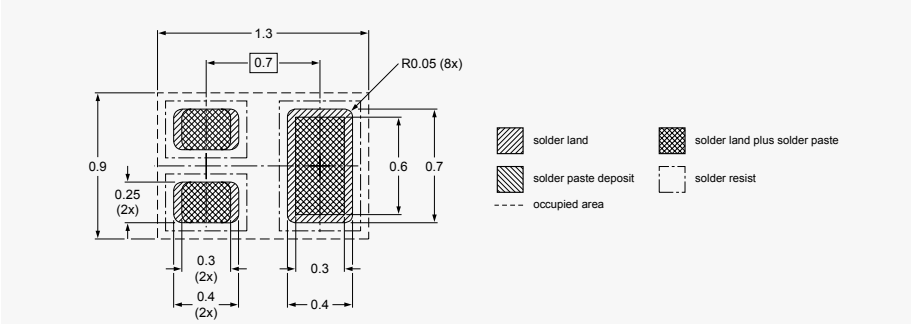


CFP5 (SOD128)

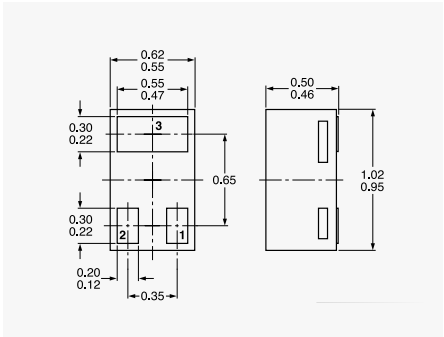
3-pin SMD packages



DFN1006B-3 (SOT883B)



DFN1006B-3 (SOT883B)



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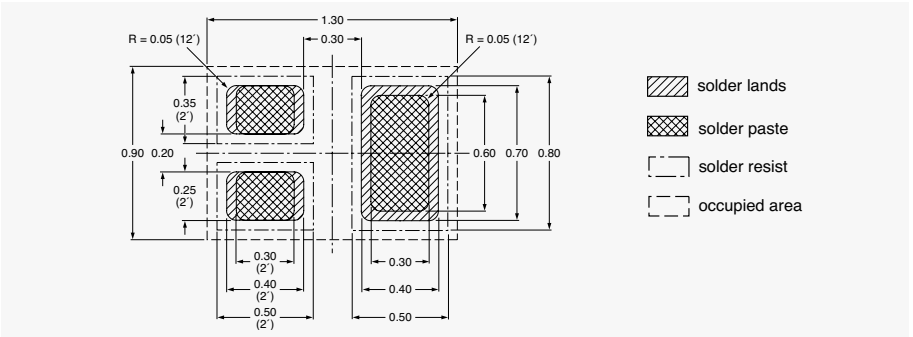
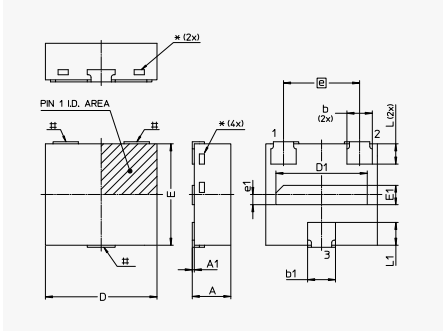
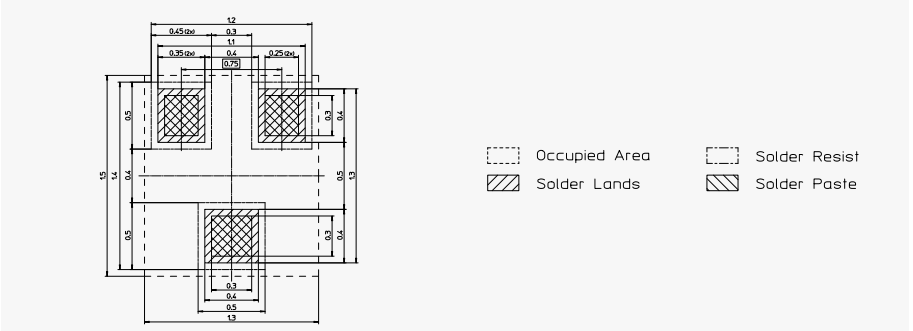


DFN1006-3 (SOT883)



DFN1010D-3 (SOT1215)

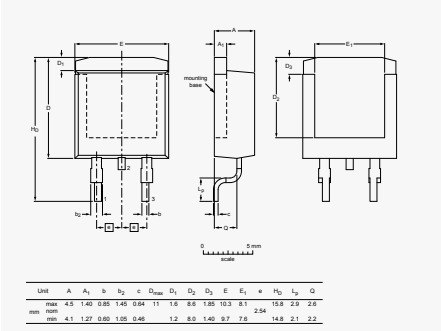


DFN1010D-3 (SOT1215)

Dimensions in mm

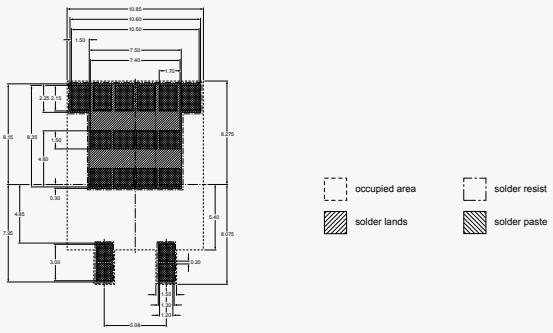
Images are for reference only, for detailed drawings please visit nexperia.com/packages

3-pin SMD packages

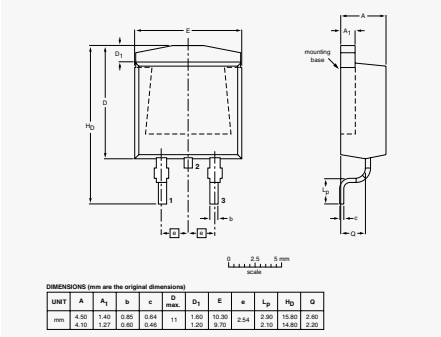


Unit		A	A_1	b	b_2	c	D_{max}	D_1	D_2	D_3	E	E_1	e	H_D	L_p	Q
mm	max	4.5	1.40	0.85	1.45	0.64	11	1.6	8.6	1.85	10.3	8.1	2.54	15.8	2.9	2.6
	nom															
	min	4.1	1.27	0.60	1.05	0.46		1.2	8.0	1.40	9.7	7.6		14.8	2.1	2.2

D2PAK (SOT404A)



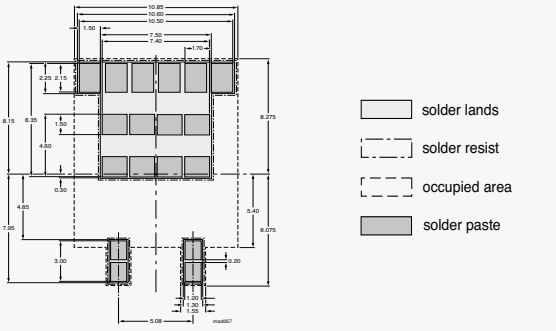
D2PAK (SOT404A)



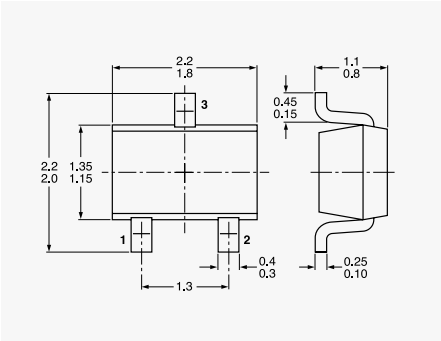
DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1	b	c	D max.	D_1	E	e	L_p	H_D	Q
mm	4.50 4.10	1.40 1.27	0.85 0.60	0.64 0.46	11	1.60 1.20	10.30 9.70	2.54	2.90 2.10	15.80 14.80	2.60 2.20

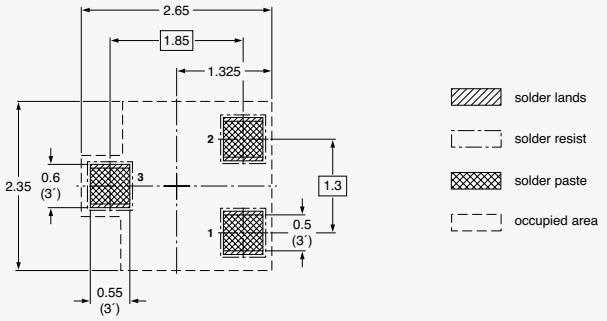
D²PAK (SOT404)



