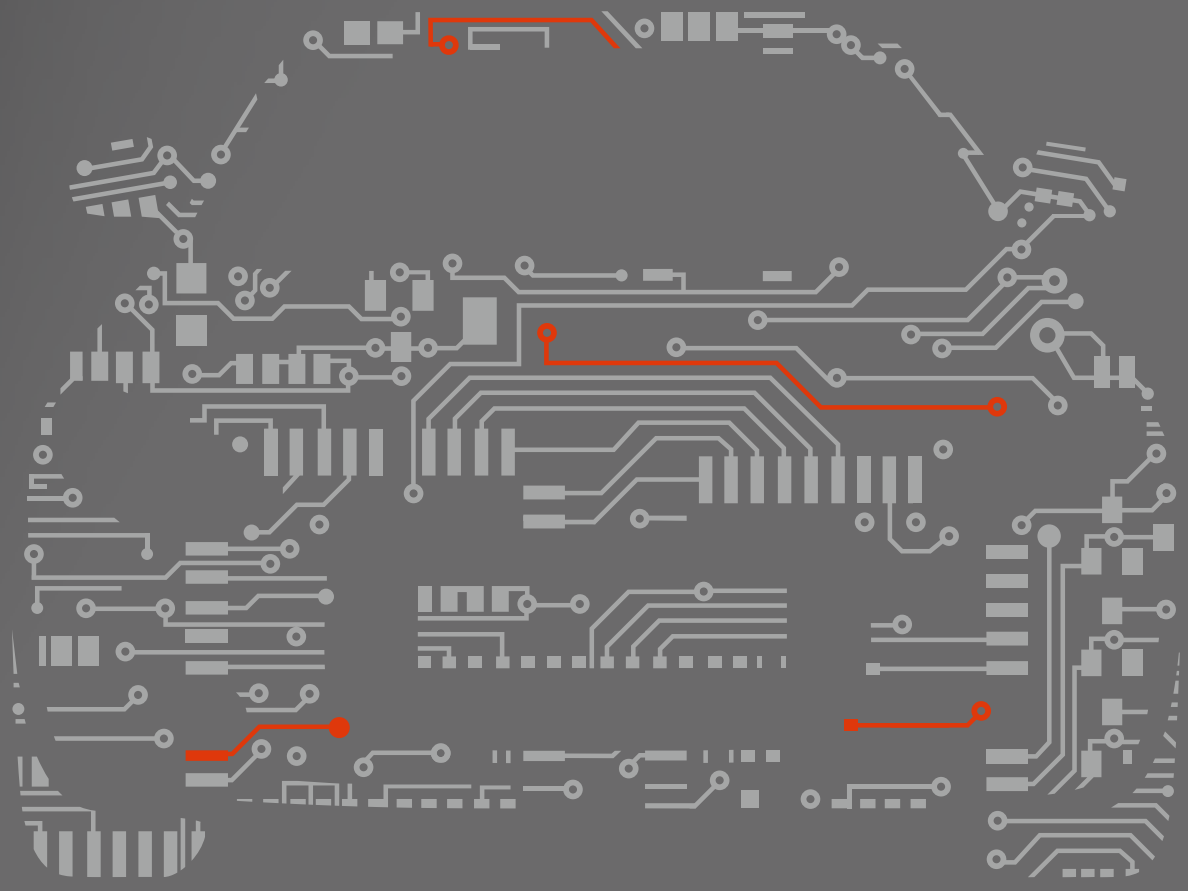
Automotive Selection guide 2018

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 discrete, MOSFET, logic and ESD protection 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 2018**. 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
Head of Automotive Sales & Marketing

Our commitment: quality and reliability



AEC-Q100/Q101 qualified

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



Go for quality

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

- ISO9001
- ISO/TS 16949 for automotive sites
- ISO14001
- OHSAS18001



Design for excellence

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



Zero defect

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

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



Automotive Selection guide 2018.

Discretes, Logic and MOSFETs AEC-Q100/Q101 qualified

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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

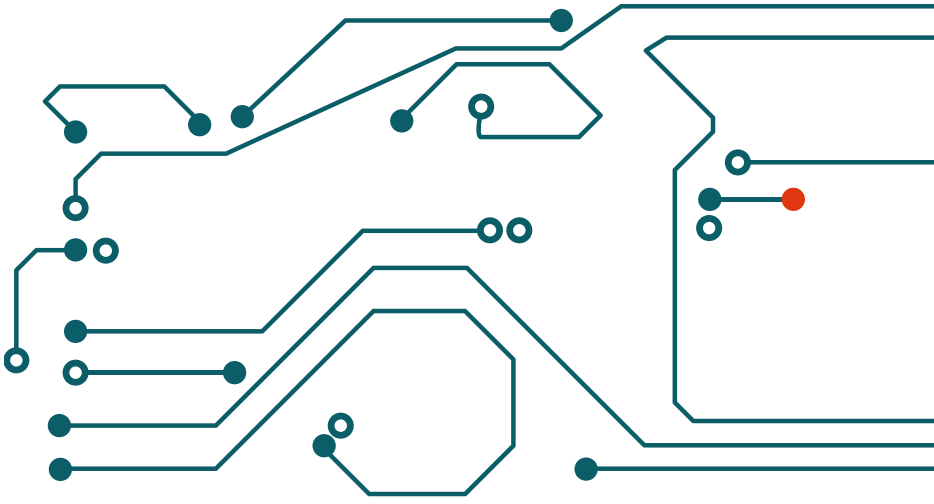
- *Dashboard*
- *Car audio*
- *Connectivity audio*
- *Entertainment*
- *GPS*
- *Car navigation display*

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*

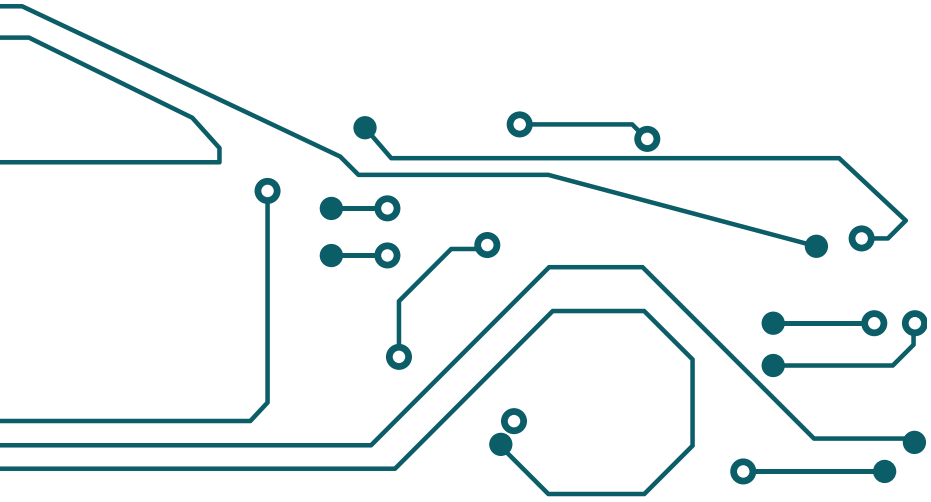


Covering all basic functions enabling automotive electronic applications

- *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

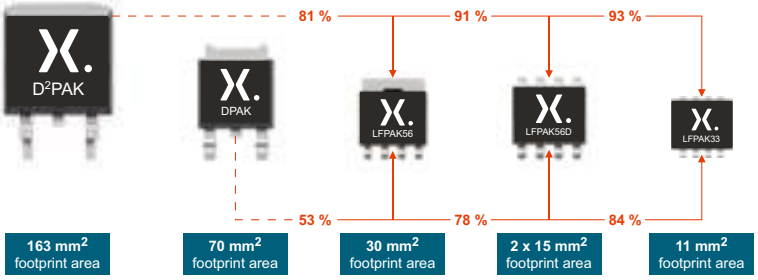


LFPAK56D
(SOT1205)
5.0 x 6.0 x 1.0

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, automatic 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

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Transistors single NPN

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			
45	800	100-250	250-600	100	BCW66F/G/H				
80	500	100	-	50	PMBTA06	PMSTA06			

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)

Types in **bold** represent new products

Package							SOT23
							
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							775
Polarity	V_{CEO} (V)	V_{ebo} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)	
NPN	45	5	0,5	100	250	100	**BC817K-16**
				160	400	100	**BC817K-25**
				250	600	100	**BC817K-40**
PNP	45	5	0,5	100	250	80	**BC807K-16**
				160	400	80	**BC807K-25**
				250	600	80	**BC807K-40**

Transistors double

Package						SOT457 (SC-74)	SOT363 (SC-88)	SOT666	DFN1412-6 (SOT1268)	DFN1010B-6 (SOT1216)
										
Size (mm)						2.9 x 1.5 x 1.0	2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.4 x 1.2 x 0.5	1.0 x 1.0 x 0.37
P_{tot} (mW)						750	300	300	480	350
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)					
NPN	40	100	120	450	100		PUMX1	PEMX1		
	45	100	200	450	100	BC847DS	BC847BS	BC847BV	BC847RA	BC847QAS
	65	100	110	-	100		BC846S			
			200	450	100	BC846DS	BC846BS			
	50	150	120	560	100		PUMX2			
	45	500	160	400	80	BC817DS			BC817RA	
PNP	40	100	120	450	100	PIMT1	PUMT1	PEMT1		
	45	100	200	450	100		BC857BS	BC857BV	BC857RA	BC857QAS
	65	100	110	-	100		BC856S			
			200	450	100		BC856BS			
	45	500	160	400	80	BC807DS			BC807RA	
NPN / PNP	40	100	120	450	100		PUMZ1	PEMZ1		
	45	100	200	450	100		BC847BPN	BC847BVN	BC847RAPN	BC847QAPN
	50	100	120	560	100	PIMZ2	PUMZ2			
	65	100	200	450	100		BC846BPN			
	12	500	200	-	250 / 100			PEMZ7		
	45	500	160	160	100 / 800	BC817DPN			BC817RAPN	

Medium power transistors

Package						SOT223 (SC-73)	SOT89 (SC-62)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
									
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)						1700	1300	1300	1300
Polarity	V_{CEO} (V)	I_C (A)	h_{FE} min	h_{FE} max	f_T min (MHz)				
NPN	20	2	85 - 160	375	40	BCP68 / -25	BC868 / -25	BC68PA / BC68-25PA	BC68PAS / BC68-25PAS
	45	1	63 - 100	160 - 250	100	BCP54 / -10 / -16	BCX54 / -10 / -16	BC54PA / BC54-10PA / BC54-16PA	BC54PAS / BC54-10PAS / BC54-16PAS
	60	1	63 - 100	160 - 250	100	BCP55 / -10 / -16	BCX55 / -10 / -16	BC55PA / BC55-10PA / BC55-16PA	BC55PAS / BC55-10PAS / BC55-16PAS
			100	300	100	BSP41	BSR41		
	80	1	63 - 100	160 - 250	100	BCP56 / -10 / -16	BCX56 / -10 / -16	BC56PA / BC56-10PA / BC56-16PA	BC56PAS / BC56-10PAS / BC56-16PAS
			40 - 100	120 - 300	100	BSP43	BSR43		
PNP	20	2	85 - 160	250 - 375	40	BCP69 / -16 / -25	BC869 / -16 / -25	BC69PA / BC69-16PA / BC69-25PA	BC69PAS / 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

Medium power transistors high performance (175 °C capable)

Types in **bold** represent new products

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

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

Types in **bold** represent new products

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

High voltage transistors

Package						SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	SOT23	SOT323 (SC-70)
										
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)						1700	1300	750	250	200
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T min (MHz)					
NPN	140	300	60	250	100				PMBT5550	PMST5550
	160	300	80	250	100				PMBT5551 / BSR19A	PMST5551
	250	100	50	-	60	BF722	BF622		BF822	
	300	100	50	-	60	BF720	BF620		BF820	BF820W
			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 VCEsat (BISS) transistor portfolio on page 29.

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	

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

Types in **bold** represent new products

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

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

Matched pair transistors - part 2

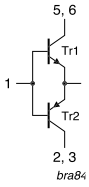
Types in **bold** represent new products

Package							SOT353 (SC-88A)	SOT363 (SC-88)		SOT666		SOT1216 (DFN1010B-6)	
													
Size (mm)							2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95		1.6 x 1.2 x 0.55		1.1x 1.0 x 0.37	
P_{tot} (mW)							300	300		300		350	
Polarity	V_{CEO} (V)	I_C (mA)	h_{FE} min	h_{FE} max	h_{FE1}/h_{FE2}	V_{BE1} - V_{BE2} (mV)							
NPN	45	100	200	450	0.9 [1]	2		BCM847BS		BCM847BV			
					0.95	2	PMP4501G		PMP4501Y		PMP4501V	**BCM847QAS**	**PMP4501QAS**
					0.98	2	PMP4201G		PMP4201Y		PMP4201V		
	65	100	200	450	0.9	2		BCM846BS					
	Configuration												
PNP	45	100	200	450	0.9 [1]	2		BCM857BS		BCM857BV			
					0.95	2	PMP5501G		PMP5501Y		PMP5501V	**BCM857QAS**	**PMP5501QAS**
					0.98	2	PMP5201G		PMP5201Y		PMP5201V		
	65	100	200	450	0.9	2		BCM856BS					
	Configuration												

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

MOSFET driver

Types in **bold** represent new products

V_{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

Types in **bold** represent new products

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	[illegible]	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)							1700	1650	750	1300	1300
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); I_C = 0.5 A; I_B = 0.05 A					
12	5.3	10.6	300 / 530	0.5	2	18		PBSS301NX			
	5.8	11.6	300 / 530	0.5	2	18	PBSS301NZ				
20	3	5	220 / 390	0.5	2	40		PBSS4320X			
	4	15	300 / 450	0.5	2	30			PBSS301ND		
	5	10	300 / 450	0.5	2	35		PBSS4520X			
	5.3	10.6	300 / 570	0.5	2	20		PBSS302NX			
	5.8	10.2	300 / 570	0.5	2	20	PBSS302NZ				
	6	7	280 / 440	0.5	2	20				PBSS4620PA	
	7	15	300 / 550	0.5	2	12		PBSS4021NX			
	8	20	300 / 550	0.5	2	9	PBSS4021NZ				
30	3	5	300 / 490	0.5	2	45		PBSS4330X			
	3	5	300 / 465	0.5	2	40					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				
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				
	6.2	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				
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				

[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

Types in **bold** represent new products

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			
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			
	6.2	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			
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	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	
		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	
	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

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 / 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					
							PBSS5250TH					
	2	3	200 / –	0.5	2	90 [2]	**PBSS5350TH**					
		5	200 / 360	0.5	2	55	PBSS5350T					
60	1	1.5	120 / 185	0.5	2	125						PBSS5160QA
		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					

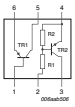
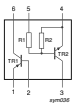
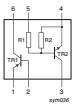
[1] IC / IB = 20 [2] V_{CEsat} (max) [3] Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors double

Package										SOT96 (SO8)	SOT457 (SC-74)	SOT666	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)
														
Size (mm)										4.9 x 3.9 x 1.75	2.9 x 1.5 x 1.0	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)										2000 [2]	750	500	1300	1300
V_{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			PBSS2515VS		
		2 x PNP	200	0.01	2	170 [1]	250	0.5	0.05			PBSS3515VS		
		NPN / PNP	200	0.01	2	170 [1]	250	0.5	0.05			PBSS2515VPN		
		NPN / PNP	200	0.01	2	170 [1]	250	0.5	0.05					
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05					PBSS4220PANS
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05					PBSS5220PAPS
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	
40	1	NPN / PNP	300 / 250	0.5	5	130 / 150	500	1	0.1		PBSS4140DPN			
	2	NPN / PNP	300 / 250	0.5	5	80 / 100	400 / 530	2	0.2		PBSS4240DPN			
50	2.7	2 x NPN	300	0.5	2	50	340	2.7	0.27	PBSS4350SS				
		2 x PNP	200	0.5	2	60	370	2.7	0.27	PBSS5350SS				
		NPN / PNP	300 / 200	0.5	2	50 / 60	340 / 370	2.7	0.27	PBSS4350SPN				
60	1	2 x NPN	200	0.5	5	115	250	1	0.1		PBSS4160DS			
		2 x PNP	150	0.5	5	120	330	1	0.1		PBSS5160DS			
		NPN / PNP	200 / 150	0.5	5	115 / 120	250 / 330	1	0.1		PBSS4160DPN			
	1	NPN / NPN	150	0.5	2	90	120	0.5	0.05				PBSS4160PAN	PBSS4160PANS
		PNP / PNP	120	0.5	2	125	180	0.5	0.05				PBSS5160PAP	PBSS5160PAPS
		NPN / PNP	150 / 120	0.5	2	90 / 125	120 / 180	0.5	0.05				PBSS4160PANP	PBSS4160PANPS
	2	NPN / NPN	210	0.5	2	70	90	0.5	0.05				PBSS4260PAN	PBSS4260PANS
		PNP / PNP	140	0.5	2	100	140	0.5	0.05				PBSS5260PAP	PBSS5260PAPS
		NPN / PNP	210 / 140	0.5	2	70 / 100	90 / 140	0.5	0.05				PBSS4260PANP	PBSS4260PANPS
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) power transistors single