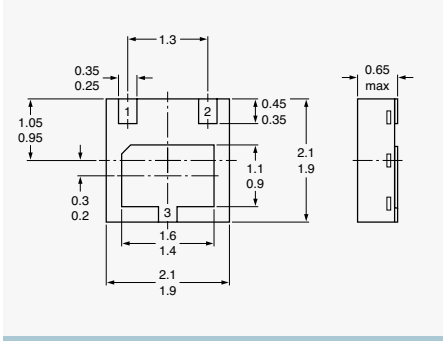
D²PAK (SOT404)



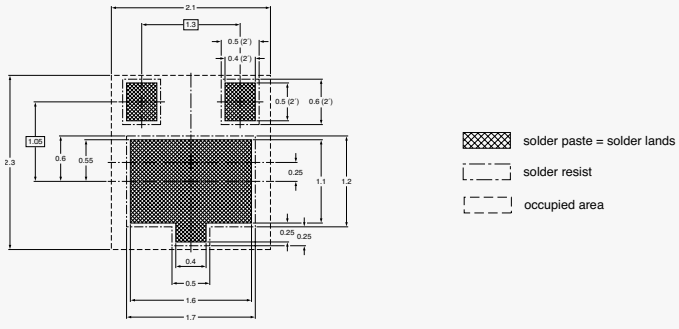
SC-70 (SOT323)



SC-70 (SOT323)



DFN2020-3 (SOT1061)

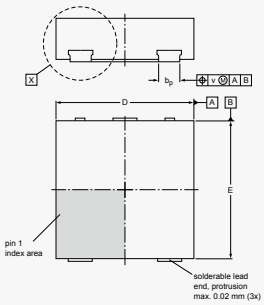


DFN2020-3 (SOT1061)

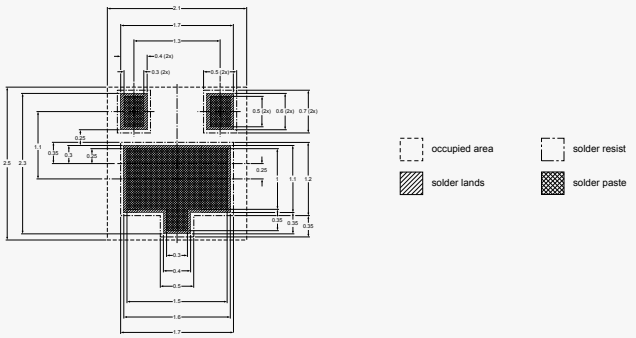
Dimensions in mm

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

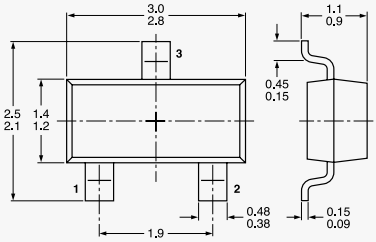
3-pin SMD packages



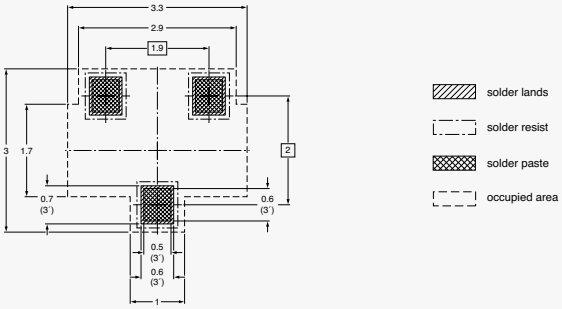
DFN2020D-3 (SOT1061D)



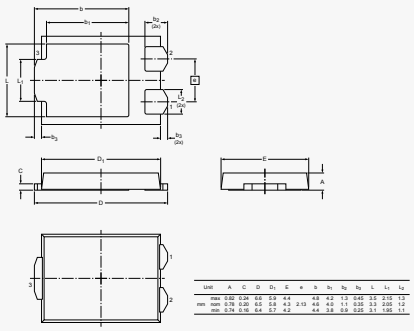
DFN2020D-3 (SOT1061D)



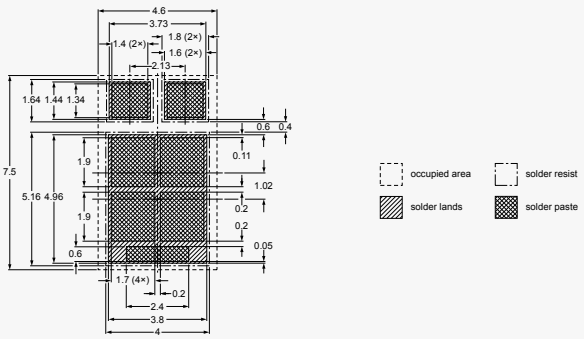
TO-236AB (SOT23)



TO-236AB (SOT23)

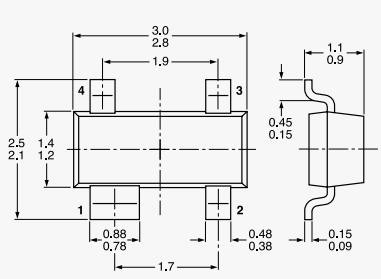


CFP15 (SOT1289)

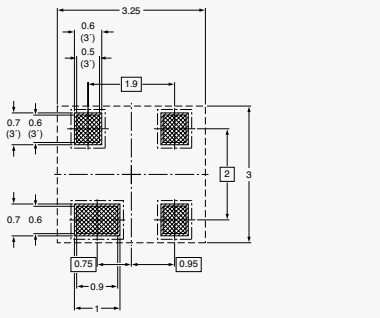


CFP15 (SOT1289)

4-pin SMD packages



SOT143B

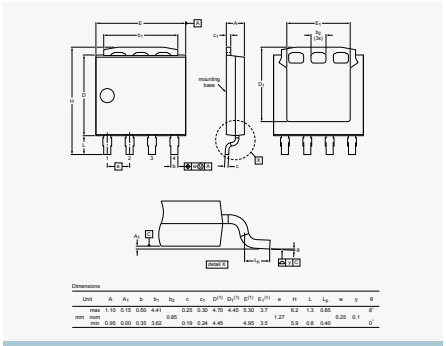


SOT143B

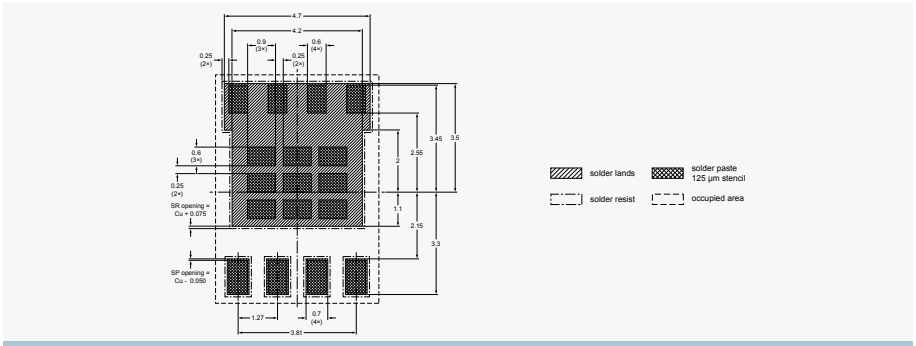
Dimensions in mm

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

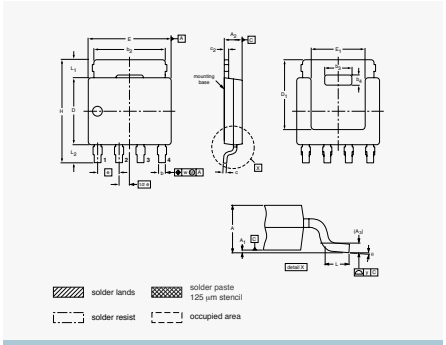
4-pin SMD packages



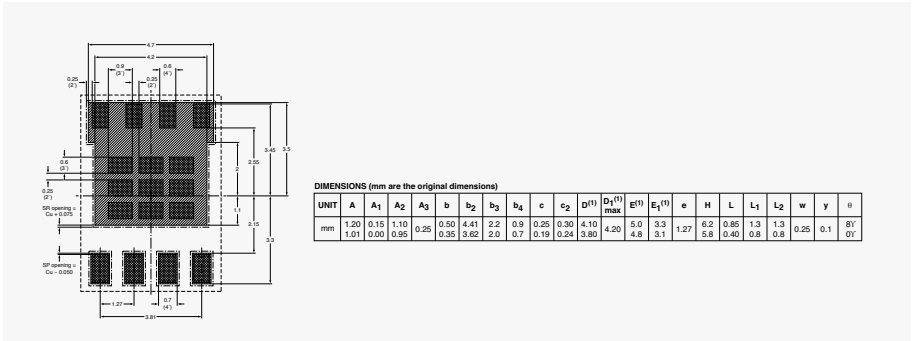
LFPAK56E; Power-SO8 (SOT1023)



LFPAK56E; Power-SO8 (SOT1023)