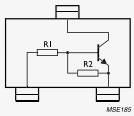
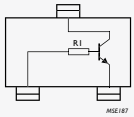
Types in **bold** represent new products

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

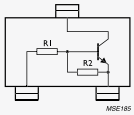
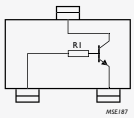
Low V_{CEsat} (BISS) power transistors double

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	-	PHPT61003NPK
						50	300	3	0.2	2XNPN	0.95	PHPT610035NK
						70	400	3	0.2	2XPNP	0.9	PHPT610035PK

RETs 100 mA single - part 1

Package					SOT23		SOT323 (SC-70)	
								
Size (mm)					2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95	
P_{tot} (mW)					250		200	
V_{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

Types in **bold** represent new products

Package					DFN1010B-6 (SOT1216)			DFN1412-6 (SOT1268)			SOT363 (SC-88)			SOT666		
																
Size (mm)					1.1 x 1.0 x 0.37			1.4 X 1.2 X 0.5			2.0 x 1.25 x 0.95			1.6 x 1.2 x 0.55		
P_{tot} (mW)					350			480			300			300		
V_{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	NPN / NPN	NPN / PNP	PNP / PNP
50	100	R1 = R2	2.2	2.2							PUMH20	PUMD20	PUMB20	PEMH20	PEMD20	PEMB20
			4.7	4.7							PUMH15	PUMD15	PUMB15	PEMH15	PEMD15	PEMB15
			10	10	PQMH11	PQMD3	PQMB11	**PRMH11**	**PRMD3**	**PRMB11**	PUMH11	PUMD3	PUMB11	PEMH11	PEMD3	PEMB11
			22	22		PQMD2			**PRMD2**		PUMH1	PUMD2	PUMB1	PEMH1	PEMD2	PEMB1
			47	47	PQMH2	PQMD12		**PRMH2**	**PRMD12**		PUMH2	PUMD12	PUMB2	PEMH2	PEMD12	PEMB2
			100	100							PUMH24	PUMD24	PUMB24	PEMH24	PEMD24	PEMB24
		R1 ≠ R2	2.2	47	PQMH10	PQMD10		**PRMH10**	**PRMD10**		PUMH10	PUMD10	PUMB10	PEMH10	PEMD10	PEMB10
			4.7	10							PUMH18	PUMD18	PUMB18	PEMH18	PEMD18	PEMB18
			4.7	47	PQMH13	PQMD13		**PRMH13**	**PRMD13**		PUMH13	PUMD13	PUMB13	PEMH13	PEMD13	PEMB13
			10	47	PQMH9			**PRMH9**			PUMH9	PUMD9	PUMB9	PEMH9	PEMD9	PEMB9
			22	47		PQMD16			**PRMD16**		PUMH16	PUMD16	PUMB16	PEMH16	PEMD16	PEMB16
			47	22							PUMH17	PUMD17	PUMB17	PEMH17	PEMD17	PEMB17
			47 / 2.2	47 / 47								PUMD48			PEMD48	
		Only R1	2.2	-							PUMH30	PUMD30	PUMB30	PEMH30	PEMD30	PEMB30
			4.7	-							PUMH7	PUMD6	PUMB3	PEMH7	PEMD6	PEMB3
			10	-							PUMH4	PUMD4	PUMB4	PEMH4	PEMD4	PEMB4
			22	-							PUMH19	PUMD19	PUMB19	PEMH19	PEMD19	PEMB19
			47	-							PUMH14	PUMD14	PUMB14	PEMH14	PEMD14	PEMB14

RETs 500mA single / double

Package					SOT457 (SC-74)		SOT23		SOT323 (SC-70)		SOT1215	
												
Size (mm)					2.9 x 1.5 x 1.0		2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		1.1 x 1.0 x 0.37	
P_{tot} (mW)					750		250		200		750	
V_{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

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								

Products in **bold red** are under development



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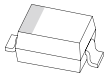
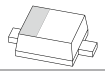
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General purpose Zener diodes

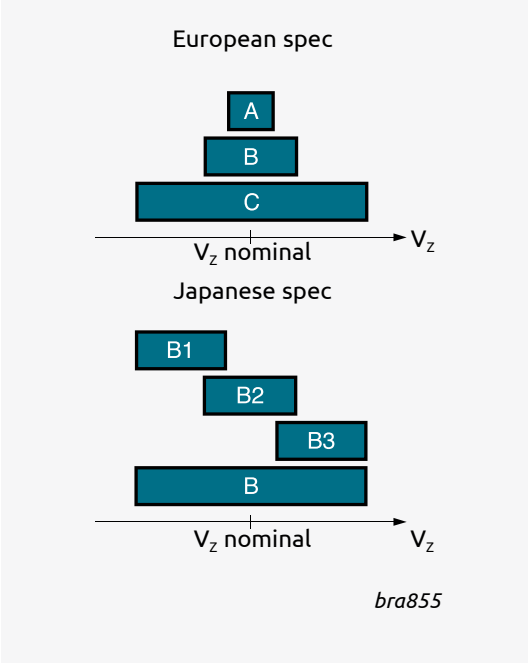
I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package	Size (mm)	P_{tot} (mW)
200	40	2.4~75	B, C	Europe	Dual c.a.		BZB84 series	SOT23 	2.9 x 1.3 x 1.0	250
			A, B, C		Single		BZX84 series			
250	40	2.4~75	B, C	Europe	Single		BZT52 series	SOD123 	2.7 x 1.6 x 1.2	550
200		2.4~36	B	Japan			PDZ-GW series			
250	40	2.4~75	B, C	Europe	Single		BZT52H series	SOD123F 		
200	40	10	B2	Japan	Dual isolated		PZU10DB2 series	SOT353 (SC-88A) 	2.0 x 1.25 x 0.95	300
200	30	100	C	Europe	Back-to-back		BZB100A	SOD323 (SC-76) 	1.7 x 1.25 x 0.95	300
250	40	2.4~75	B, C	Europe	Single		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
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					
		100	5000	75	4								
80	1	50	500	80	4				1PS300				
									1PS301				
									1PS302				
90	1	50	500	80	4		BAW56		BAW56W			BAW56QA	BAW56M
										BAW56S	BAW56SRA		
										BAV756S			

General purpose, high speed switching diodes 100V

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOT666	DFN1412-6 (SOT1268)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-2 (SOD882)	DFN1006-3 (SOT883)	DFN1006D-2 (SOD882D)
						Size (mm)	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.6 x 1.2 x 0.55	1.1 x 1.2 x 0.5	1.2 x 0.8 x 0.6	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
						P_{tot} (mW)	**250**	**380**	**375**	**200**	**300**	**300**	**300**	**180**	**480**	**250**	**325**	**250**	**250**	**250**
100	1	50	500	80	4			BAS16GW	BAS16H			BAS316	BAS16J			BAS516		BAS16L		BAS16LD
							BAS16			BAS16W							BAS16QA			
											BAS-16VY			BAS-16VV						
							BAV70			BAV70W							BAV70QA		BAV70M	
											BAV70S				BAV70SRA					
							BAV99			BAV99W							BAV99QA			
											BAV99S									

General purpose, switching diodes >= 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))
																		
						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)
						P_{tot} (mW)	**250**	**250**	**250**	**380**	**375**	**200**	**255**	**300**	**300**	**300**	**250**	**250**
100	1	100	100	100	50			BAS19										
150	1	100	100	150	50													
								BAS20										
≥200	1	100	100	150	50					BAS21GW	BAS21H				BAS321	**BAS321J**		BAS21LL BAS21LD
				200				BAS21				BAS21W						
									BAV23									
													BAS21PG					
								BAV23A				BAS21AW						
								BAV23C										
								BAV23S				BAS21SW						
							BA-S21AVD											
							BAS21VD											
300	1.1	100	150	250	50											BAS21J	BAS521	
								BAS101										
								BAS101S										
									BAW101									
														BAW101S				

Controlled avalanche switching diodes

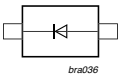
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_d max (pF)	t_{rr} max (ns)	Package	SOT23	SOT143B
										
								Size (mm)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
								P_{tot} (mW)	250	250
60	1	200	100	9	600	2.5	6			BAS56
90	1	200	100	10	600	35	50		BAS29	
	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

Low leakage current switching diodes

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	t_{rr} max (µs)	Package	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	

PN 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 pn-rectifier 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

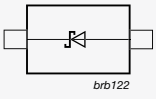
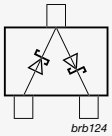
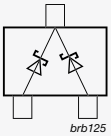
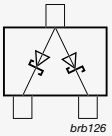
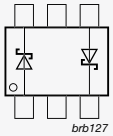
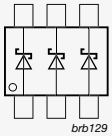
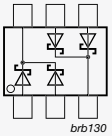
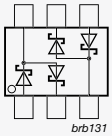
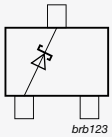
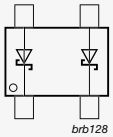
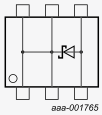
Cont. Forward current:
10 = 1.0 A
20 = 2.0 A
30 = 3.0 A

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	SOD123F
										
						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	2.6 x 1.6 x 1.1
						P_{tot} (mW)	250	250	357	375
70	70	750	10	0.1	50	Single	BAS70			BAS70H
						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			BAS40H
						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	BAT54H
						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	BAT46WH

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

	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)	DFN1006-2 (SOD882)/ DFN1006-3 (SOT883)
							
	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
	250	300	385	400	300	275	250
	BAS70W			1PS76SB70		1PS79SB70	BAS70L
	BAS70-04W						
	BAS70-05W						
	BAS70-06W						
		BAS70-07S			BAS70-07V		
					BAS70VV		
		BAS70XY					
				RB751V40		RB751S40	RB751CS40
	BAS40W			1PS76SB40		1PS79SB40	BAS40L
	BAS40-04W						
	BAS40-05W						
	BAS40-06W						
					BAS40-07V		
		1PS88SB48			BAS40-05V		
		BAS40XY					
						1PS79SB31	
		BAT754L					
	BAT54W		BAT54J	1PS76SB10		1PS79SB10	BAT54L
	BAT54SW						
	BAT54CW						BAT54CM
	BAT54AW						
		BAT74S			BAT74V		
					BAT54VV		
					BAT54CV		
		BAT54XY					
						RB521S30	RB521CS30L
						RB520S30	RB520CS30L
				1PS76SB21			
						1PS79SB30	
	BAT854W						
	BAT854SW						
	BAT854CW						
	BAT854AW						
			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)	SOT666	SOD523 (SC-79)	DFN1006-2 (SOD882)
												
					Size (mm)	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
					P_{tot} (mW)	250	250	300	400	300	500	250
30	4	450	1	1	Single	BAT17			1PS76SB17		1PS79SB17	
					Triple isolated					1PS66SB17		
					Dual series	PMBD353 PMBD354 [1]						
	15	340	1	1	Single		1PS70SB82					1PS10SB82
					Triple isolated			1PS88SB82		1PS66SB82		
					Dual series		1PS70SB84					
					Dual c.c.		1PS70SB85					
					Dual c.a.		1PS70SB86					

[1] Diodes have matched capacitance

Medium power low VF schottky rectifiers single >= 200 mA - leadless DSN / DFN packages

I_F max (A)	V_R max (V)	V_F max (mV) @ IF max	I_R max (mA) @ V_R max	Package	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	DFN1608D-2 (SOD1608)	
				Size (mm)	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62	1.6 x 0.8 x 0.57	
				P_{tot} (mW) @ 1 cm²	960	960	780	
				Optimization				
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				
		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			PMEG2005EPK	
		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				
		720	0.009	Low I_R				
	40	590	0.01	low I_R			PMEG4005EPK	
		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			PMEG2010EPK	
		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			PMEG4010EPK	
		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			PMEG2015EPK	
	40	610	0.03	low I_R			PMEG4015EPK	
2	20	420	1.9	low V_F	PMEG2020EPA	PMEG2020EPAS		
		450	0.9	low V_F			PMEG2020EPK	
	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			PMEG4020EPK	
		575	0.25	low V_F	PMEG6020EPA	PMEG6020EPAS		

	DFN1006-2 (SOD882)	DFN1006D-2 (SOD882D)
		
	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
	565	660
	PMEG3002AEL	PMEG3002AELD
	PMEG4002EL	PMEG4002ELD
		PMEG6002ELD
		PMEG2005BELD
	PMEG2005AEL	PMEG2005AELD
	PMEG2005EL	PMEG2005ELD
	PMEG3005EL	PMEG3005ELD
		PMEG2010BELD

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
		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			**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 VF/Low IR	**PMEG045T030EPD**		
	50	530	0.1	Low V_F	PMEG050V030EPD		
	60	475	0.4	Low V_F		PMEG6030EVP	
		530	0.2	Low V_F	PMEG060V030EPD	PMEG6030EP	
				Low V_F		PMEG6030ETP	
		690	0.001	Low I_R		PMEG6030ELP	
	100	770	0.00045	Low I_R		PMEG10030ELP	
4.5	60	530	0.4	Low V_F		PMEG6045ETP	
5	30	360	8	Low V_F		PMEG3050EP	
		450	0.25	Low I_R		PMEG3050BEP	
		500	0.15	Low V_F	PMEG030V050EPD		
	40	490	0.3	Low V_F		PMEG4050EP	
			0.3	Low V_F		PMEG4050ETP	
		520	0.12	Low V_F	PMEG040V050EPD		
		525	0.041	Low V_F/Low I_R		**PMEG40T50EP**[1]	
	45	490	0.3	Low V_F	PMEG045V050EPD		
		525	0.044	Low VF/Low IR	**PMEG045T050EPD**		
	60	560	0.4	Low V_F	PMEG060V050EPD		
6	100	840	0.00045	Low I_R	PMEG100V060ELPD		
8	100	850	0.0005	Low I_R	PMEG100V080ELPD		
10	45	490	0.6	Low V_F	PMEG045V100EPD		
		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]		
		570	0.098	Low VF/Low IR	**PMEG045T150EIPD**		
	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)	SOT666	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	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6
				P_{tot} (mW) @ 1 cm²	540	420	660	830	400	830	570	570	500
				Optimization									
0.2	30	480	0.05	Low V_f						PMEG3002EJ			PMEG3002AEB
	40	600	0.01	Low I_r						PMEG4002EJ			PMEG4002EB
	60	600	0.1	Low V_f						PMEG6002EJ			PMEG6002EB
0.5	20	390	0.2	Low V_f		PMEG2005ET	PMEG2005EGW	PMEG2005EH		PMEG2005EJ	PMEG2005AEA	PMEG2005AEV	
		480	0.03	Low I_r									PMEG2005EB
	30	430	0.15	Low V_f		PMEG3005ET	PMEG3005EGW	PMEG3005EH		PMEG3005EJ	PMEG3005AEA	PMEG3005AEV	
		500	0.5	Low V_f									PMEG3005EB
	40	470	0.1	Low V_f		PMEG4005ET	PMEG4005EGW	PMEG4005EH		PMEG4005EJ	PMEG4005AEA	PMEG4005AEV	
		550	1.1	Low V_f		BAT720			1PS70SB20				
		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	PMEG2010BEV	
		550	0.07	Low I_r						PMEG2010AEJ	PMEG2010EA BAT760	PMEG2010EV BAT960	
		620	1.5	Low V_f									PMEG2010AEB
	30	450	1	Low V_f	1PS74SB23								
		520	0.1	Low I_r				PMEG3010CEH		PMEG3010CEJ			
		560	0.15	Low V_f		PMEG3010ET	PMEG3010EGW	PMEG3010EH		PMEG3010EJ	PMEG3010BEA	PMEG3010BEV	
		680	0.5	Low V_f									PMEG3010EB
	40	570	0.05	Low I_r			PMEG4010CEGW	PMEG4010CEH		PMEG4010CEJ			
		640	0.05	Low V_f		PMEG4010ET	PMEG4010EGW	PMEG4010EH		PMEG4010EJ	PMEG4010BEA	PMEG4010BEV	
		840	0.008	Low I_r							PMEG4010CEA		
	60	660	0.05	Low I_r			PMEG6010CEGW	PMEG6010CEH		PMEG6010CEJ			
1.5	20	660	0.2	Low I_r				PMEG2015EH		PMEG2015EJ	PMEG2015EA	PMEG2015EV	
	30	500	1	Low V_f				PMEG3015EH		PMEG3015EJ		PMEG3015EV	
2	10	460	3	Low V_f				PMEG1020EH		PMEG1020EJ	PMEG1020EA	PMEG1020EV	
	20	525	0.2	Low V_f				PMEG2020EH		PMEG2020EJ	PMEG2020AEA		
	30	620	1	Low V_f			PMEG3020EGW	PMEG3020EH		PMEG3020EJ			
3	10	530	3	Low V_f				PMEG1030EH		PMEG1030EJ			

Medium power low VF schottky rectifiers dual >= 200 mA

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Optimization	Package	SOT223 (SC-73)	SOT23	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	SOT666
										
					Size (mm)	6.5 x 3.5 x 1.65	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.63	1.6 x 1.2 x 0.55
					P_{tot} (mW) @ 1 cm²	1500	400	1000	1000	400
0.2	30	480	0.03	Low V_f						PMEG3002TV
	60	600	0.1	Low V_f						PMEG6002TV
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
V	SOT666

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
- **International 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

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Low capacitance ESD protection for high-speed interfaces 52

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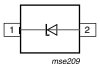
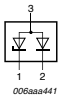
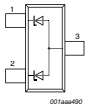
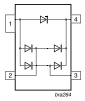
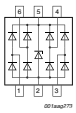
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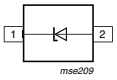
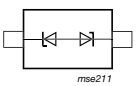
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Low capacitance ESD protection for high-speed interfaces

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	ESD rating max (kV) [1]	Surge robustness 8/20 µs (A)	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional									
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)

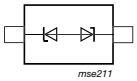
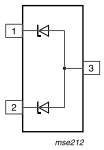
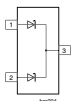
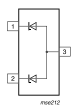
General purpose ESD protection devices

Number of protected lines											
Unidirectional	Bidirectional	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)
		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		
1	0	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	65	78	-	30	0.05		PTVS4V5D1BL	DFN1006-2 (SOD882)	

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

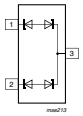
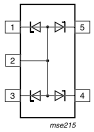
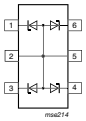
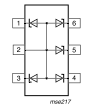
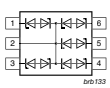
[2] according to IEC 61000-4-2 (contact discharge)

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	P_{PP} max (W) [1]	ESD rating max (kV) [2]	I_R max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
0	1		11	13	45	30	0.01	 mse211	PESD5V0V1BLD	DFN1006D-2 (SOD882D) 	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	 mse212	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

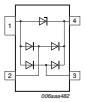
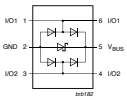
[2] according to IEC 61000-4-2 (contact discharge)

Audio interface protection

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	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	

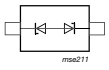
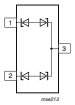
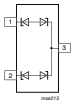
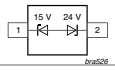
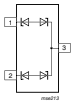
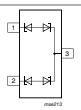
Automotive high-speed network protection

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		

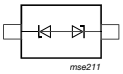
[1] 8 / 20 µs surge pulse according to IEC 61000-4-5

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

Charger port protection

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

Antenna protection (NFC, WiFi,…)

Number of protected lines (Bidirectional)	V_{RWM} [V]	C_{line} typ [pF]	C_{line} max [pF]	ESD rating [1] max [kV]	Configuration	Type	Package	Size
1	18	0.35	0.5	10		PESD18VF1BL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
	24	0.3	0.45	10		PESD24VF1BL		1.0 x 0.6 x 0.48

[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		

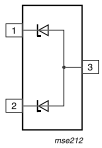
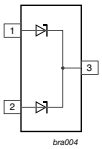
TVS diodes, compact

Types in **bold** represent new products

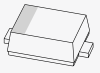
P_{PPM} 10/1000µs	V_{RWM}	V_{BR} min	V_{BR} max	I_{PPM} 8/20µs	V_{CL} 8/20µs	I_{PPM} 10/1000µs	V_{CL} 10/1000µs	Type	Package	Size
300	4.5	4.7	-	34	13.2	-	-	**PTVS4V5D1BL**	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
	7.5	8.33	9.21	178	19.7	23.3	12.9	PTVS7V5U1UPA	DFN2020-3 (SOT1061) 	2.0 x 2.0 x 0.62
	10	11.1	12.3	148	23	17.6	17	PTVS10VU1UPA		
	12	13.3	14.7	131	25.2	15.1	19.9	PTVS12VU1UPA		
	15	16.7	18.5	111	28.8	12.3	24.4	PTVS15VU1UPA		
	18	20	22.1	97	32	10.3	29.2	PTVS18VU1UPA		
	20	22.2	24.5	98.5	38.7	9.2	32.5	**PTVS20VU1UPA**		
	22	24.4	26.9	88.5	41	8.4	35.5	**PTVS22VU1UPA**		
	24	26.7	29.5	79	44.2	7.7	38.8	**PTVS24VU1UPA**		
	26	28.9	31.9	69	43.5	7	43	PTVS26VU1UPA		

TVS diodes, 24 W/40 W

Types in **bold** represent new products

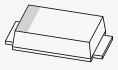
Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV) [1]	C_{line} typ (pF)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	3	5.32	5.6	5.88	20	30	210	8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

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		

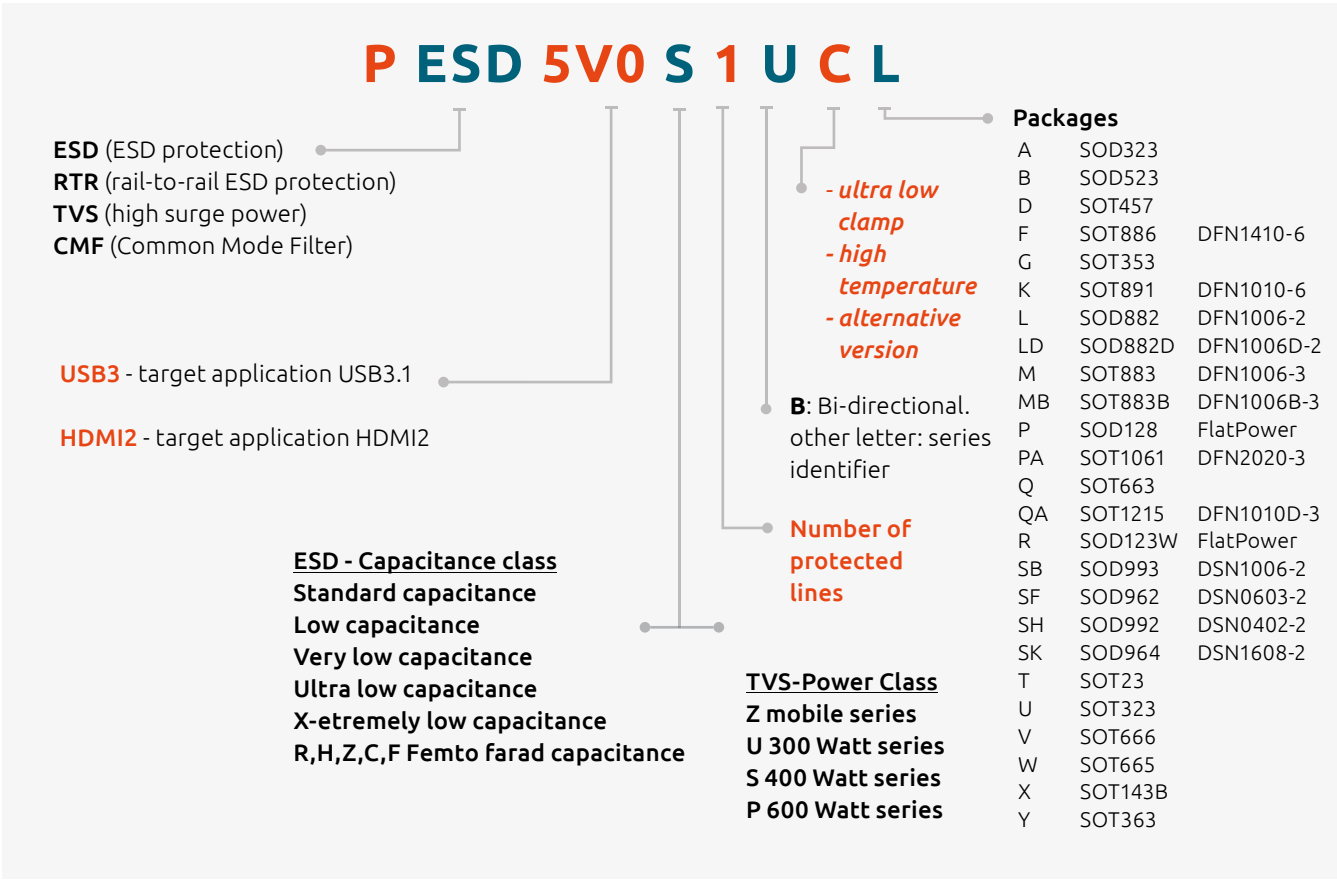
[1] 10 / 1000 µs according to IEC 61643-321

TVS diodes, 600W

Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RM} typ (µA) @ V_{RWM}	I_{RM} max (µA) @ V_{RWM}	Type (T_j max = 150 °C)	Type (T_j max = 185 °C)	Package	Size (mm)
600	3.5	5.20	5.60	6.00	10	8	75	5	600	PTVS3V3P1UP	PTVS3V3P1UTP	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





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Automotive grade MOSFETs nomenclature

BUK 7 Y 3R0 - 40 H

Segment
'BUK' for automotive grade

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

Package
6 = D²PAK
2 = DPAK
E = I²PAK
5 = TO-220
M = LFPAK33
Y = LFPAK56
K = LFPAK56D
J = LFPAK56E

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

Voltage rating
BV_{DSS} rating

3R0 = $R_{DS(on)}$ <3mΩ max 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) 	BUK962R8-30B	30	2.4	2.8	75	0.5
	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
	BUK9607-30B	30	5	7	75	0.95
	BUK7607-30B	30	7		75	0.95
LFPAK56; Power-SO8 (SOT669) 	BUK9Y07-30B	30	6	7	75	1.42
	BUK7Y07-30B	30	7		75	1.42
	BUK9Y11-30B	30	9	11	59	2
	BUK7Y10-30B	30	10		67	1.76
	BUK9Y22-30B	30	19	22	37.7	2.53
	BUK7Y20-30B	30	20		39.5	2.53
LFPAK56D (SOT1205) 	BUK9K5R1-30E	30	4.4	5.3	40	2.21
	BUK9K5R6-30E	30	4.7	5.8	40	2.36
	BUK7K5R1-30E	30	5.1		40	2.21
	BUK7K5R6-30E	30	5.6		40	2.36
LFPAK33 (SOT1210) 	BUK9M5R2-30E	30	4.1	5.2	70	1.89
	BUK9M6R6-30E	30	5.3	6.6	70	2
	BUK9M10-30E	30	7.8	10	54	2.75
	BUK9M17-30E	30	14	17	37	3.4

N-channel 40V automotive power MOSFETs

Types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78) 	BUK751R8-40E	40	1.8		120	0.43
	BUK752R3-40E	40	2.3		120	0.51
	BUK753R1-40E	40	3.1		100	0.64
	BUK758R3-40E	40	7.4		75	1.56
D^2PAK (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
DPAK (SOT428) 	BUK9209-40B	40	7	9	75	0.95
	BUK7208-40B	40	8		75	0.95
I^2PAK (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
	BUK7Y3R5-40E	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

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		24.2	3.96
	BUK9K25-40E	40	24	29	18.2	4.68
	BUK7K25-40E	40	25			4.68
LFPAK33 (SOT1210) 	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M8R0-40E	40	8		69	2
	BUK7M10-40E	40	10		56	2.43
	BUK7M12-40E	40	12		48	2.75
	BUK7M21-40E	40	21		33	3.4
	BUK7M45-40E	40	45		19	4.8
	BUK9M14-40E	40	11	14	44	2.75
	BUK9M24-40E	40	20	24	30	3.4
	BUK9M52-40E	40	40	52	17.6	4.8
	BUK9M7R2-40E	40	5.8	7.2	70	1.89
	BUK9M9R1-40E	40	7.3	9.1	64	2
	BUK9M11-40E	40	9	11	53	2.43

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (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
	BUK7624-55A	55	24		47	1.4
	BUK9628-55A	55	25	28	42	1.5
	BUK7628-55A	55	28		42	1.5
	BUK9635-55A	55	32	35	34	1.8
	BUK7635-55A	55	35		35	1.7
	BUK9675-55A	55	68	75	20	2.4
	BUK7675-55A	55	75		20.3	2.4

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)
D²PAK (SOT404) 	BUK962R5-60E	60	2.3	2.5	120	0.43
	BUK762R4-60E	60	2.4		120	0.43
	BUK962R8-60E	60	2.5	2.8	120	0.46
	BUK762R6-60E	60	2.6		120	0.46
	BUK963R3-60E	60	3	3.3	120	0.51
	BUK763R1-60E	60	3.1		120	0.51
	BUK964R2-60E	60	3.9	4.2	100	0.57
	BUK763R9-60E	60	3.9		100	0.57
	BUK964R8-60E	60	4.4	4.8	100	0.64
	BUK764R4-60E	60	4.5		100	0.64
	BUK966R5-60E	60	5.9	6.5	75	0.82
	BUK766R0-60E	60	6		75	0.82
	BUK969R0-60E	60	8	9	75	1.09
	BUK768R3-60E	60	8.3		75	1.09
	BUK9614-60E	60	13	14	56	1.56
	BUK7613-60E	60	13		58	1.56
DPAK (SOT428) 	BUK9212-55B	55	10	12	75	0.95
	BUK7210-55B	55	10		75	0.95
	BUK7212-55B	55	12		75	0.95
	BUK9215-55A	55	14	15	62	1.3
	BUK7215-55A	55	15		62	1.3
	BUK9219-55A	55	18	19	55	1.3
	BUK7219-55A	55	19		55	1.3
	BUK9222-55A	55	20	22	48	1.5
	BUK9225-55A	55	22	25	43	1.6
DPAK (SOT428) 	BUK7222-55A	55	22		48	1.5
	BUK7225-55A	55	25		43	1.6
	BUK9230-55A	55	27	30	38	1.7
	BUK7230-55A	55	30		38	1.7
	BUK9237-55A	55	33	37	32	1.94
	BUK7237-55A	55	37		32.3	1.9
	BUK9245-55A	55	40	45	28	2.1
	BUK9277-55A	55	69	77	18	2.93
	BUK7277-55A	55	77		18	2.9
	BUK92150-55A	55	125	140	11	4.1
	BUK72150-55A	55	150		11	4.1
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	16.7	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		20.7	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK7K52-60E	60	45		15.4	4.68
	BUK9K52-60E	60	49	55	16	4.68
LFPAK33 (SOT1210) 	BUK7M9R9-60E	60	9.9		60	1.89
	BUK9M12-60E	60	11	12	54	1.89
	BUK7M12-60E	60	12		53	2
	BUK9M15-60E	60	13	15	47	2
	BUK7M15-60E	60	15		43	2.43
	BUK9M19-60E	60	17	19	38	2.43
	BUK7M19-60E	60	19		36	2.75
	BUK9M24-60E	60	21	24	32	2.75
	BUK7M33-60E	60	33			3.4
	BUK9M42-60E	60	37	42	22	3.4
	BUK7M42-60E	60	42		20	4.17
	BUK9M53-60E	60	46	53	17	4.17
	BUK7M67-60E	60	67		14	4.8
	BUK9M85-60E	60	73	85	12.8	4.8
SOT223 	BUK9832-55A/CU	55	29	32		
	BUK9880-55A/CU	55	73	80		
	BUK7880-55A/CU	55	80			
	BUK98150-55A/CU	55	137	150		
	BUK78150-55A/CU	55	150			