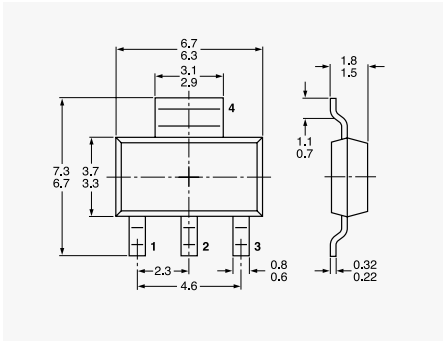
LFPAK56; Power-SO8 (SOT669)



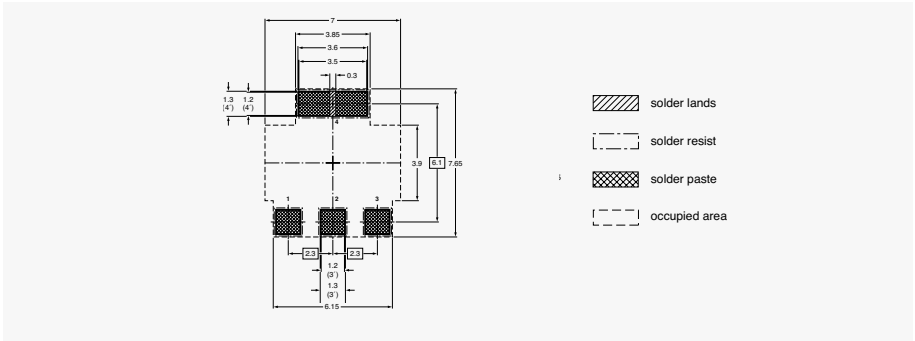
DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1	A_2	A_3	b	b_2	b_3	b_4	c	c_2	$D^{(1)}$	$D_1^{(1)}$ max	$E^{(1)}$	$E_1^{(1)}$	e	H	L	L_1	L_2	w	y	θ
mm	1.20 1.01	0.15 0.00	1.10 0.95	0.25	0.50 0.35	4.41 3.62	2.2 2.0	0.9 0.7	0.25 0.19	0.30 0.24	4.10 3.80	4.20	5.0 4.8	3.3 3.1	1.27	6.2 5.8	0.85 0.40	1.3 0.8	1.3 0.8	0.25	0.1	8° 0°

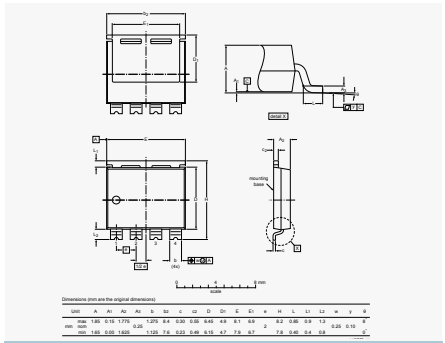
LFPAK56; Power-SO8 (SOT669)



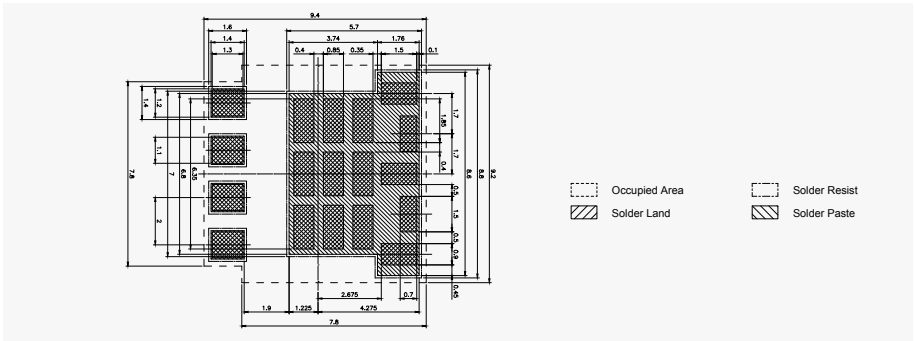
SC-73 (SOT223)



SC-73 (SOT223)



LFPAK88 (SOT1235)

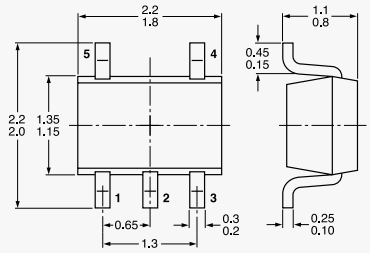


LFPAK88 (SOT1235)

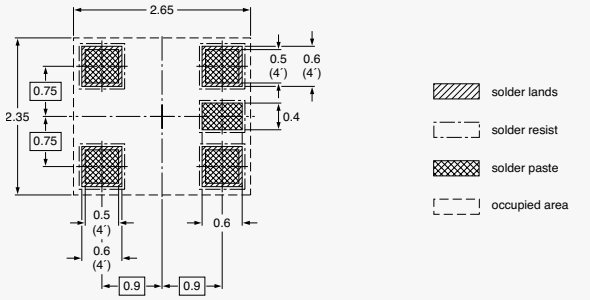
Dimensions in mm

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

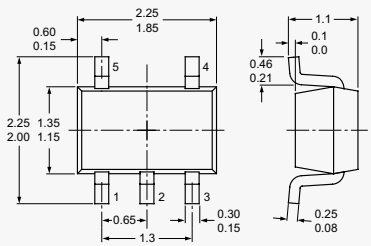
5-pin SMD packages



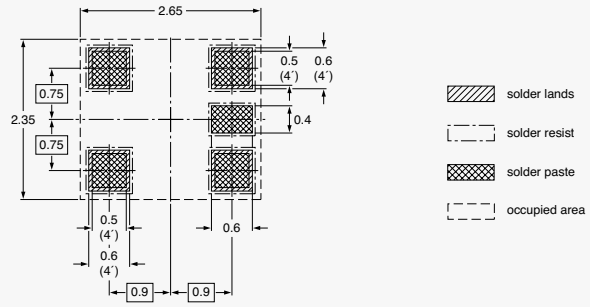
TSSOP5 (SOT353)



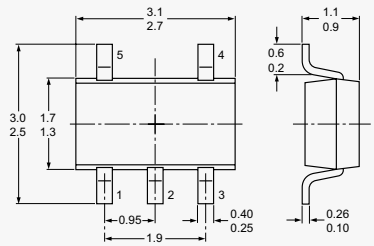
TSSOP5 (SOT353)



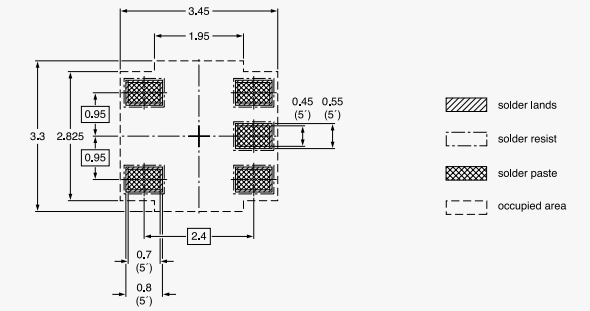
TSSOP5 (SOT353-1)



TSSOP5 (SOT353-1)

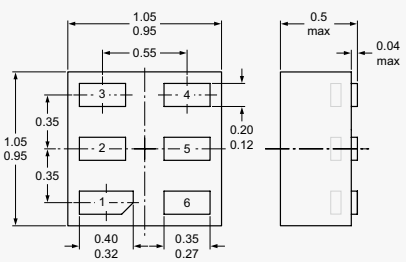


TSOP5 (SOT753)

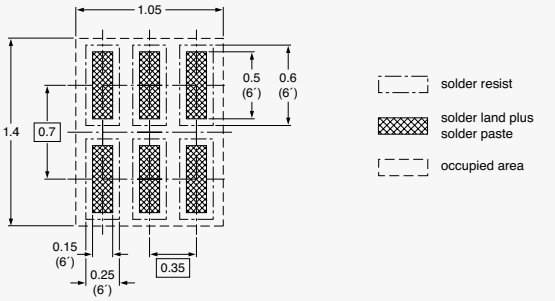


TSOP5 (SOT753)

6-pin SMD packages



XSON6 (SOT891)

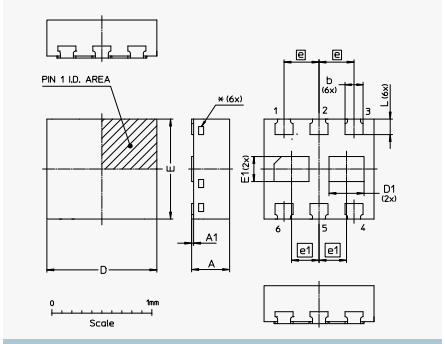


XSON6 (SOT891)