N-channel 75V-80V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78) 	BUK753R8-80E	80	4		120	0.43
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
DPAK (SOT428) 	BUK7214-75B	75	14		69	0.95
	BUK9217-75B	75	15	17	64	0.95
	BUK9226-75A	75	25	26	45	1.3
	BUK7226-75A	75	26		45	1
LFPAK56; Power-SO8 (SOT669) 	BUK7Y7R8-80E	80	7.8		100	0.63
	BUK9Y8R5-80E	80	8	8.5	100	0.63
	BUK7Y9R9-80E	80	9.9		89	0.77
	BUK9Y11-80E	80	10	11	84	0.77
	BUK9Y14-80E	80	14	15	62	1.02
	BUK7Y14-80E	80	14		65	1.02
	BUK9Y25-80E	80	25	27	37	1.58
	BUK7Y25-80E	80	25		39	1.58
	BUK9Y41-80E	80	41	45	24	2.33
	BUK7Y41-80E	80	41		25	2.31
	BUK9Y72-80E	80	72	78	15	3.33
	BUK7Y72-80E	80	72		16	3.33
	BUK9Y107-80E	80	98	107	11.8	4.03
	BUK7Y98-80E	80	98		12.3	4.03
LFPAK56D (SOT1205) 	BUK7K15-80E	80	15		23	2.21
	BUK7K17-80E	80	17		21	2.36
	BUK7K23-80E	80	23		17	2.21
	BUK9K20-80E	80	17	19	23	2.84
	BUK9K22-80E	80	19	22	21	2.36
	BUK9K30-80E	80	26	30	17	2.84
LFPAK33 (SOT1210 	BUK7M17-80E	80	17		43	1.89
	BUK9M23-80E	80	20	23	37	1.89
	BUK7M22-80E	80	22		37	2
	BUK7M27-80E	80	27		30	2.43
	BUK9M28-80E	80	28	28	33	2
	BUK9M35-80E	80	35	35	26	2.43

N-channel 100V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (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
DPAK (SOT428) 	BUK7227-100B	100	27		48	0.95
	BUK9230-100B	100	28	30	47	0.95
	BUK9240-100A	100	39	40	33	1.3
	BUK7240-100A	100	40		34	1.3
	BUK9275-100A	100	72	75	21.7	1.7
	BUK7275-100A	100	75		21.7	1.7
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		21.4	2.84
	BUK9K45-100E	100	42	45	21	2.84
	BUK7K89-100E	100	83		13	3.96
	BUK9K89-100E	100	85	89	12.5	3.96
	BUK7K134-100E	100	121		9.8	4.68
	BUK9K134-100E	100	154	159	8.5	4.68
LFPAK33 (SOT1210) 	BUK9M34-100E	100	34	34	29	1.89
	BUK9M43-100E	100	43	44	26	1.88
	BUK9M120-100E	100	119	120	11.5	3.4
	BUK9M156-100E	100	150	156	9.3	4.17
SOT223 	BUK98180-100A/CU	100	173	180	4.6	
	BUK9875-100A/CU	101	72	75	7	

P-channel 30V-60V automotive power MOSFETs

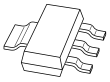
Types in **bold** represent new products

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

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

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N-channel	20	8	4.7	0.45	1	2	-	24	29	40	
			2	0.45	1	2	-	57	64	78	
			2.8	0.4	1	2	-	64	78	110	
		12	12.9	0.4	0.9	2	-	10	12	16	
			11.4	0.4	0.9	2	-	12	15	20	
			6.3	0.75	1.25	2	-	16	24	-	
	30	12	11.3	0.4	0.9	2	-	13	14	17	
			5	0.4	0.9	2	-	28	32	37	
			4	0.75	1.25	2	-	55	72	-	
			0.9	0.75	1.25	2	-	212	269	-	
		20	5.5	1	2.5	2	17	22	-	-	
			3.9	1	2.5	2	30	39	-	-	
			3.7	1	2.5	2	54	70	-	-	
	40	15	7	1.4	2.1	0.5	-	18	22	-	
			19	1	2	-	-	23	-	-	
		20	7	2.4	4	0.5	19	-	-	-	
			2.7	1	2.5	1	64	79	-	-	
			2.5	1	2.5	1	95	120	-	-	
			19	1.3	2.7	-	23	30			
			19	2.4	4	-	25	-			
	60	20	5	1.3	2.7	0.5	32	38	-	-	
			4	1.3	2.7	2	42	49	-	-	
			3.1	1.3	2.7	2	46	52	-	-	
			3	1.3	2.7	2	72	85	-	-	
			2.1	1.3	2.7	2	96	108	-	-	
			1.5	1.3	2.7	2	176	196	-	-	
			0.8	1.3	2.7	2	300	332	-	-	
			13	1.3	2.7	-	43	53	-	-	
	80	20	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	
			6	0.45	0.95	2	-	37	45	59	
			2	0.5	1.1	-	-	100	155	210	
			2.3	0.45	0.95	-	-	120	150	200	
		12	10.3	0.47	0.9	2	-	19	22	28	
			5.7	0.75	1.25	2	-	27	39	-	
			5	0,47	0,9	2,3	-	28	31	36	
			5.3	0.75	1.25	2	-	28	42	-	
			5	0.47	0.9	2	-	39	45	56	
			5.7	0.75	1.25	2	-	41	56	-	
			3.5	0.75	1.25	-	-	48	71	-	
			3.3	0.75	1.25	2	-	67	99	-	
			4.1	0.75	1.25	2	-	70	101	-	
			2.4	1	2.5	2	-	97	147	-	
	30	20	8,8	1	2,5	-	24	32	-	-	
			4.2	1	3	2	35	47	-	-	
	40	20	1.5	1	2.5	1	180	220	-	-	
			5	1.5	3	1	32	42	-	-	
			14	1.4	2.7	-	43	70			
	60	20	8	1,9	3,2	0,5	95	125			
	70	20	2.3	1	3	2	156	177	-	-	

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			
			PMV65UNEA			
				PMPB10XNEA		
				PMPB12UNEA		
			PMV20XNEA	PMPB20XNEA		
				PMPB13XNEA		
				PMPB29XNEA		
					PMDPB56XNEA	
			PMV25ENEA			
			PMV50ENEA			
			PMV100ENEA			
				BUK9D23-40E		
			PMV65ENEA			
			PMV130ENEA			
				BUK6D23-40E		
				BUK7D25-40E		
				PMPB55ENEA		
			PMV55ENEA			
				PMPB85ENEA		
			PMV120ENEA			
			PMV230ENEA			
			PMV450ENEA			
				BUK6D43-60E		
				PMPB95ENEA		
				PMPB215ENEA		
						PMXB360ENEA
	PMT280ENEA		PMV280ENEA			
	PMT560ENEA					
				PMPB15XPA		
			PMV27UPEA			
			NX2301P			
			BSH205G2			
				PMPB20XPEA		
		PMN27XPEA				
				PMPB29XPEA		
			PMV30XPEA			
				PMPB43XPEA		
		PMN42XPEA				
			PMV48XPA			
			PMV65XPEA			
			PMV100XPEA			
				PMPB27EPA		
			PMV50EPEA			
			PMV250EPEA			
				PMPB45EPA		
				BUK6D43-40P		
				BUK6D120-60P		

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	20	8	0.8	0.5	0.95	2	-	380	620	1100	
	30	12	4	0.75	1.25	2	-	55	72	-	
			0.95	0.75	1.25	2	-	211	267	-	
P	20	8	0.55	0.5	1.3	2	-	670	1200	1800	
N	20	8	0.73	0.5	0.95	2	-	290	420	600	
P			0.5	0.5	1.3	2	-	670	1200	1800	

Small-signal MOSFETs complementary

Package	Type	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	V_{GSth} min (V)	V_{GSth} max (V)
 SOT666 (1.6 x 1.2 x 0.55)	NX1029X	N	60	20	0.33	1.1	2.1
		P	50	20	0.17	1.1	2.1
	NX3008CBKV	N	30	8	0.4	0.6	1.1
		P	30	8	0.22	0.6	1.1
	PMDT290UCE	N	20	8	0.8	0.5	0.95
		P	20	8	0.55	0.5	1.3
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	NX3008CBKS	N	30	8	0.35	0.6	1.1
		P	30	8	0.2	0.6	1.1

	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	SOT666	DFN1006 (SOT883)
					
	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.0 x 0.6 x 0.5
	250	300	200	300	250
	NX3008NBK	NX3008NBKS	NX3008NBKW	NX3008NBKV	
	BSS138P	BSS138PS	BSS138PW		
	BSS138BK	BSS138BKS	BSS138BKW		
	2N7002BK	2N7002BKS	2N7002BKW		2N7002BKM
	2N7002CK				
	BSS138AKA				
	NX3008PBK	NX3008PBKS	NX3008PBKW	NX3008PBKV	
	BSS84AK	BSS84AKS	BSS84AKW	BSS84AKV	BSS84AKM

	SOT363 (SC-88)	SOT666	DFN2020D-6 (SOT1118D)
			
	2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.65
	300	300	1250
		PMDT290UNE	
			PMDPB56XNEA
	PMGD175XNEA		
		PMDT670UPE	
	PMGD290UCEA		

	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =			
					10 V	4.5 V	2.5 V	1.8 V
	11	19	0.5	2	1000	1300	-	-
	24	73	0.26	1	4500	5100	-	-
	26	88	0.52	2	-	1000	1400	2000
	49	103	0.55	2	-	2800	5300	-
	10	117	0.45	2	-	290	420	600
	48	152	0.76	2	-	670	1200	1800
	26	88	0.52	2	-	1000	1400	2000
	49	103	0.55	2	-	2800	5300	-


AIRBAG

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Automotive standard logic

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

Types in **bold** represent new products

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74HC161-Q100	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

Types in **bold** represent new products

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

Types in **bold** represent new products

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
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)
74VHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	
74VHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74VHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	
74VHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
HEF4001B-Q100	Quad 2-input NOR gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4011B-Q100	Quad 2-input NAND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4030B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4070B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4081B-Q100	Quad 2-input AND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4082B-Q100	Dual 4-input AND gate	3.0 - 15	± 2.4	25	-40~85	•		

Latches/Registered drivers

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

Level shifters/Translators

Types in **bold** represent new products

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

Multivibrators

Types in **bold** represent new products

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

Schmitt-triggers

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

Shift registers

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

Shift registers

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74LV4060-Q100	14-stage binary ripple counter with oscillator	1.0 - 5.5	± 6	29	-40~125				•	•			
74LVC594A-Q100	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	± 24	3.1	-40~125				•	•	•		
74VHC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	± 8	4.0	-40~125				•	•	•		
74VHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
HEF4014B-Q100	8-bit shift register with synchronous parallel enable	3.0 - 15	± 2.4	40	-40~85				•				
HEF4021B-Q100	8-bit shift register with asynchronous parallel load	3.0 - 15	± 2.4	40	-40~85				•	•			
HEF4094B-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	3.0 - 15	± 2.4	50	-40~85				•	•			
HEF4794B-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85				•				
HEF4894B-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85							•	•
NPIC6C595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596A-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	2.3 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C4894-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.5 - 15	-100	105	-40~125							•	•

Transceivers

Type number	Description	Features				Package (suffix)			
		V_{cc} (V)	I_o (mA)	t_{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				•

Automotive mini logic

Analog switches

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

Bus switches

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

Buffers/Inverters

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

Digital decoders/Demultiplexers

Types in **bold** represent new products

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

Digital multiplexers

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

Flip-flops

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

Gates

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G09-Q100	Single 2-input AND gate; open-drain	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•				
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)	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

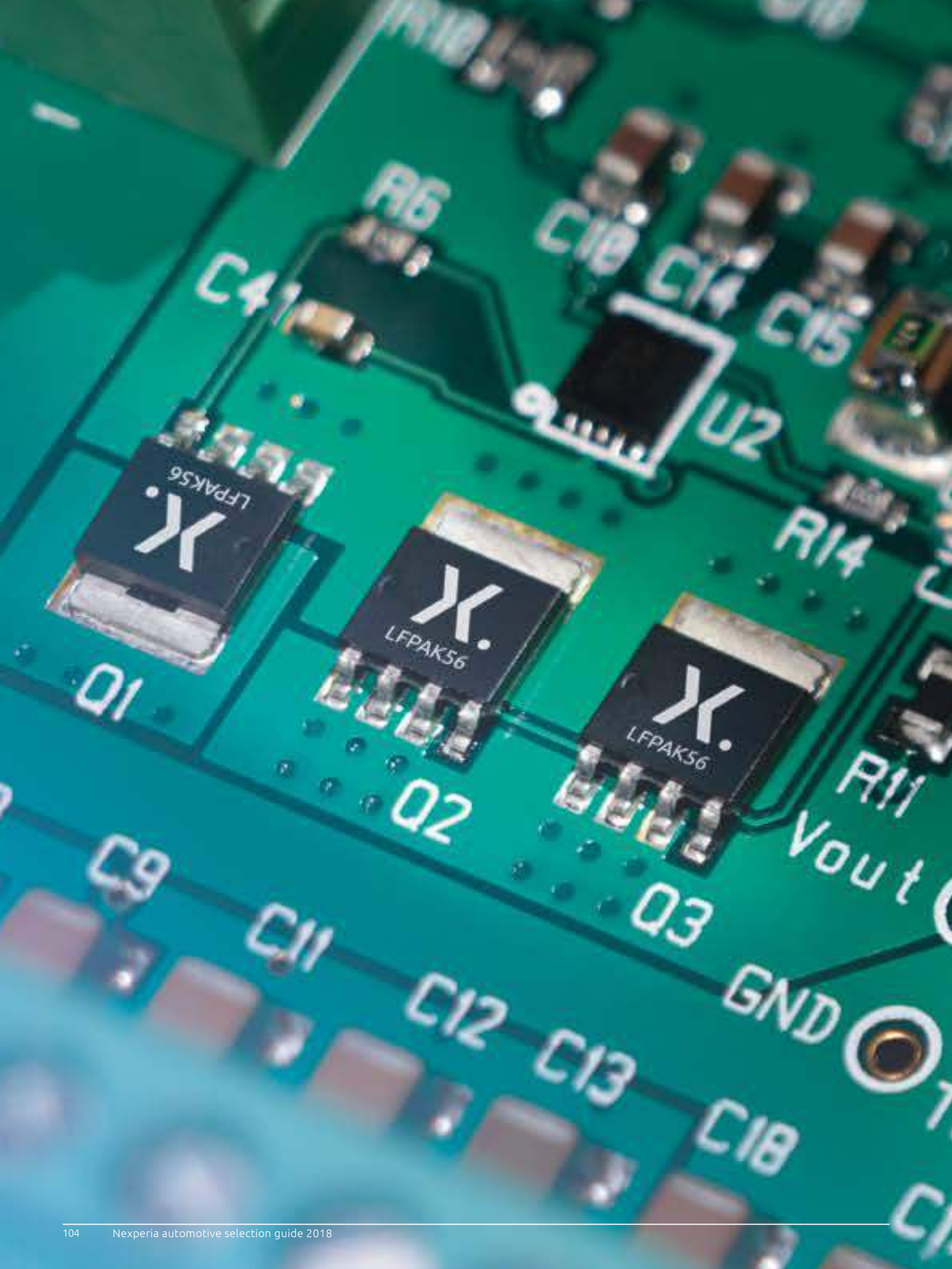
Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT505-2 (DP)	SOT765-1 (DC)
74LVC1G123-Q100	Single retriggerable monostable multivibrator	1.65 - 5.5	± 32	3.5	-40~125	•	•

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


R6
C10
C14
C15
C41
U2
R14
LFPAK56
LFPAK56
LFPAK56
Q1
Q2
Q3
R11
Vout
C9
C11
C12
C13
GND
C18

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Package details and packing methods SMD – Part 1