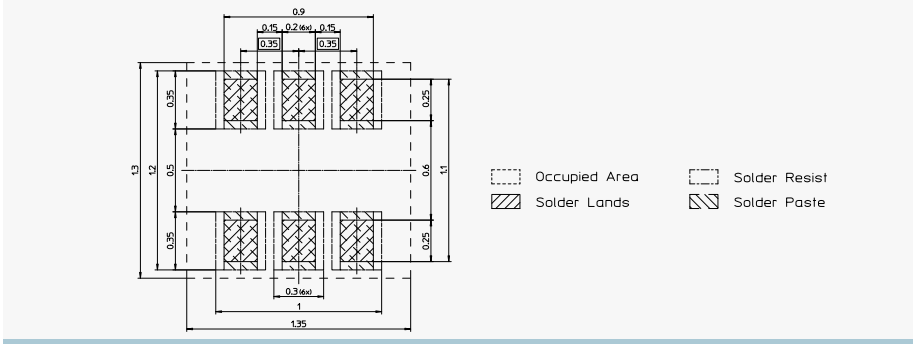
Dimensions in mm

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

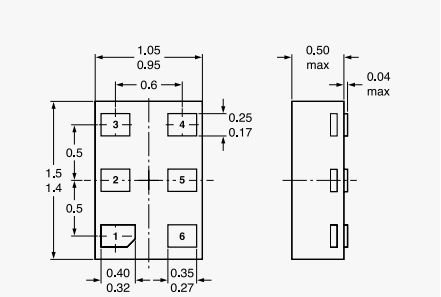
6-pin SMD packages



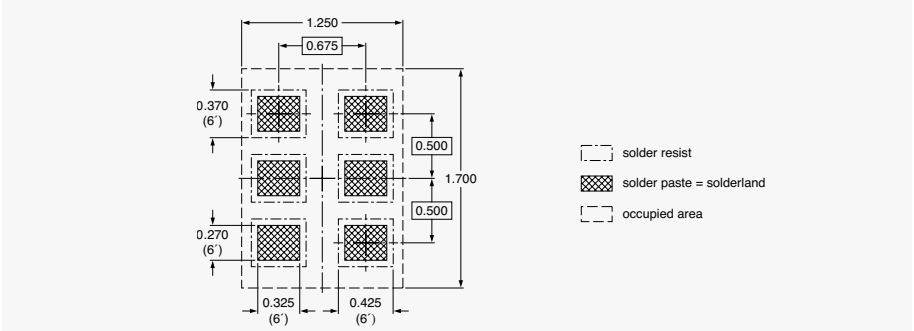
DFN1010B-6 (SOT1216)



DFN1010B-6 (SOT1216)



XSON6 (SOT886)



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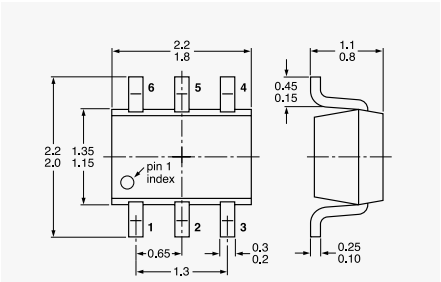
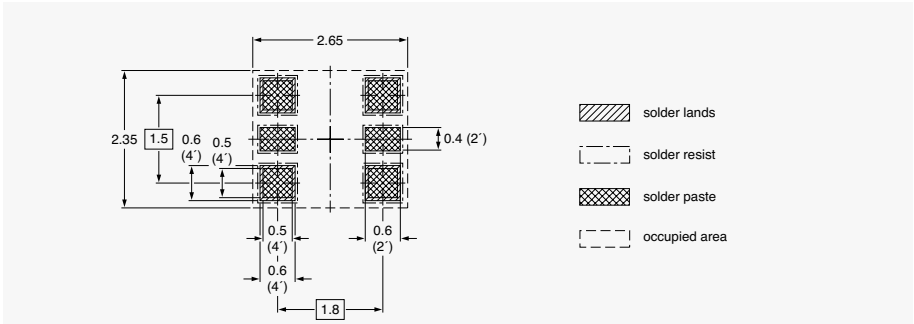


TSSOP6 (SOT363)



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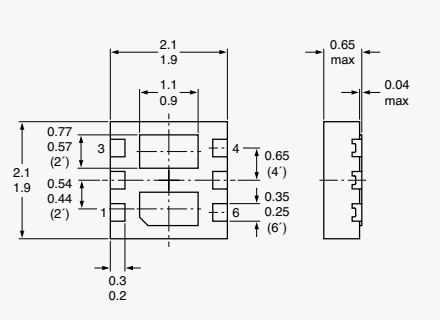
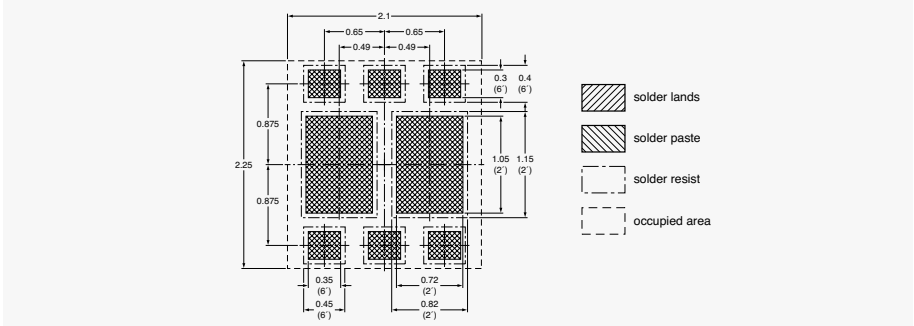


DFN2020-6 (SOT1118)

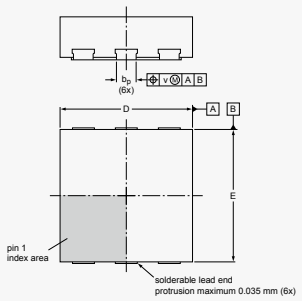


DFN2020-6 (SOT1118)

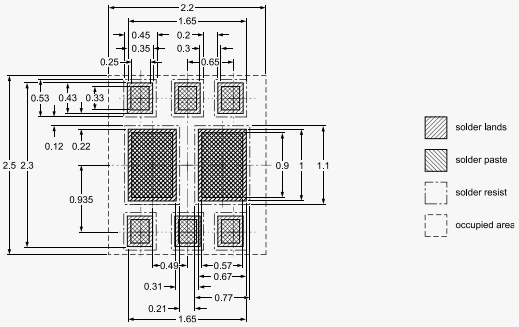
Dimensions in mm

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

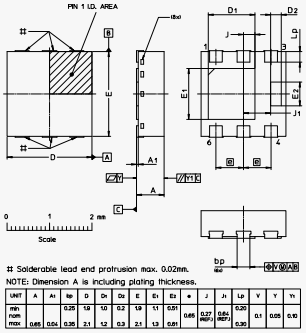
6-pin SMD packages



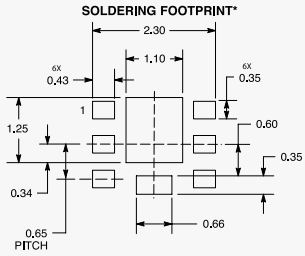
DFN2020D-6 (SOT1118D)



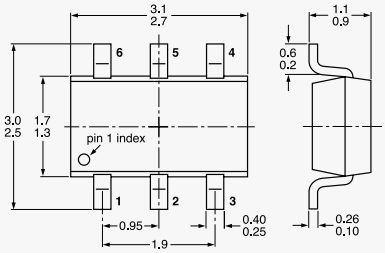
DFN2020D-6 (SOT1118D)



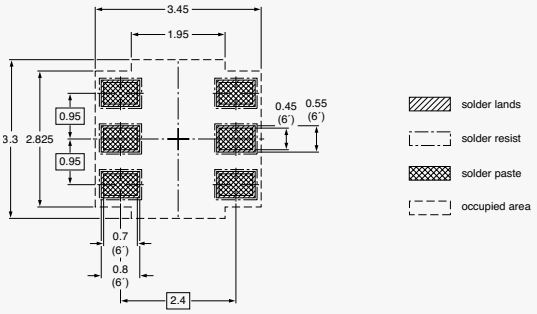
DFN2020MD-6 (SOT1220)



DFN2020MD-6 (SOT1220)

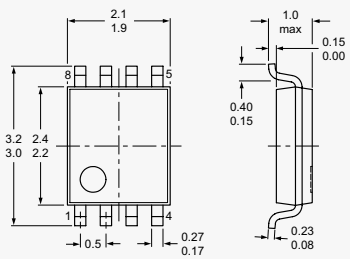


TSOP6 (SOT457)

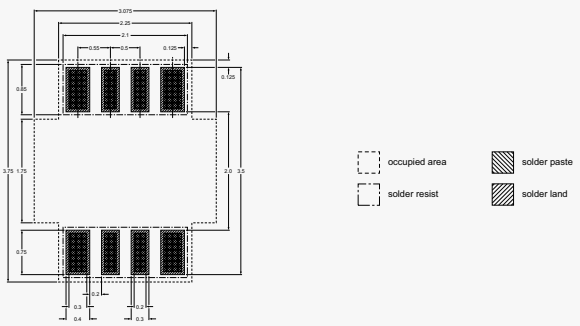


TSOP6 (SOT457)

8-pin SMD packages



VSSOP8 (SOT765-1)

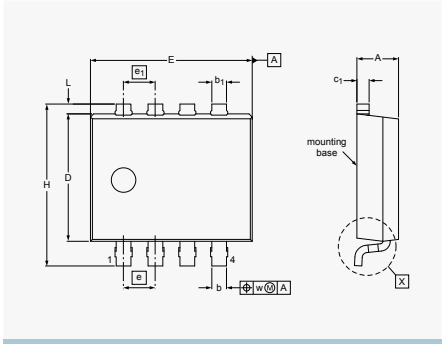


VSSOP8 (SOT765-1)

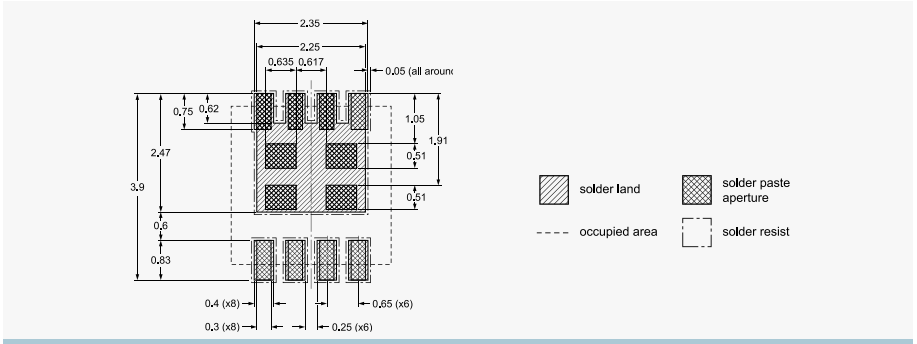
Dimensions in mm

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

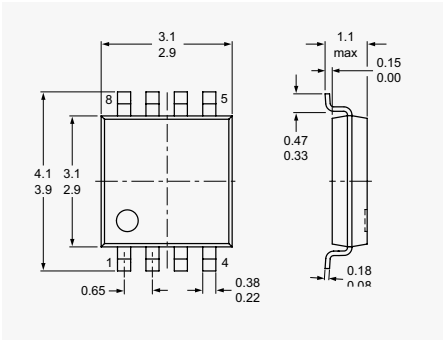
8-pin SMD packages



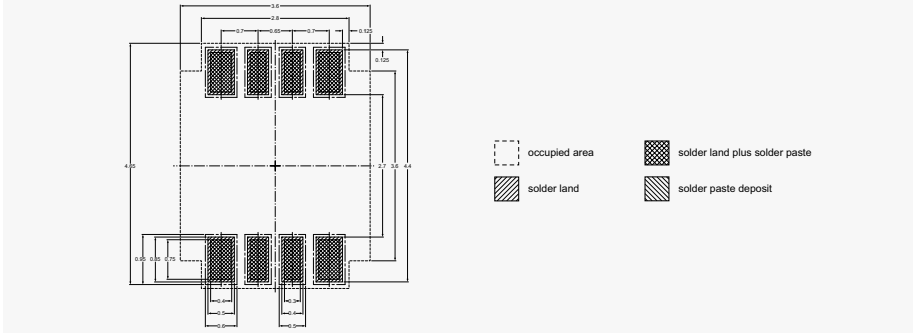
LFPAK33 (SOT1210)



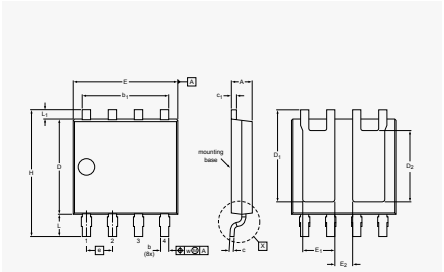
LFPAK33 (SOT1210)



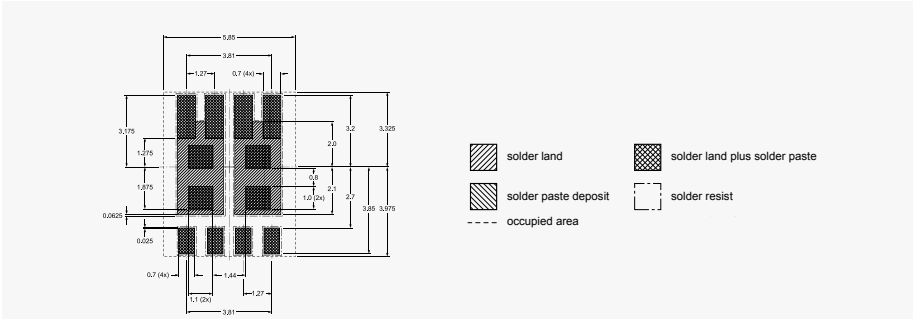
TSSOP8 (SOT505-2)



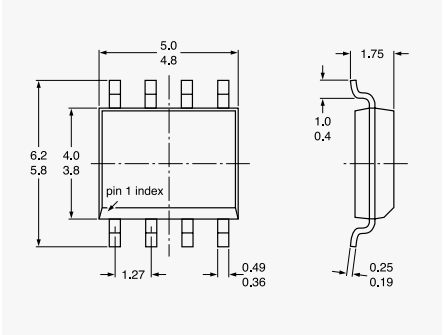
TSSOP8 (SOT505-2)



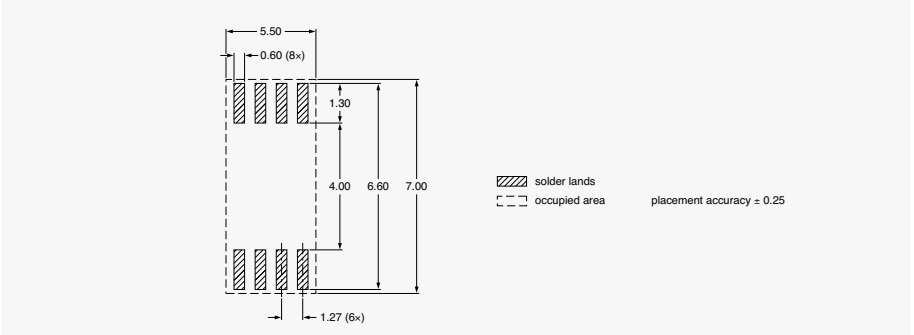
LFPAK56D (SOT1205)



LFPAK56D (SOT1205)



SO8 (SOT96-1)

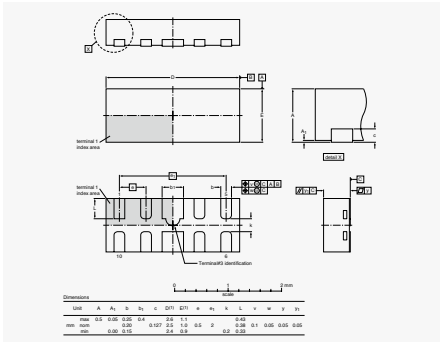


SO8 (SOT96-1)

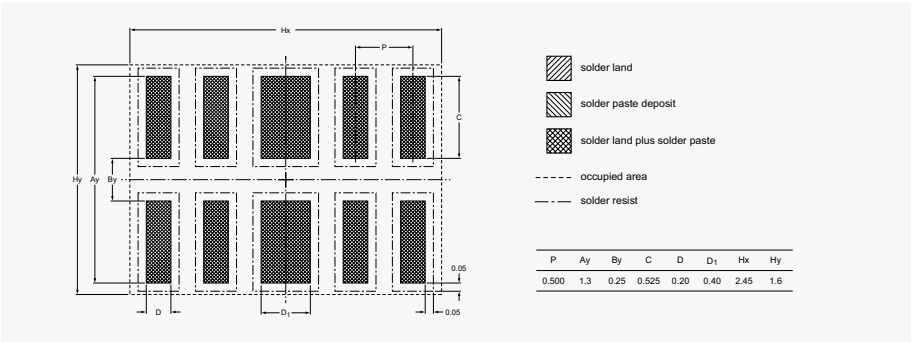
Dimensions in mm

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

10-pin SMD packages



DFN2510-10 (SOT1165-1)