Package details					Packing methods																	
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)															
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000
2	DFN1006D-2 (SOD882D)	1.00 x 0.60 x 0.37	0.65		2 mm pitch. 8 mm tape and reel	180 x 8																-315
	DFN1006-2 (SOD882)	1.00 x 0.60 x 0.48	0.65		2 mm pitch. 8 mm tape and reel	180 x 8																-315
	SOD523 (SC-79)	1.20 x 0.80 x 0.60			2 mm pitch. 8 mm tape and reel	180 x 8														-315		
					4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8																-135
	DFN1608D-2 (SOD 1608)	1.60 x 0.80 x 0.37	0.94		2 mm pitch. 8 mm tape and reel	180 x 8														-315		
	SOD323F (SC-90)	1.70 x 1.25 x 0.70			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
						286 x 8																-135
	SOD323 (SC-76)	1.70 x 1.25 x 0.95			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8																-135
					10 reels in one box	286 x 8																-135
	SOD123F	2.60 x 1.60 x 1.10			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
	CFP3 (SOD123W)	2.60 x 1.70 x 1.00			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
	SOD123	2.70 x 1.60 x 1.20			4 mm pitch. 8 mm tape and reel	180 x 8								-115								
						286 x 8																-118
	SOD80C (MiniMelf)	3.50 x 1.50 x 1.50			4 mm pitch. 8 mm tape and reel	180 x 8							-115									
					4 mm pitch. 8 mm tape and reel	330 x 8																-135
	CFP5 (SOD128)	3.80 x 2.50 x 1.00			4 mm pitch. 12 mm tape and reel	180 x 12								-115								
3	DFN1006B-3 (SOT883B)	1.00 x 0.60 x 0.37	0.65		2 mm pitch. 8 mm tape and reel	180 x 8																-315
	DFN1006-3 (SOT883)	1.00 x 0.60 x 0.48	0.65		2 mm pitch. 8 mm tape and reel	180 x 8																-315
	DFN1010D-3 (SOT1215)	1.10 x 1.00 x 0.37	0.75		4 mm pitch. 8 mm tape and reel	180 x 8												-115				
	SOT663	1.20 x 1.60 x 0.55	0.5		4 mm pitch. 8 mm tape and reel	180 x 8										-115						
	SOT323 (SC-70)	2.00 x 1.25 x 0.95	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8																-135
	DFN2020-3 (SOT1061)	2.00 x 2.00 x 0.62	1.3		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
	DFN2020D-3 (SOT1061D)	2.00 x 2.00 x 0.62	1.3		4 mm pitch, 8 mm tape and reel	180 x 8								-115								
	SOT23	2.90 x 1.30 x 1.00	0.95		4 mm pitch. 8 mm tape and reel	180 x 8								-215								
						286 x 8																-235
					10 reels in one box	180 x 8								-185								
	SOT89 (SC-62)	4.50 x 2.50 x 1.50	1.5		8 mm pitch. 12 mm tape and reel	180 x 12			-115													
					8 mm pitch. 12 mm tape and reel	330 x 12										-135						
					8 mm pitch. 12 mm tape and reel	180 x 12			-146													
					8 mm pitch. 12 mm tape and reel	180 x 12			-147													
	CFP15 (SOT1289)	5.80 x 4.30 x 0.78	2.13		8 mm pitch. 12 mm tape and reel	330 x 12					-146							-139				
	DPAK (SOT428)	6.60 x 6.10 x 2.30	4.57		8 mm pitch. 16 mm tape and reel	330 x 16							-118									
	D2PAK (SOT404)	10 x 9.60 x 4.30	5.08		16 mm pitch. 24 mm tape and reel	330 x 24		118														

Package details and packing methods SMD – Part 2

Package details					Packing methods																	
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)															
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000
4	SOT143B	2.90 x 1.30 x 1.00	1.9		4 mm pitch. 8 mm tape and reel	180 x 8								-215								
					4 mm pitch. 8 mm tape and reel	286 x 8																-235
	LFPAK56 (SOT669)	4.90 x 4.45 x 1.00	1.27		8 mm pitch. 12 mm tape and reel	180 x 12					-115											
	SOT223 (SC-73)	6.50 x 3.50 x 1.65	2.3		8 mm pitch. 12 mm tape and reel	180 x 12			-115													
					8 mm pitch. 12 mm tape and reel	330 x 12										-135						
5	SOT665	1.60 x 1.20 x 0.55	0.5		2 mm pitch. 8 mm tape and reel	180 x 8																-125
					4 mm pitch. 8 mm tape and reel	180 x 8										-115						
	SOT353 (SC-88 A)	2.00 x 1.25 x 0.95	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8																-135
					4 mm pitch. 8 mm tape and reel	180 x 8								-125								
					4 mm pitch. 8 mm tape and reel	286 x 8																-165
	TSOP5 (SOT753)	2.90 x 1.50 x 1.00	0.95		4mm pitch, 8mm tape and reel	180 x 8								-125								
6	XSON6 (SOT1202)	1.00 x 1.00 x 0.35	0.35		4mm pitch, 8mm tape and reel	180 x 8												-125				
	DFN1010-6 (SOT891)	1.00 x 1.00 x 0.50	0.35		4 mm pitch. 8 mm tape and reel	180 x 8												-125				
	DFN1010B-6 (SOT1216)	1.10 x 1.00 x 0.37	0.35		4 mm pitch. 8 mm tape and reel	180 x 8												-147				
	DFN1412-6 (SOT1268)	1.40 x 1.20 x 0.50	0.5		4 mm pitch. 8 mm tape and reel	180 x 8												-147				
	SOT666	1.60 x 1.20 x 0.55	0.5		2 mm pitch. 8 mm tape and reel	180 x 8														-315		
					4 mm pitch. 8 mm tape and reel	180 x 8										-115						
	SOT363 (SC-88)	2.00 x 1.25 x 0.95	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8																-135
					4 mm pitch. 8 mm tape and reel	180 x 8								-125								
					4 mm pitch. 8 mm tape and reel	286 x 8																-165
	DFN2020-6 (SOT 1118)	2.00 x 2.00 x 0.62	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
														-184								
	DFN2020D-6 (SOT1118D)	2.00 x 2.00 x 0.62	0.65		4 mm pitch, 8 mm tape and reel	180 x 8								-115								
	DF-N2020MD-6 (SOT1220)	2.00 x 2.00 x 0.62	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
														-125								
	SOT457 (SC-74)	2.90 x 1.50 x 1.00	0.95		4 mm pitch. 8 mm tape and reel	180 x 8								-115								
					4 mm pitch. 8 mm tape and reel	286 x 8																-135
					4 mm pitch. 8 mm tape and reel	180 x 8								-125								
					4 mm pitch. 8 mm tape and reel	286 x 8																-165
7	DFN2111-7 (SOT1358)	2.10 x 1.10 x 0.50	1.3		4 mm pitch, 8 mm tape and reel	180 x 9								471								
	D2PAK-7 (SOT427)	10 x 15.30 x 4.30	-		16 mm pitch, 24 mm tape and reel	330 x 24		118														

Package details and packing methods SMD – Part 3

Package details					Packing methods																	
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)															
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000
8	XSON8 (SOT1203)	1.35 x 1.00 x 0.35	0.35		4mm pitch, 8mm tape and reel	180 x 8												-115				
	VSSOP8 (SOT765-1)	2.00 x 2.30 x 1.00	0.5		4mm pitch, 8mm tape and reel	180 x 8								-125								
	TSSOP8 (SOT505-2)	3.00 x 3.00 x 1.10	0.65		4mm pitch, 12mm tape and reel	180 x 12								-125								
	TSSOP8 (SOT530-1)	3.00 x 3.40 x 1.10	0.65			330 x 12							-118									
	LFPAK33 (SOT1210)	3.30 x 3.30 x 0.85	-		8 mm pitch, 12 mm tape and reel	180 x 12					-115											
	SOT96 (SO8)	4.90 x 3.90 x 1.75	1.27		8 mm pitch. 12 mm tape and reel	180 x 12			-115													
					8 mm pitch. 12 mm tape and reel	330 x 12							-518									
					8 mm pitch. 12 mm tape and reel	331 x 12							-118									
	LFPAK56D (SOT1205)	4.90 x 4.45 x 1.00	1.27		8 mm pitch. 12 mm tape and reel	180 x 12					-115											
10	X2QFN10 (SOT1430-1)	1.30 x 1.60 x 0.33	0.40		4 mm pitch, 8 mm tape and reel	180 x 8												-471				
	DFN2510-10 (SOT1165)	2.50 x 1.00 x 0.48	0.5		4 mm pitch. 8 mm tape and reel	180 x 8												-115				
	HVSON10 (SOT650)	3.00 x 3.00 x 0.85	0.5		8mm pitch, 12mm tape and reel	330 x 12													-118			
	TSSOP10 (SOT552-1)	3.00 x 3.00 x 1.10	0.50		8 mm pitch, 12 mm tape and reel	330 x 12							-118									
14	DHVQFN14 (SOT762-1)	3.00 x 2.50 x 1.00	0.50		4 mm pitch, 12 mm tape and reel	180 x 12								-115								
	TSSOP14 (SOT402-1)	5.00 x 4.40 x 1.10	0.65		8mm pitch, 12mm tape and reel	330 x 12							-118									
	SSOP14 (SOT337-1)	6.20 x 5.30 x 2.00	0.65		12 mm pitch, 16 mm tape and reel	330 x 16						-118										
	SO14 (SOT108-1)	8.65 x 3.9 x 1.45	1.27		8mm pitch, 16mm tape and reel	330 x 16							-118									
16	TSSOP16 (SOT403-1)	5.00 x 4.40 x 1.10	0.65		8mm pitch, 12mm tape and reel	330 x 12							-118									
	SSOP16 (SOT519-1)	4.90 x 3.90 x 1.73	0.64		8 mm pitch, 12 mm tape and reel	330 x 12							-118									
	SSOP16 (SOT338-1)	6.20 x 5.30 x 2.00	0.65		12mm pitch, 16mm tape and reel	330 x 16						-118										
	SO16 (SOT109-1)	9.90 x 3.90 x 1.35	1.27		8 mm pitch, 16 mm tape and reel	330 x 16							-118									
20	DHXQFN20 (SOT1045-2)	4.50 x 2.50 x 0.50	0.50			180 x 12										-115						
	DHVQFN20 (SOT764-1)	4.50 x 2.50 x 1.00	0.5		4mm pitch, 12mm tape and reel	180 x 12								-115								
	TSSOP20 (SOT360-1)	6.50 x 4.40 x 1.10	0.65		8 mm pitch, 16 mm tape and reel	330 x 16							-118									
	SSOP20 (SOT339-1)	7.20 x 5.30 x 2.00	0.65		12mm pitch, 16mm tape and reel	330 x 16			-118													
	SO20 (SOT163-1)	12.80 x 7.50 x 2.65	1.27		12mm pitch, 24mm tape and reel	330 x 24						-118										
24	DHVQFN24 (SOT815-1)	5.50 x 3.50 x 0.85	0.5		8mm pitch, 12mm tape and reel	330 x 12								-118								
	TSSOP24 (SOT355-1)	7.80 x 4.40 x 1.10	0.65		8mm pitch, 16mm tape and reel	330 x 16							-118									
	SO24 (SOT137-1)	15.40 x 7.50 x 2.65	1.27		12mm pitch, 24mm tape and reel	330 x 24			-118													
32	DFN5050-32 (SOT617)	5.00 x 5.00 x 1.00	0.5		8 mm pitch, 12 mm tape and reel	330 x 12													-118 -128			
48	TSSOP48 (SOT480-1)	9.70 x 4.40 x 1.10	0.40			330 x 16							-118									
	TSSOP48 (SOT362-1)	12.50 x 6.10 x 1.20	0.50		12 mm pitch, 24 mm tape and reel	330 x 24						-118										
56	VFBGA56 (SOT702-1)	4.50 x 7.00 x 1.00	0.65		8 mm pitch, 16 mm tape and reel	330 x 16									-518							
	TSSOP56 (SOT364-1)	14.00 x 6.10 x 1.20	0.50		12 mm pitch, 24 mm tape and reel	330 x 24						-118										
96	LFBGA96 (SOT536-1)	5.50 x 13.50 x 1.50	0.80		8 mm pitch, 24 mm tape and reel	330 x 24									-518							

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

Package cross reference list – Part 1

Type	Competitor	Nexperia	Pins/ Leads
µQFN-2L	ST	DFN1006-2 (SOD882)	2
6 Lead DFN	ON Semi	DFN2020-6 (SOT1118)	6
CMAK/ CMPAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CMPAK/ CMAK	Renesas	SOT323	3
CP4	Toshiba	SOT143B	4
CPT3	Rohm	DPAK (SOT428)	3
CS6	Toshiba	DFN1010-6 (SOT891)	6
CST3	Toshiba	DFN1006-3 (SOT883)	3
CST3	Toshiba	DFN1006B-3 (SOT883B)	3
CTS2 (fSC)	Toshiba	DFN1006-2 (SOD882)	2
CTS2 (fSC)	Toshiba	DFN1006D-2 (SOD882D)	2
D2PAK	ON Semi	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK-3	OnSemi	D2PAK (SOT404)	3
D2PAK-7	ST	D2PAK-7 (SOT427)	7
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK7P	Infineon	D2PAK-7 (SOT427)	7
DFN-5	OnSemi	LFPAK56 (SOT669)	4
DFN-8	OnSemi	LFPAK56D (SOT1205)	8
DFN1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1006H4-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1411*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
DPAK	ON Semi	DPAK (SOT428)	3
DPAK	Toshiba	DPAK (SOT428)	3
DPAK	OnSemi	DPAK (SOT428)	3
DPAK	Infineon	DPAK (SOT428)	3
DPAK	ST	DPAK (SOT428)	3
DPAK(S)	Renesas	DPAK (SOT428)	3
DSN2, 1.0 x 0.6	ON Semi	DFN1006D-2 (SOD882D)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
EMD2	Rohm	SOD523	2
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
EMD5/EMT5	Rohm	SOT665	5
EMD6/EMT6/WEMT6	Rohm	SOT666	6
EMT3	Rohm	DFN1006-3 (SOT883)	3
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
EMT5*	Rohm	SOT666	6
EMT5/EMD5	Rohm	SOT665	5
EMT6	Rohm	SOT666	6
EMT6/EMD6/WEMT6	Rohm	SOT666	6
ES6	Toshiba	SOT666	6

Type	Competitor	Nexperia	Pins/ Leads
ES6 ESV	Toshiba	SOT666	6
ESC/TESC	Toshiba	SOD523	2
ESM	Toshiba	DFN1006-3 (SOT883)	3
ESV	Toshiba	SOT665	5
ESV	Toshiba	SOT666	6
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
H2PAK-2	ST	D2PAK (SOT404)	3
H2PAK-6	ST	D2PAK-7 (SOT427)	7
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
HUML2020L8 (Dual)	Rohm	DFN2020-6 (SOT1118)	6
HUML2020L8 (Single)	Rohm	DFN2020MD-6 (SOT1220)	6
I2PAK	OnSemi	I2PAK (SOT226)	3
I2PAK	ST	I2PAK (SOT226)	3
KMD2	Rohm	DFN1608D-2 (SOD1608)	2
LDPAK(S)-(1)	Renesas	D2PAK (SOT404)	3
LFPAK	Renesas	LFPAK (SOT669)	5
LG A 1.0 x 0.6mm	Texas Instruments	DFN1006B-3 (SOT883B)	3
LLD	Renesas	SOD80C	2
LLDS	Rohm	SOD80C	2
LLP1006-2L	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2L	Vishay	DFN1006D-2 (SOD882D)	2
LLP1006-2M	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2M	Vishay	DFN1006D-2 (SOD882D)	2
LPDS/LPTS	Rohm	D2PAK (SOT404)	3
LPTS	Rohm	D2PAK (SOT404)	3
LPTS/LPDS	Rohm	D2PAK (SOT404)	3
M-Flat	Toshiba	SOD128	2
Micro 3	Int. Rectifier	SOT23	3
Micro 6	Int. Rectifier	SOT457	6
MiCRO FOOT 0.8 x 0.8*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
MiCRO FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
MICRO FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6
MicroFET	Fairchild	DFN2020MD-6 (SOT1220)	6
MicroFET 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
MiniMelf	Diodes Inc.	SOD80C	2
MiniMelf	ST	SOD80C	2
MiniMelf	Vishay	SOD80C	2
MP-25SK	Renesas	I2PAK (SOT226)	3
MP-25ZT	Renesas	D2PAK-7 (SOT427)	7
MP-25ZT	Renesas	D2PAK (SOT404)	3
MP-3Z	Renesas	DPAK (SOT428)	3