P	Ay	By	C	D	D_1	Hx	Hy
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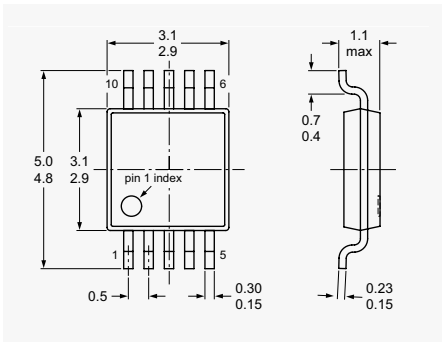
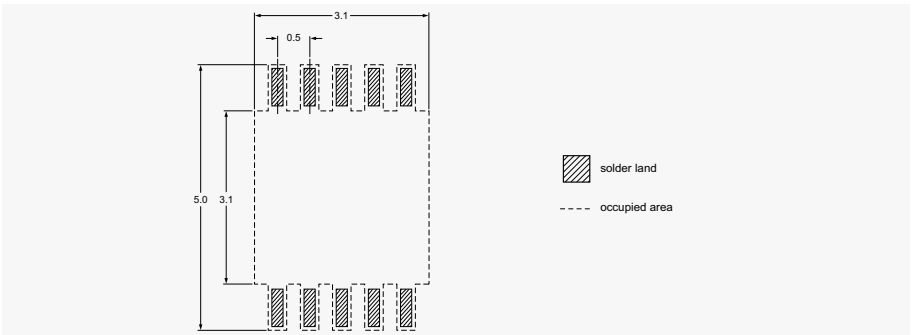
DFN2510-10 (SOT1165-1)

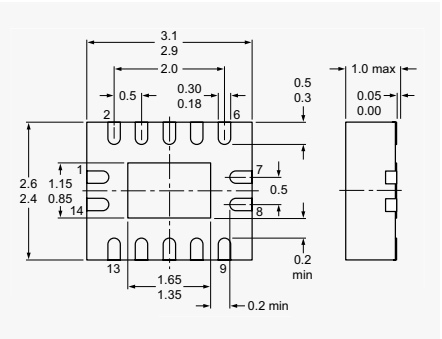


TSSOP10 (SOT552-1)

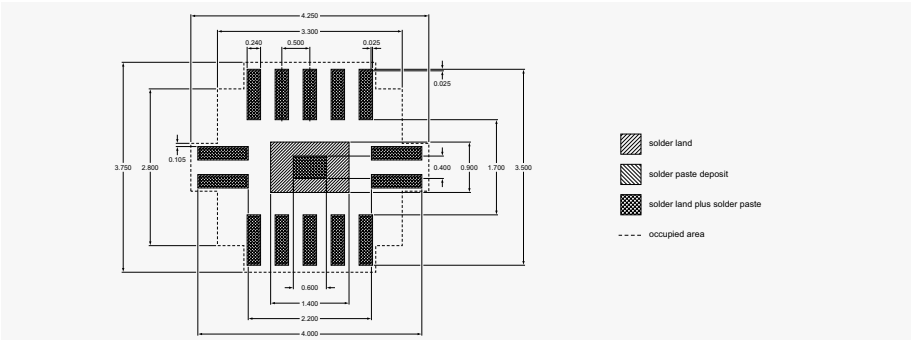


TSSOP10 (SOT552-1)

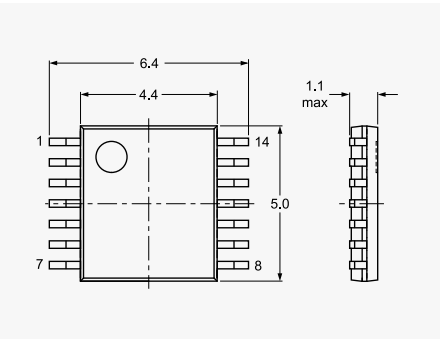
14-pin SMD packages



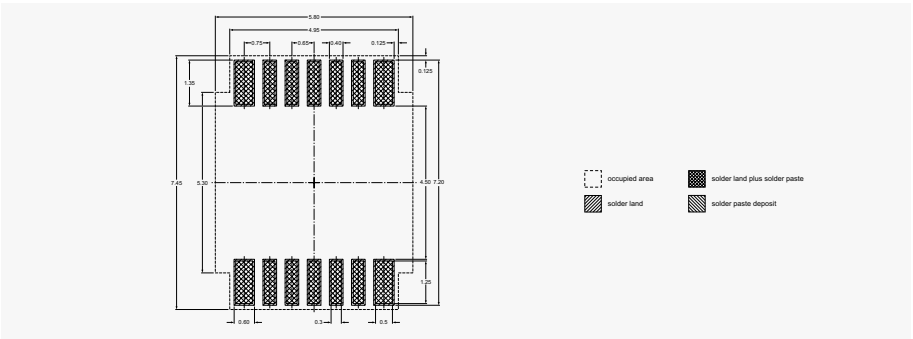
DHVQFN14 (SOT762-1)



DHVQFN14 (SOT762-1)



TSSOP14 (SOT402-1)



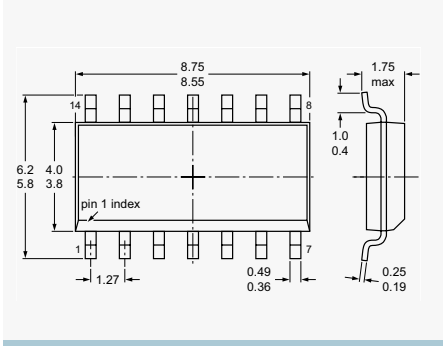
TSSOP14 (SOT402-1)

Dimensions in mm

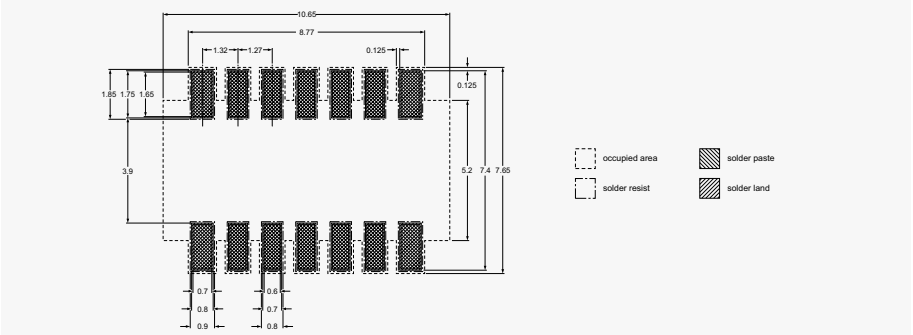
Images are for reference only, for detailed drawings please visit nexperia.com/packages

Minimized outline drawings and reflow soldering footprint

14-pin SMD packages

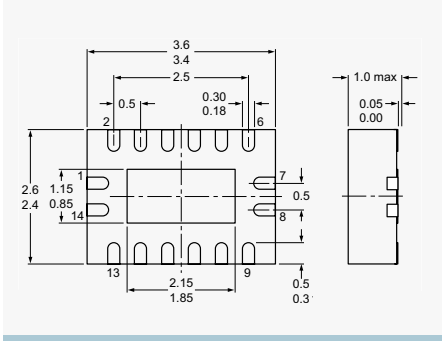


SO14 (SOT108-1)

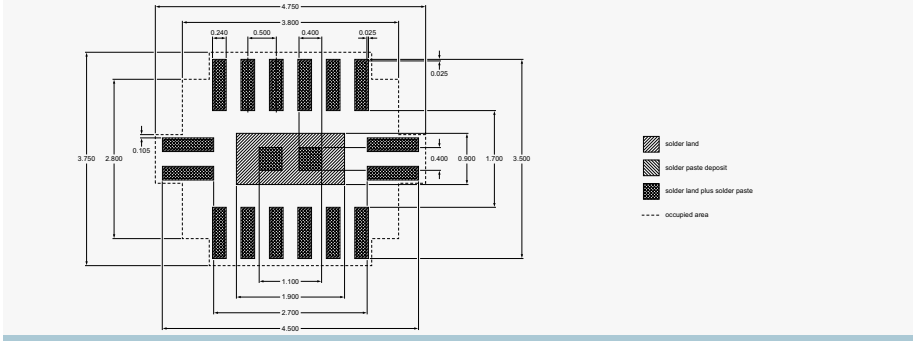


SO14 (SOT108-1)

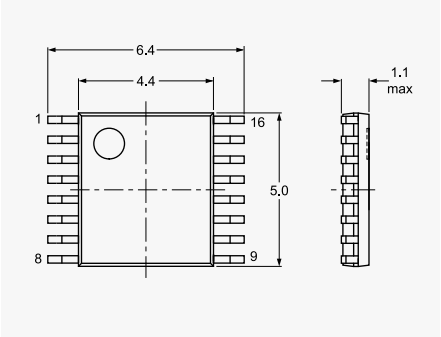
16-pin SMD packages



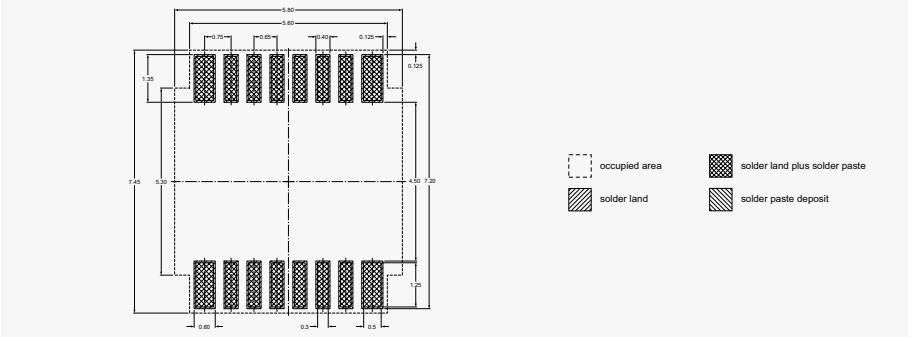
DHVQFN16 (SOT763-1)