Types with * show footprint compability only

Package cross reference list – Part 2

Type	Competitor	Nexperia	Pins/ Leads
MPAK	Renesas	SOT23	3
MPAK	Renesas	SOT23	3
MPAK-4R	Renesas	SOT143B	4
MPT3	Rohm	SOT89	3
PG-TD SON-8	Infineon	LFPAK (SOT669)	5
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO252-3	Infineon	DPAK (SOT428)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TO263-7	Infineon	D2PAK-7 (SOT427)	7
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power FLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
Power FLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8
Power FLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDi5	Diodes Inc.	CFP15 (SOT1289)	3
PowerFLAT (6 x 5)	ST	LFPAK56 (SOT669)	5
PowerFLAT (6 x 5)	ST	LFPAK56D (SOT1205)	5
PowerPAK 1212-8	Vishay	LFPAK33 (SOT1210)	8
PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPak SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPak SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPAK SO-8	Vishay	LFPAK56 (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8
PW-Mini	Toshiba	SOT89	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
S08	Vishay	SOT96	8
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC-74 TSOP-6	ON Semi	SOT457	6
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3

Type	Competitor	Nexperia	Pins/ Leads
SC-88	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC-89	Semtech	SOT666	6
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-3	AOS	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	Vishay	SOT363	6
SC70-6	AOS	SOT363	6
SC70-6	Fairchild	SOT363	6
SC70-6L	Semtech	SOT363	6
SC74 TSOP6	Infineon	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC88/SC 7 0-6/SOT 363 6 LEAD	ON Semi	SOT363	6
SC89	Fairchild	SOT666	6
SC89-3	Vishay	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Fairchild	DFN1006-3 (SOT883)	3
SC89-6	Vishay	SOT666	6
SC89-6	AOS	SOT666	6
SC89-6	Fairchild	SOT666	6
SC89-6lead	Vishay	SOT666	6
SLP1006P2	Semtech	DFN1006-2 (SOD882)	2
SLP1006P2T	Semtech	DFN1006D-2 (SOD882D)	2
SLP1006P3	Semtech	DFN1006-3 (SOT883)	3
SLP1006P3T	Semtech	DFN1006B-3 (SOT883B)	3
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1713P8	Semtech	DFN1714U-8 (SOT983)	8
SLP2513P12	Semtech	DFN2514-12 (SOT1167)	12
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
SMFPAK-6	Renesas	SOT666	6
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC TO-277A	Vishay	CFP15 (SOT1289)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPAK56 (SOT669)	5
SO-8FL Dual	OnSemi	LFPAK56D (SOT1205)	8
SO-8FL Dual	OnSemi	LFPAK56 (SOT669)	4
SOD-123	ST	SOD123F	2

Types with * show footprint compability only

Package cross reference list – Part 3

Type	Competitor	Nexperia	Pins/ Leads
SOD-123-FL	ON Semi	SOD123F	2
SOD-123-FL	ON Semi	SOD123W	2
SOD-323	ON Semi	SOD323	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ST	SOD323	2
SOD-523	ON Semi	SOD523	2
SOD-523	ST	SOD523	2
SOD323	Infineon	SOD323	2
SOD323	Vishay	SOD323	2
SOD323	Semtech	SOD323	2
SOD523	Diodes Inc.	SOD523	2
SOD523	Vishay	SOD523	2
SOD523	Semtech	SOD523	2
SOD882	ST	DFN1006-2 (SOD882)	2
SOD882T	ST	DFN1006D-2 (SOD882D)	2
SOD923-2*	ON Semi	DFN1006-2 (SOD882)	2
SOIC-8 NB	ON Semi	SOT96	8
SON 2x2	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SON 3x3*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SOP-8	Renesas	SOT96	8
SOP/DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP8	Rohm	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT-143	Diodes Inc.	SOT143B	4
SOT-223	ON Semi	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	OnSemi	SOT223	3
SOT-223	Infineon	SOT223	3
SOT-223	ST	SOT223	3
SOT-23	ON Semi	SOT23	3
SOT-23	Diodes Inc.	SOT23	3
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	SOT323	3
SOT-363	Diodes Inc.	SOT363	6
SOT-553	ON Semi	SOT665	5
SOT-563	ON Semi	SOT666	6
SOT-89	ON Semi	SOT89	3
SOT063*	ON Semi	DFN101 OB-6 (SOT1216)	6
SOT223	Vishay	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	Fairchild	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Diodes Inc.	SOT223	4
SOT223	Diodes Inc.	SOT223	3
SOT23	Infineon	SOT23	3
SOT23	ST	SOT23	3
SOT23	Vishay	SOT23	3
SOT23	Semtech	SOT23	3

Type	Competitor	Nexperia	Pins/ Leads
SOT23	Diodes Inc.	SOT23	3
SOT23	AOS	SOT23	3
SOT23	ON Semi	SOT23	3
SOT23-3	Diodes Inc.	SOT23	3
SOT23-3	AOS	SOT23	3
SOT23-3	ON Semi	SOT23	3
SOT23-5	AOS	SOT457	6
SOT23-5	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	ST	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6L	Semtech	SOT457	6
SOT23F	Toshiba	SOT23	3
SOT23F	Diodes Inc.	SOT23	3
SOT26	Diodes Inc.	SOT457	6
SOT323	Infineon	SOT323	3
SOT323	Diodes Inc.	SOT323	3
SOT323	Fairchild	SOT323	3
SOT353	Diodes Inc.	SOT353	5
SOT353	Vishay	SOT353	5
SOT353	Diodes Inc.	SOT363	6
SOT363	Infineon	SOT363	6
SOT363	Diodes Inc.	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3
SOT523F	Fairchild	DFN1006-3 (SOT883)	3
SOT563	Diodes Inc.	SOT666	6
SOT563-6	ON Semi	SOT666	6
SOT563F	Fairchild	SOT666	6
SOT666	Infineon	SOT666	6
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Infineon	SOT89	3
SOT89	Diodes Inc.	SOT89	3
SOT89-3L	Diodes Inc.	SOT89	3
SOT963	ON Semi	DFN1010-6 (SOT891)	6
SOT963*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
SRP-F	Renesas	SOD123W	2
SS CSP2	Toshiba	DFN1006-3 (SOT883)	3
SSD3/SST3	Rohm	SOT23	3
SSM	Toshiba	DFN1006-3 (SOT883)	3
SSOT3	Fairchild	SOT23	3
SSOT6	Fairchild	SOT457	6
SSOT6 FLMP	Fairchild	SOT457	6
SST3	Rohm	SOT23	3
SST3/SSD3	Rohm	SOT23	3
Stmite flat	ST	SOD123W	2
T0263	Diodes Inc.	D2PAK(SOT404)	3
T0263-3	Infineon	D2PAK (SOT404)	3
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6

Types with * show footprint compability only

Package cross reference list – Part 4

Type	Competitor	Nexperia	Pins/ Leads
Thin PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO-220S	Renesas	D2PAK (SOT404)	3
TO-220SM	Toshiba	D2PAK (SOT404)	3
TO-252	Renesas	DPAK (SOT428)	3
TO-252	Vishay	DPAK (SOT428)	3
TO-252 (MP-3ZK)	Renesas	DPAK (SOT428)	3
TO-252 reverse, TO-252	Vishay	DPAK (SOT428)	3
TO-252-3/-3-23	Infineon	DPAK (SOT428)	3
TO-252, TO-252 reverse	Vishay	DPAK (SOT428)	3
TO-262	Renesas	I2PAK (SOT226)	3
TO-262	Vishay	I2PAK (SOT226)	3
TO-262-2L	OnSemi	I2PAK (SOT226)	3
TO-262-3L	OnSemi	I2PAK (SOT226)	3
TO-263	Renesas	D2PAK-7 (SOT427)	7
TO-263	Renesas	D2PAK (SOT404)	3
TO-263	Vishay	D2PAK (SOT404)	3
TO-263 3-lead	Vishay	D2PAK (SOT404)	3
TO-263-2L	OnSemi	D2PAK (SOT404)	3
TO-263-7L	Vishay	D2PAK-7 (SOT427)	7
TO-263AB	Vishay	D2PAK (SOT404)	3
TO252	Diodes Inc.	DPAK (SOT428)	3
TO262	Infineon	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	3
TP-FA	OnSemi	DPAK (SOT428)	3
TSLP-2-1	Infineon	DFN1006-2 (SOD882)	2
TSLP-2-7/-17	Infineon	DFN1006D-2 (SOD882D)	2
TSLP-3-1, -15	Infineon	DFN1006B-3 (SOT883B)	3
TSLP-3-4	Infineon	DFN1006-3 (SOT883)	3
TSMT5*	Rohm	SOT457	6
TSMT6	Rohm	SOT457	6
TSNP-2-2	Infineon	DFN1608D-2 (SOD 1608)	2
TSON Advance	Toshiba	LFPAK33 (SOT1210)	8
TSOP-6	Renesas	SOT457	6
TSOP-6/ TSOP6	Vishay	SOT457	6
TSOP6	Vishay	SOT457	6
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	SOT457	6
TSST8*	Rohm	DFN2020MD-6 (SOT1220)	6
TUMT3	Rohm	SOT323	3
TUMT5*	Rohm	DFN2020-6 (SOT1118)	6
TUMT6*	Rohm	DFN2020-6 (SOT1118)	6
U-DFN2020-3 Type B 2.0 x 2.0 x 0.6	Diodes Inc.	DFN2020-3 (SOT1061)	3
U-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN 1.7 x 1.35, 0.4P	ON Semi	DFN1714U-8 (SOT983)	8
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN12 2.5 x 1.35, 0.4P	ON Semi	DFN2514-12 (SOT1167)	12

Type	Competitor	Nexperia	Pins/ Leads
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6B	Toshiba	DFN2020MD-6 (SOT1220)	6
UF6	Toshiba	SOT363	6
UF6/ USV/ US6	Toshiba	SOT363	6
UFP	Renesas	SOD523	2
UMD2	Rohm	SOD323F	2
UMD3/UMT3	Rohm	SOT323	3
UMD5/UMT5	Rohm	SOT353	5
UMD6/ UMT6	Rohm	SOT363	6
UMLP 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
UMT3	Rohm	SOT323	3
UMT3F*	Rohm	SOT323	3
UMT5/ UMD5	Rohm	SOT353	5
UMT6	Rohm	SOT363	6
UMT6/ UMD6	Rohm	SOT363	6
UPAK (SOT89)	Renesas	SOT89	3
URP	Renesas	SOD323	2
US-Flat	Toshiba	SOD323F	2
US6	Toshiba	SOT363	6
US6/ UF6/ USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5
USV	Toshiba	SOT363	6
USV/ US6/ UF6/	Toshiba	SOT363	6
VESM*	Toshiba	DFN1010D-3 (SOT1215)	3
VML0806*	Rohm	DFN1006B-3 (SOT883B)	3
VML1006	Rohm	DFN1006-3 (SOT883)	3
VMN2*	Rohm	DFN1006-2 (SOD882)	2
VMN2*	Rohm	DFN1006D-2 (SOD882D)	2
VMN3*	Rohm	DFN1006-3 (SOT883)	3
VMT3*	Rohm	DFN1010D-3 (SOT1215)	3
VMT6*	Rohm	DFN101 OB-6 (SOT1216)	6
VS6	Toshiba	SOT457	6
VSON-5	Renesas	SOT665	5
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6
WDFN-8	OnSemi	LFPAK33 (SOT1210)	8
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WEMT6	Rohm	SOT666	6
WEMT6/ EMT6/ EMD6	Rohm	SOT666	6
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

Types with * show footprint compability only

Package cross reference list – Part 5

Type	Competitor	Nexperia	Pins/ Leads
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

Type	Competitor	Nexperia	Pins/ Leads
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
µ8FL	OnSemi	LFPAK33 (SOT1210)	8

Package cross reference matrix – Part 1

Pins/ leads	Nexperiav	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
	SOD80C	Mini-Melf	3.5 x 1.5 x 1.5	300		LLDS			LLD		MiniMelf	MiniMelf	MiniMelf	
	SOD123F		2.6 x 1.6 x 1.1	830			S-Flat	SOD-123-FL			PowerDI123	SOD-123		
	SOD123W		2.6 x 1.7 x 1.0	900		PMDU	S-Flat	SOD-123-FL	SRP-F		PowerDI123	Stmite flat		
	SOD128		3.8 x 2.5 x 1.0	1000		PMDT	M-Flat					SMA flat		
	SOD323	SC-76	1.7 x 1.25 x 0.95	400			USC	SOD-323	URP	SOD323	SOD-323	SOD-323	SOD323	SOD323
	SOD323F	SC-90	1.7 x 1.25 x 0.7	830		UMD2	US-Flat				PowerDI323			
	SOD523	SC-79	1.2 x 0.8 x 0.6	500		EMD2	ESC/ TESC	SOD-523	UFP	SC79	SOD523	SOD-523	SOD523	SOD523
3	CFP15 (SOT1289)		5.8 x 4.3 x 0.78	1200							PowerDi5		SMPC TO-277A	
	DFN1006-3 (SOT883)	SC-101	1.0 x 0.6 x 0.48	250		VML1006	SS CSP2	XDFN3		TSLP-3-4	X1 -DFN 1006-3			SLP1006P3
	DFN1006B-3 (SOT883B)		1.0 x 0.6 x 0.37	250		VML1006	CST3	XDFN3		TSLP-3-1, -15	X2-DFN1006-3			SLP1006P3T
	DFN1010D-3 (SOT1215)		1.1 x 1.0 x 0.37	325		(VMT3)	(VESM)	(SOT723)			X2-DFN1010-3			
	DFN2020-3 (SOT1061)	HU-SON3	2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DFN2020D-3 (SOT1061D)		2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DPAK (SOT428)		6.6 x 6.1 x 2.3			CPT3	DPAK	DPAK, TP-FA	TO-252 (MP-3ZK) DPAK(S)	TO-252-3/-3-2 3 DPAK, PG-TO252-3	TO252	DPAK	TO-252,TO-252 reverse	
	D2PAK (SOT404)		11.0 x 11.0 x 4.3			LPDS/ LPTS	TO-220SM D2PAK	D2PAK D2PAK 3 TO-263-2L	TO-220S / SMD TO-263 LDPAK(S)-(1) MP-25Z	D2PAK, PG-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

Types in brackets (…) show footprint compatibility only

Package cross reference matrix – Part 2

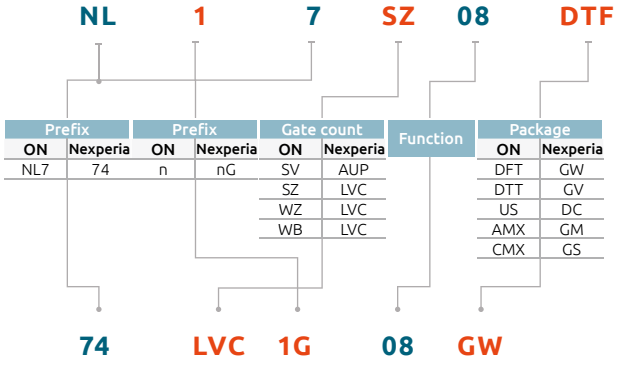
Pins/ leads	Nexperiav	Industry standard names	Size (l x w x h) (mm)	P_{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
	SOT89	SC-62	4.5 x 2.5 x 1.5	1300		MPT3	PW-Mini	SOT-89	UPAK (SOT89)	SOT89	SOT89			
3	SOT323	SC-70	2.0 x 1.25 x 0.95	200		UMD3/ UMT3 TUMT3	USM	SC-70	CMAK/ CMPAK	SOT323	SOT-323	SOT-323	SC-70 3 leads	SOT-323
	I2PAK (SOT226)		11 x 10 x 4.3					I2PAK, TO-262-2L, TO-262-3L	MP-25SK, TO-262	PG-TO262-3, TO262		I2PAK	TO-262	
	SOT223		6.5 x 3.5 x 1.65					SOT-223		SOT-223	SOT223	SOT-223		
4	LFPAK56 (SOT669)	Power-S08	4.9 x 4.45 x 1.0	3000		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK56, HSON-8	PG-TD-SON-8	Power-Di5060-8	Power-FLAT (6x5)	PowerPAK SO-8(L)	
	SOT143B		2.9 x 1.3 x 1.0	250			CP4		MPAK-4R	SOT143	SOT-143			SOT-143
	SOT223	SC-73	6.5 x 3.5 x 1.65	1700				SOT-223		SOT223	SOT-223		SOT223	
5	SOT353	SC-88 A	2.0 x 1.25 x 0.95	300		UMD5/ UMT5	USV	SC-88 A	CMPAK-5C0		SOT353		SOT353	SC70-5L
	SOT665		1.6 x 1.2 x 0.55	300		EMD5/ EMT5	ESV	SOT-553	VSON-5					
6	DFN1010-6 (SOT891)	x SON6	1.0 x 1.0 x 0.48				CS6	SOT963						
	DFN1010B-6 (SOT1216)		1.1 x 1.0 x 0.37	350		(VMT6)	(FS6)	(SOT063)			(SOT963)			
	DFN2020-6 (SOT1118)		2.0 x 2.0 x 0.62	1300		HU-ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020-6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN2020D-6 (SOT1118D)		2.0 x 2.0 x 0.62	1300		HU-ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020-6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN-2020MD-6 (SOT1220)		2.0 x 2.0 x 0.62	1250		HU-ML2020L8 (Single)	UDFN6B	UDFN-6 WDFN6			UDFN2020-6 Type E		PowerPAK SC-70 Thin PowerPAK SC-70	
	SOT363	SC-88	2.0 x 1.25 x 0.95	300		UMD6/ UMT6	US6 UF6 USV	SC-88	CMPAK-6	SOT363	SOT-363		SC70-6	SC70-6L
	SOT457	SC-74	2.9 x 1.5 x 1.0	750		SMD6/ SMT6	SM6 VS-6	SC-74 TSOP-6	TSOP-6	SC74 TSOP6	SOT23-6 SOT26		TSOP6 TSOP-6	SOT23-6L
	SOT666		1.6 x 1.2 x 0.55	300		EMD6/ EMT6 WEMT6	ES6 ESV	SOT-563	SMFPAK-6	SOT666	SOT563		SC89-6lead	SC-89
7	D2PAK-7 (SOT427)		11 x 10 x 4.3						MP-25ZT, 7pin TO-263	D2PAK7P, PG-TO263-7		D2PAK-7, H2PAK-6	TO-263-7L	
8	LFPAK33 (SOT1210)		3.3 x 3.3 x 0.85			HSMT8	TSON Advance	µ8FL, WDFN-8		PG-TSD-SON-8	Power DI3333-8	Power FLAT 3.3 x 3.3	PowerPAK 1212-8	
	LFPAK56D (SOT1205)		4.9 x 4.45 x 1.0	3000		HSOP8 (Dual)		SO-8FL Dual, DFN-8	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	
	DFN1714U-8 (SOT983)	H x SON8	1.7 x 1.35 x 0.48					UDFN 1.7 x 1.35, 0.4P						SLP1713P8
10	DFN2510-10 (SOT 1165)	x SON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
12	DFN2512-12 (SOT 1158)	H x - SON12	2.5 x 1.2 x 0.48					UDFN12, 2.5 x 1.2, 0.4P						
	DFN2514-12 (SOT 1167)	HU-SON12	2.5 x 1.35 x 0.53					UDFN12, 2.5 x 1.35, 0.4P						SLP2513P12
16	DFN3312-16 (SOT 1159)	H x - SON16	3.3 x 1.2 x 0.48					UDFN 16, 3.5 x 1.2, 0.4P						

Types in brackets (…) show footprint compatibility only

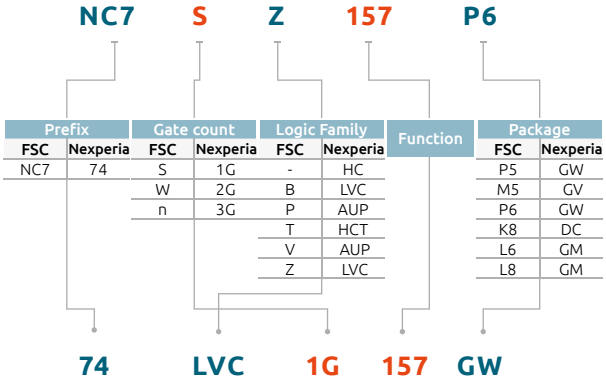
Competitive cross reference - Logic

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

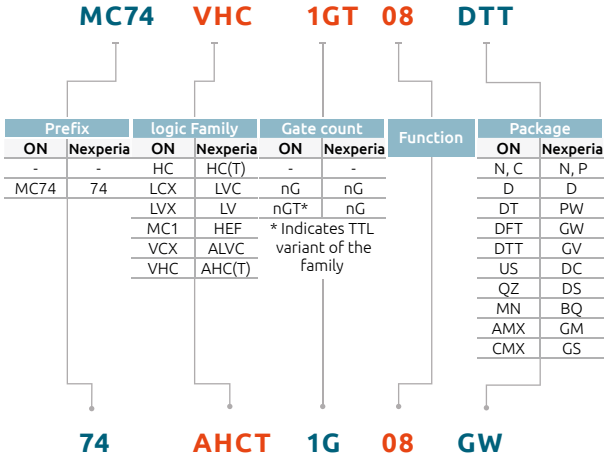
On semiconductor low pin count logic



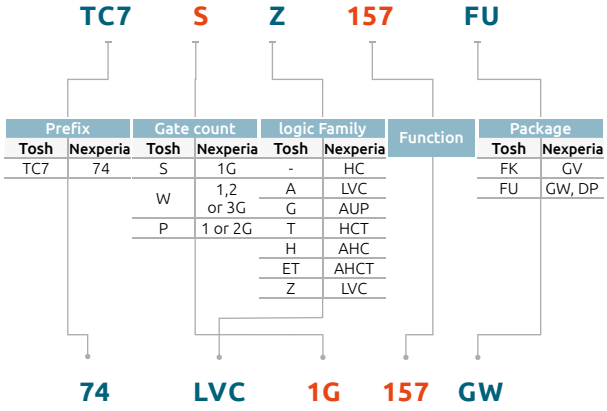
Fairchild semiconductor tiny logic



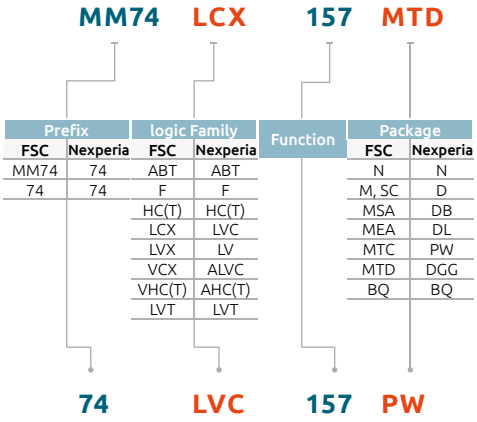
On semiconductors logic



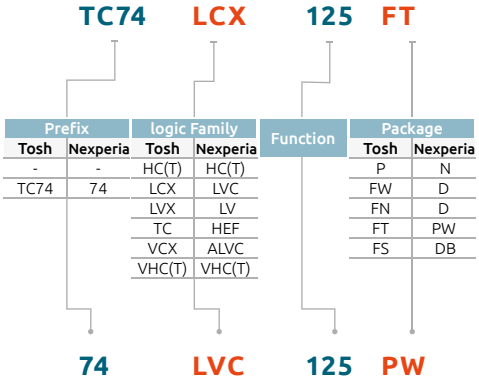
Toshiba one gate



Fairchild semiconductor standard logic



Toshiba standard logic



Texas instruments logic

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
	SOD80	115, 135
	SOD123F	115
	CFP3 (SOD123W)	115
	SOD123	115,118
	CFP5 (SOD128)	115
	SOD323	115, 135
	SOD323F	115
	SOD523	115, 135, 315, 335

3 pin packages

Orientation in tape	Package	Packing 12NC ending
	SOT89	146

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

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

Orientation in tape	Package	Packing 12NC ending
	SOT89	147

4 pin packages

Orientation in tape	Package	Packing 12NC ending
		

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

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

Orientation in tape	Package	Packing 12NC ending
		

5 pin packages

Orientation in tape	Package	Packing 12NC ending
	LFPAK56 (SOT669)	115

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
	SOT665	115

Orientation in tape	Package	Packing 12NC ending
		

6 pin packages

Orientation in tape	Package	Packing 12NC ending
	DFN2020MD-6 (SOT1220)	184
	LFPAK33 (SOT1210)	115
	LFPAK56D (SOT1205)	115
	XSON6 (SOT1202)	125

Orientation in tape	Package	Packing 12NC ending
	DFN1010-6 (SOT891)	132
	DFN1010E-6 (SOT1202)	132
	DFN2020MD-6 (SOT1220)	125
	SOT363	125, 165
	SOT457	125, 165
	SC-88 (SOT363)	125
	SC-74 (SOT457)	125

Orientation in tape	Package	Packing 12NC ending
	DFN1412-6 (SOT1268)	147
	DFN2020-6 (SOT1118)	115
	DFN2020D-6 (SOT1118D)	115
	DFN2020MD-6 (SOT1220)	115
	SOT363	115, 135
	SOT457	115, 135
	SOT666	115, 315

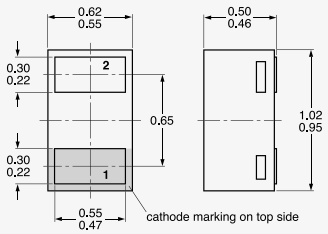
Orientation in tape	Package	Packing 12NC ending
		

multi I/O pin packages

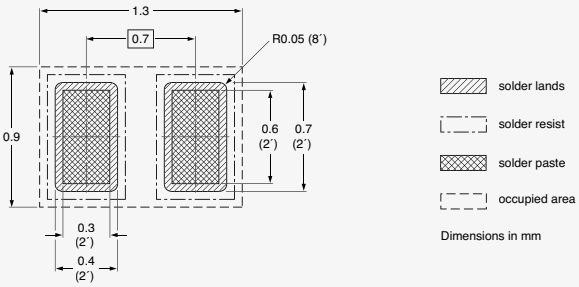
Orientation in tape	Package	Packing 12NC ending
	DFN2110-9 (SOT1178)	115
	DFN2111-7 (SOT1358)	471
	DFN2520-9 (SOT1333)	
	DFN2520-9 (SOT1333)	
	DFN2520-9 (SOT1333)	
	DFN2520-9 (SOT1333)	
	XSON8 (SOT1203)	115
	TSSOP8 (SOT530-1)	118
	SO8 (SOT96-1)	118
	X2QFN10 (SOT1430-1)	471
	TSSOP10 (SOT552-1)	118
	DHVQFN14 (SOT762-1)	115
	TSSOP14 (SOT402-1)	118
	SSOP14 (SOT337-1)	118
	SSOP16 (SOT519-1)	118
	TSSOP16 (SOT403-1)	118
	SSOP16 (SOT338-1)	118
	SO16 (SOT109-1)	118
	TSSOP20 (SOT360-1)	118
	SO20 (SOT163-1)	118
	DHXQFN20 (SOT1045-2)	115
	DHVQFN20 (SOT764-1)	115
	SSOP20 (SOT339-1)	118
	SO24 (SOT137-1)	118
	DHVQFN24 (SOT815-1)	118
	TSSOP24 (SOT355-1)	118
	TSSOP48 (SOT362-1)	118
	TSSOP48 (SOT480-1)	118
	TSSOP56 (SOT364-1)	118
	VFBGA56 (SOT702-1)	518
	LFBGA96 (SOT536-1)	518

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

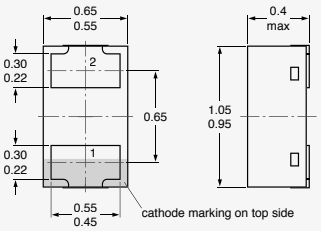
2-pin SMD packages



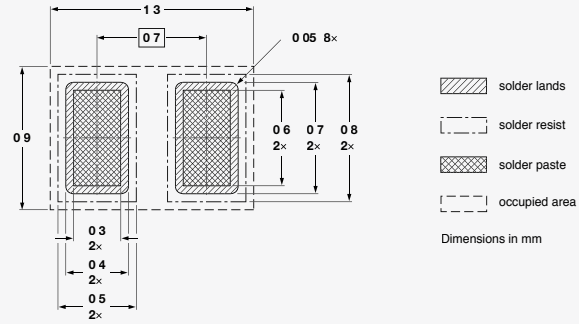
DFN1006-2 (SOD882)



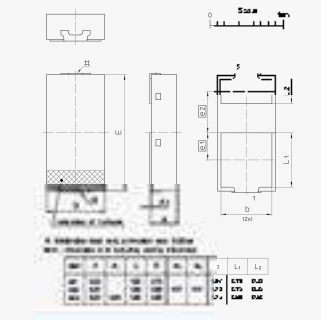
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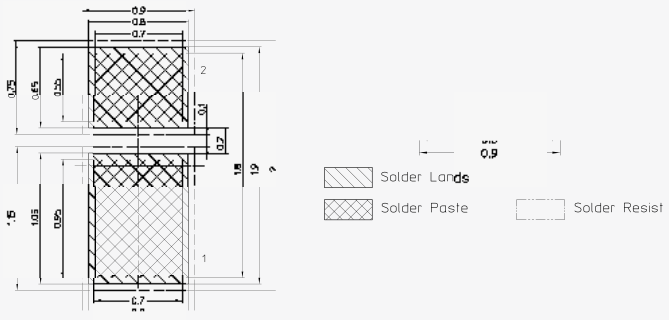
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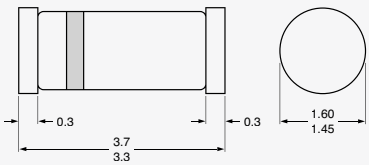
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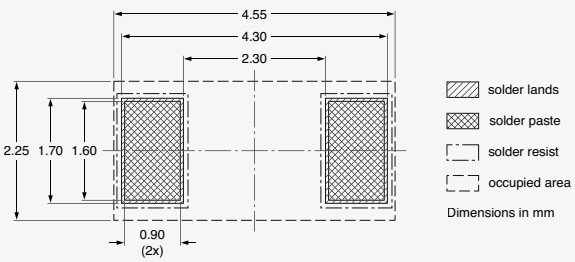
DFN1608D-2 (SOD1608)



DFN1608D-2 (SOD1608)



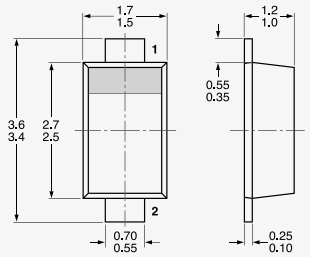
SOD80C



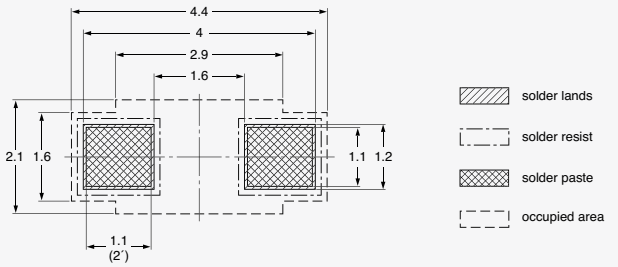
SOD80C

Dimensions in mm

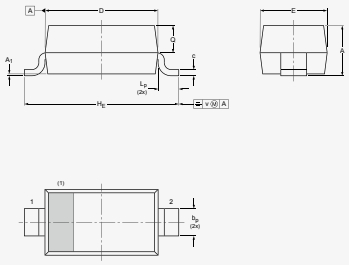
2-pin SMD packages



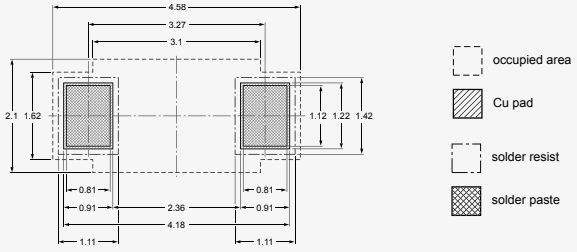
SOD123F



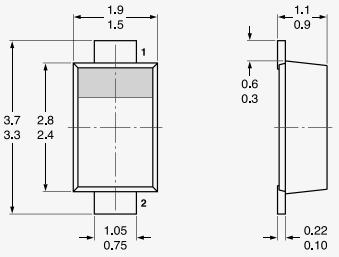
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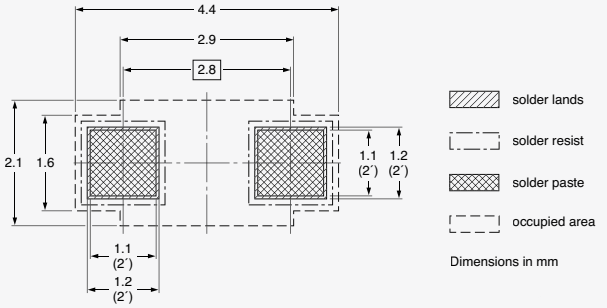
SOD123