DHVQFN16 (SOT763-1)



TSSOP16 (SOT403-1)



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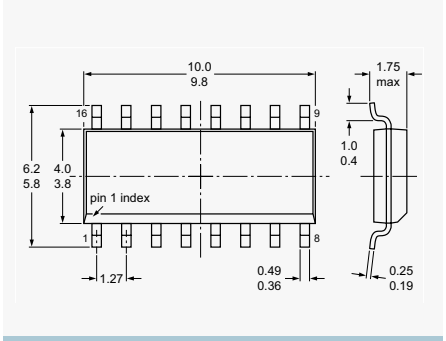
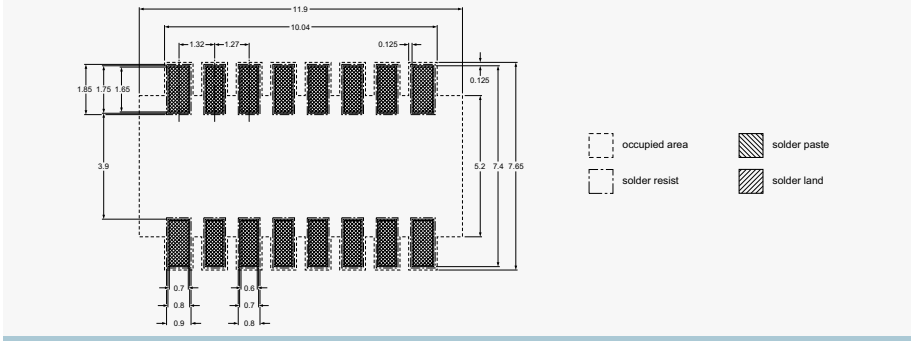


SO16 (SOT109-1)

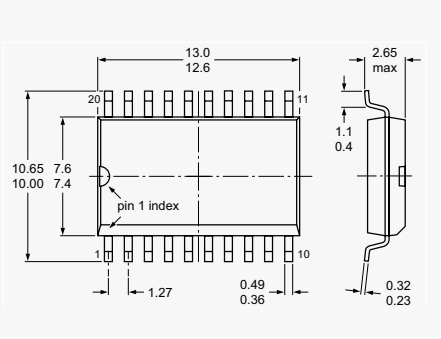


SO16 (SOT109-1)

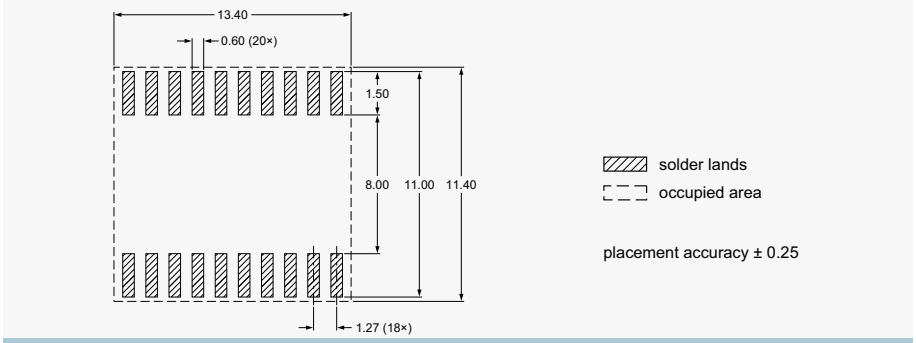
Dimensions in mm

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

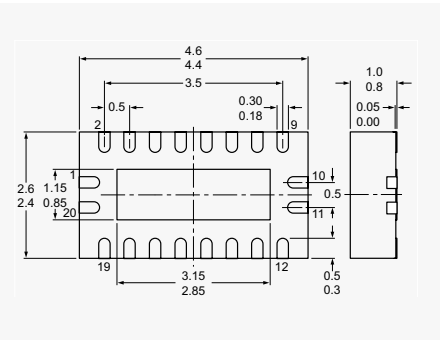
20-pin SMD packages



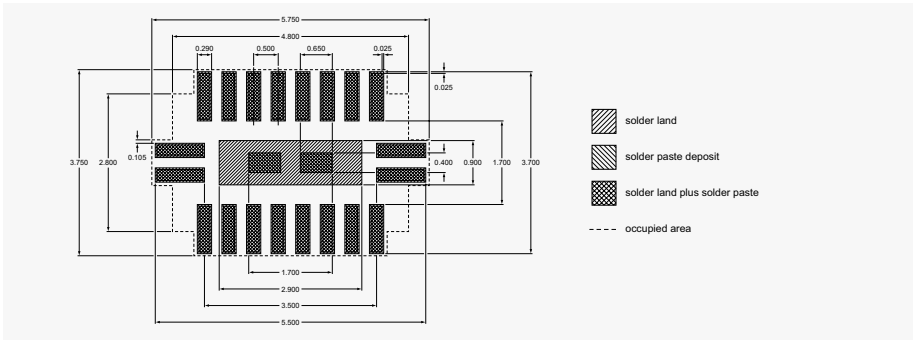
SO20 (SOT163-1)



SO20 (SOT163-1)



DHVQFN20 (SOT764-1)



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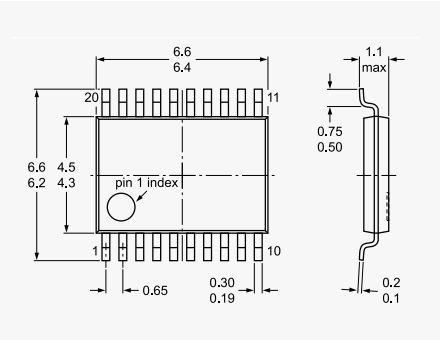
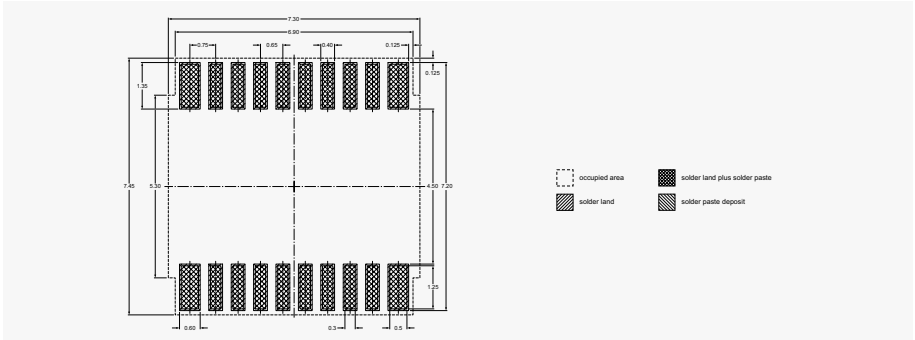
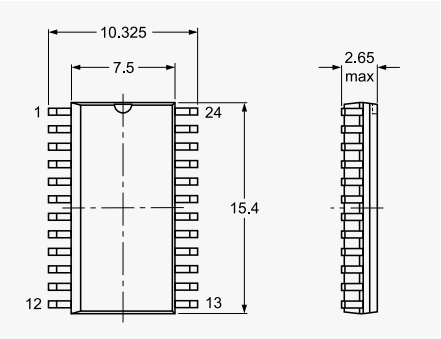


TSSOP20 (SOT360-1)

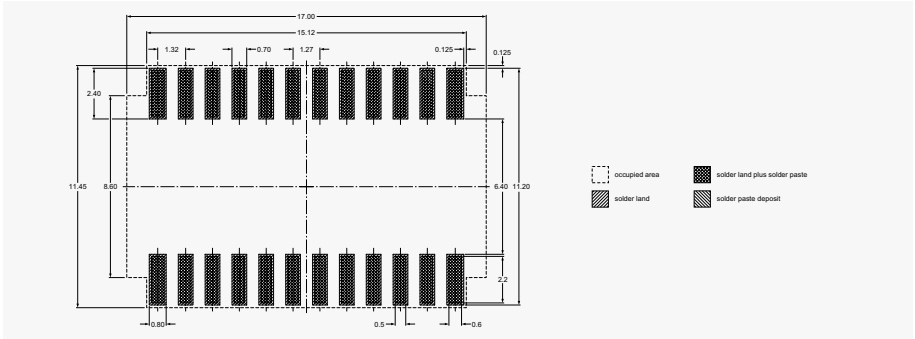


TSSOP20 (SOT360-1)

24-pin SMD packages



SO24 (SOT137-1)



SO24 (SOT137-1)

Dimensions in mm

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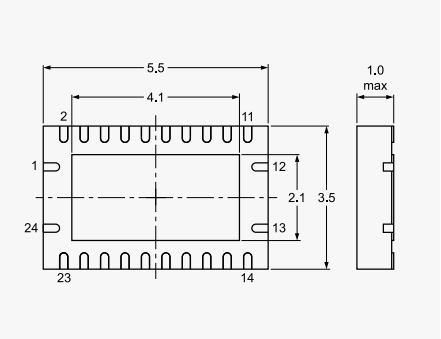
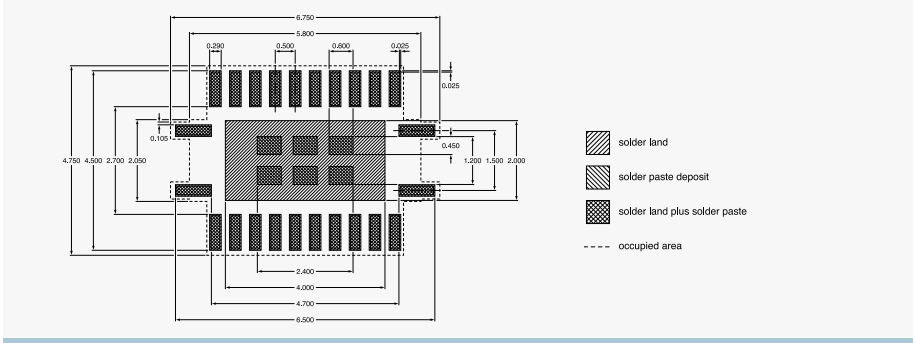
Minimized outline drawings and reflow soldering footprint

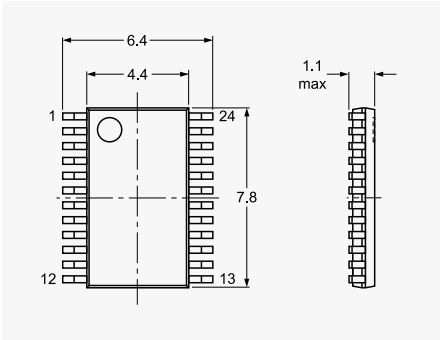
24-pin SMD packages



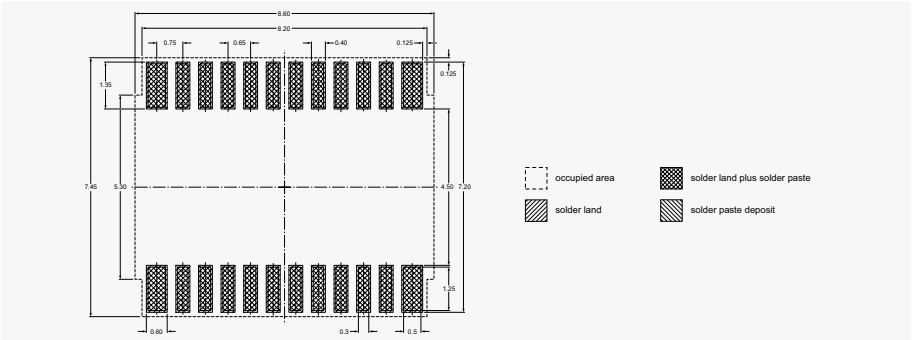
DHVQFN24 (SOT815-1)



DHVQFN24 (SOT815-1)

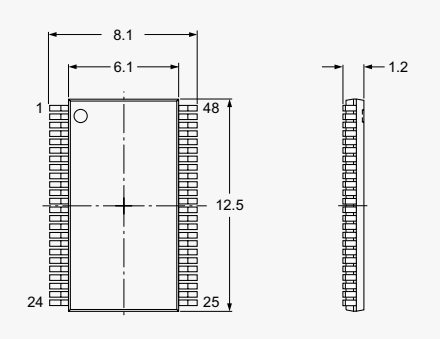


TSSOP24 (SOT355-1)

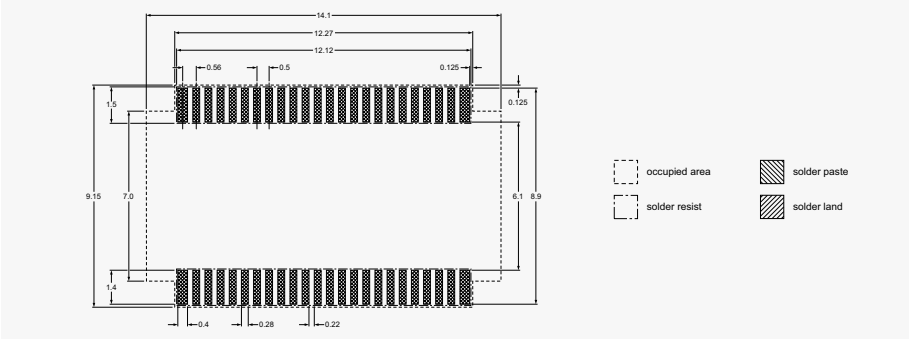


TSSOP24 (SOT355-1)

48-pin SMD packages



TSSOP48 (SOT362-1)



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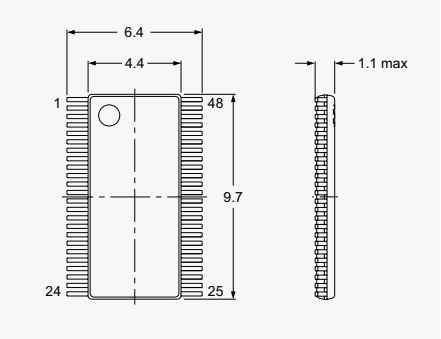
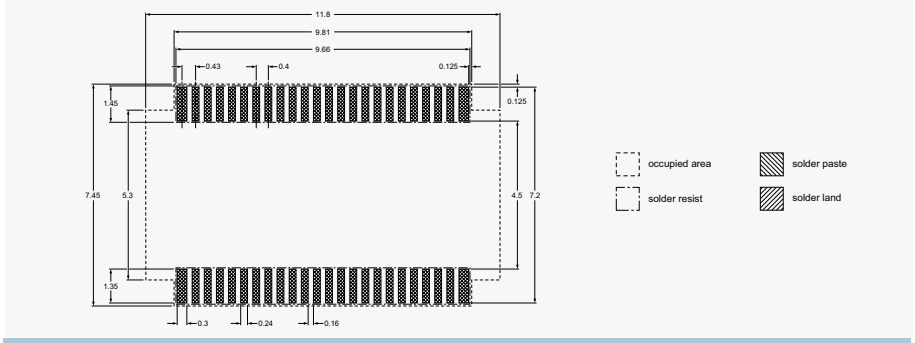


TVSOP48 (SOT480-1)



TVSOP48 (SOT480-1)

Dimensions in mm

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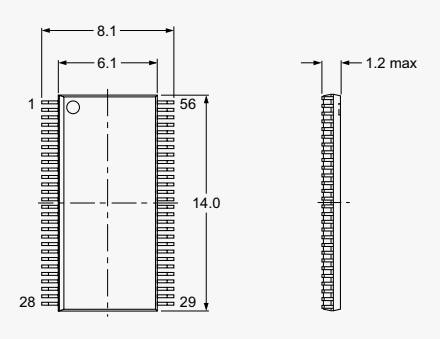
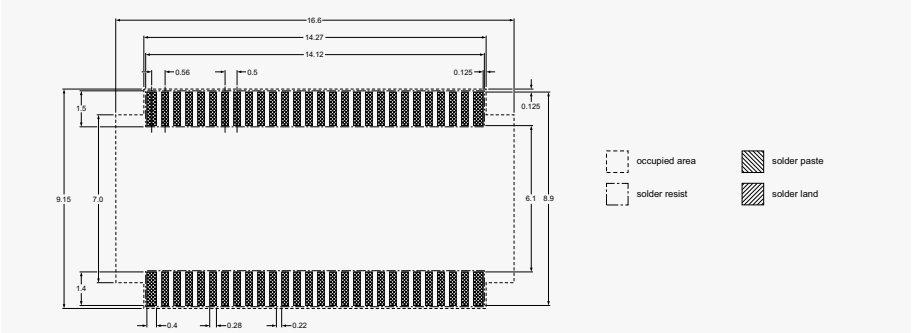
56-pin SMD packages



TSSOP56 (SOT364-1)



TSSOP56 (SOT364-1)

Dimensions in mm

Dimensions in mm

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Notes

Notes

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