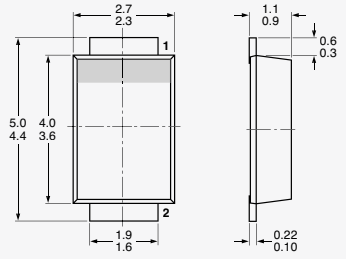
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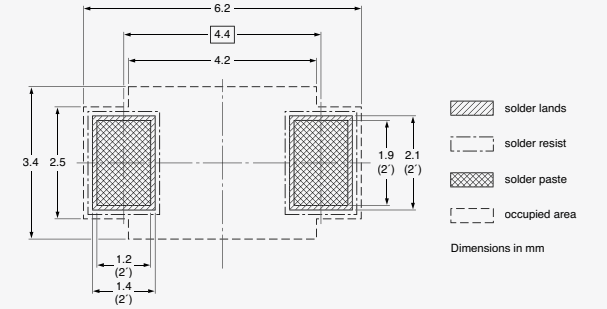
SOD123W



SOD123W



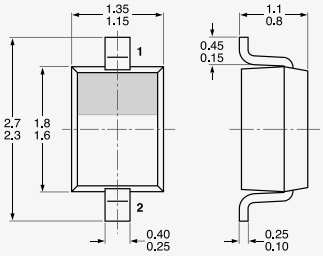
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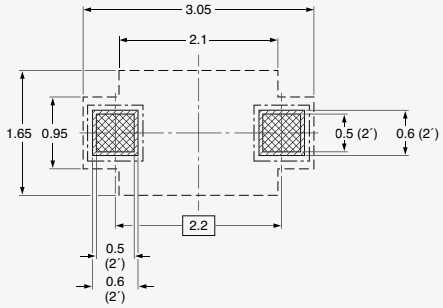
SOD128

Dimensions in mm

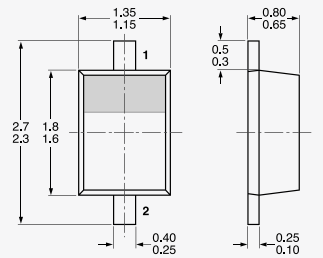
2-pin SMD packages



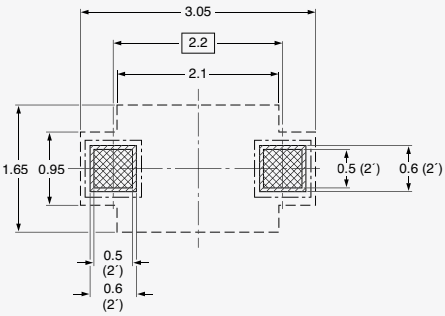
SOD323 (SC-76)



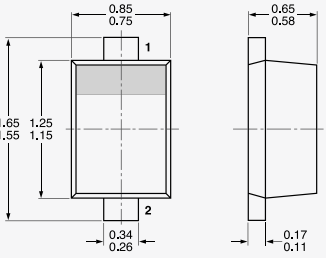
SOD323 (SC-76)



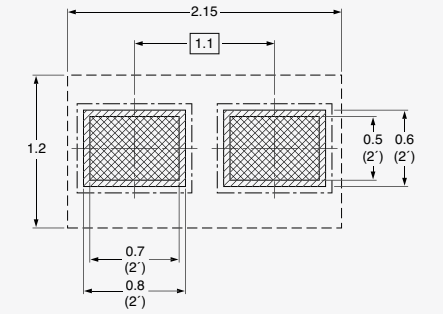
SOD323F (SC-90)



SOD323F (SC-90)

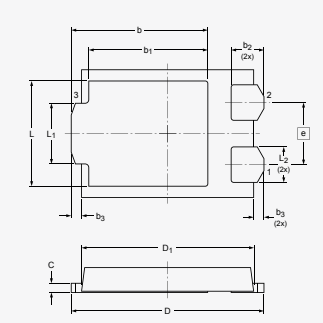


SOD523 (SC-79)

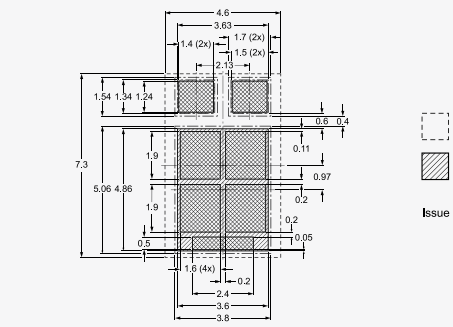


SOD523 (SC-79)

3-pin SMD packages



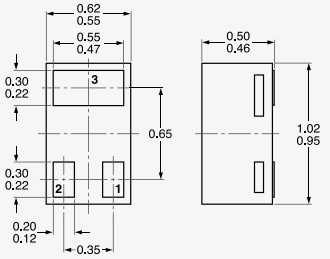
CFP15 (SOT1289)



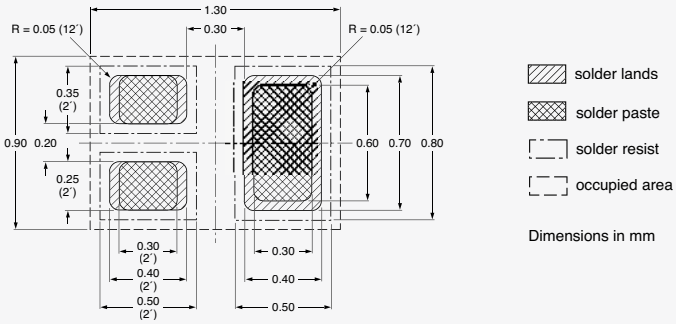
CFP15 (SOT1289)

Dimensions in mm

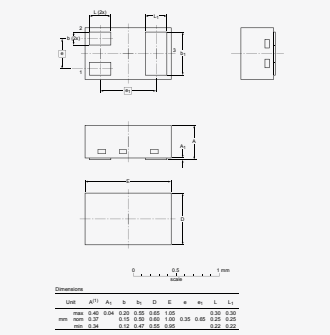
3-pin SMD packages



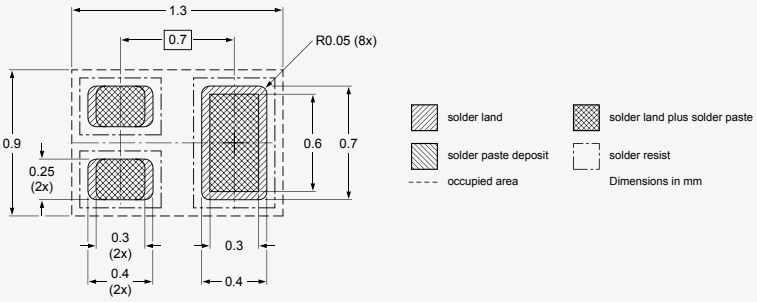
DFN1006-3 (SOT883)



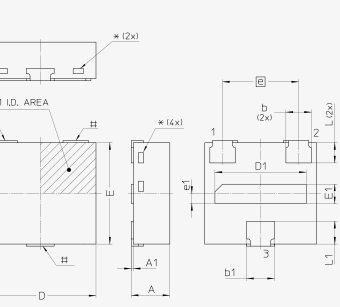
DFN1006-3 (SOT883)



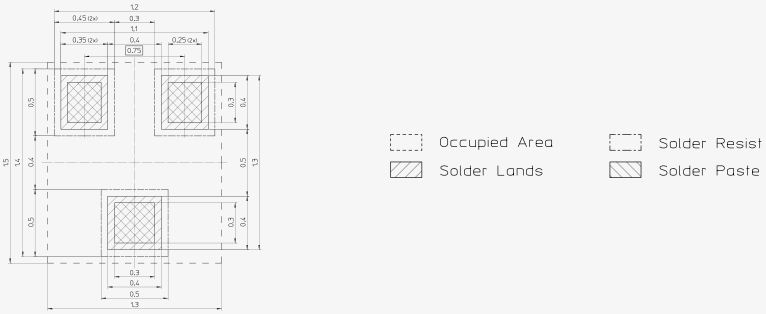
DFN1006B-3 (SOT883B)



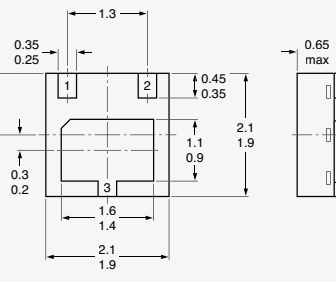
DFN1006B-3 (SOT883B)



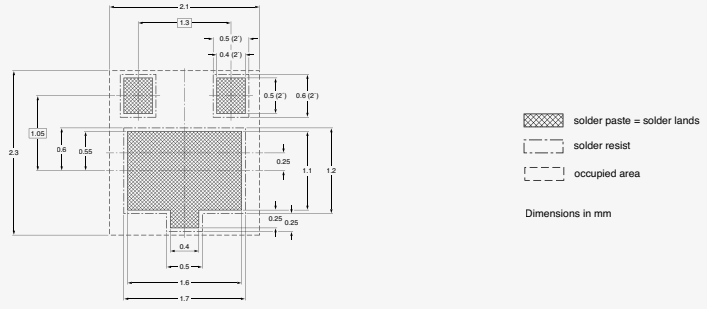
DFN1010D-3 (SOT1215)



DFN1010D-3 (SOT1215)



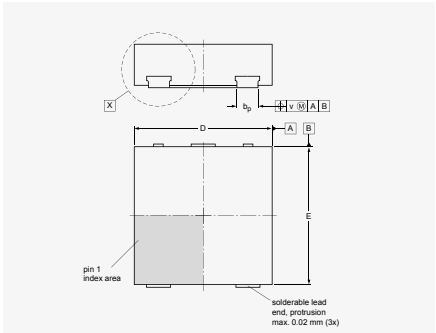
DFN2020-3 (SOT1061)



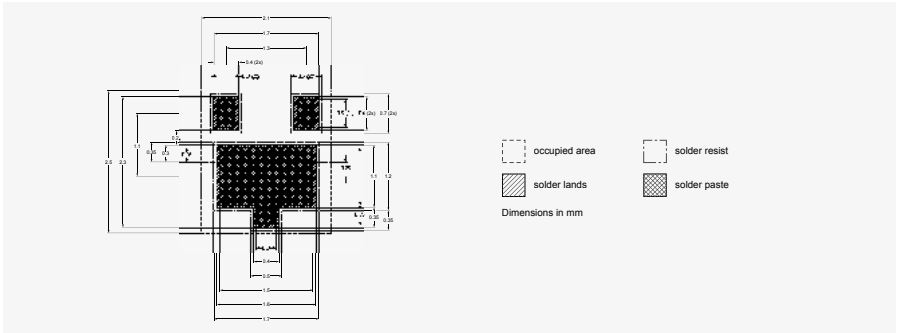
DFN2020-3 (SOT1061)

Dimensions in mm

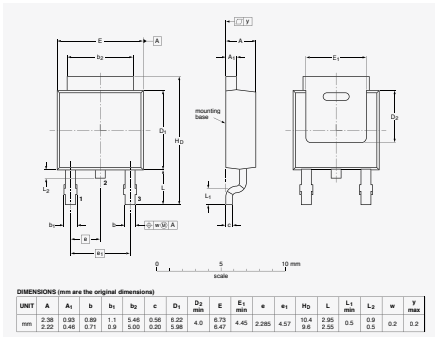
3-pin SMD packages



DFN2020D-3 (SOT1061D)

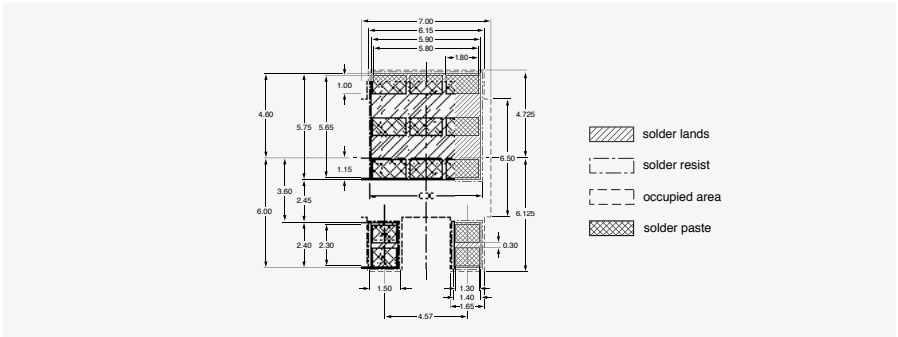


DFN2020D-3 (SOT1061D)

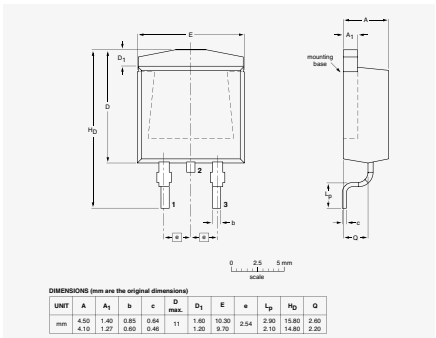


UNIT	A	A_1	b	b_1	b_2	c	D_1	D_2 min	E	E_1 min	e	e_1	H_D	L	L_1 min	L_2	w	y max
mm	2.38 2.22	0.93 0.46	0.89 0.71	1.1 0.9	5.46 5.00	0.56 0.20	6.22 5.98	4.0	6.73 6.47	4.45	2.285	4.57	10.4 9.6	2.95 2.55	0.5	0.9 0.5	0.2	0.2

DPAK (SOT428)

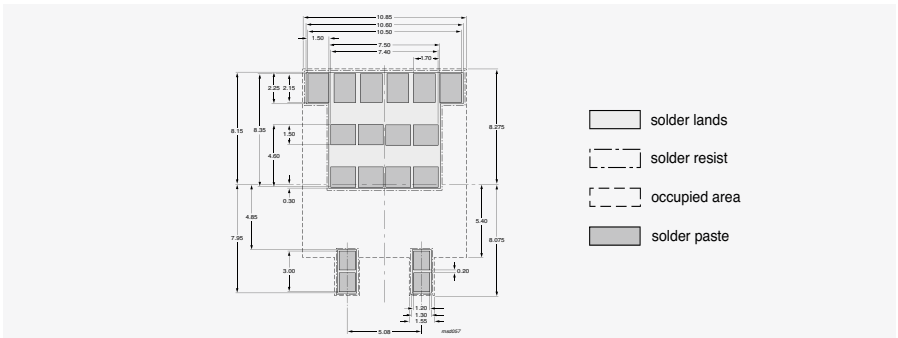


DPAK (SOT428)

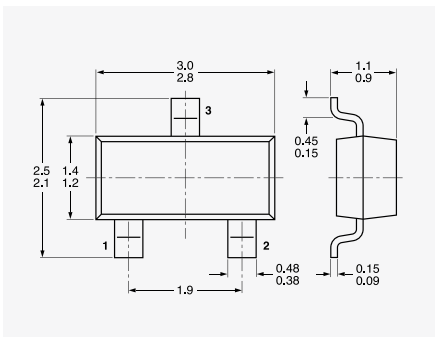


UNIT	A	A_1	b	c	D max.	D_1	E	e	L_p	H_D	Q
mm	4.50 4.10	1.40 1.27	0.85 0.60	0.64 0.46	11	1.60 1.20	10.30 9.70	2.54	2.90 2.10	15.80 14.80	2.60 2.20

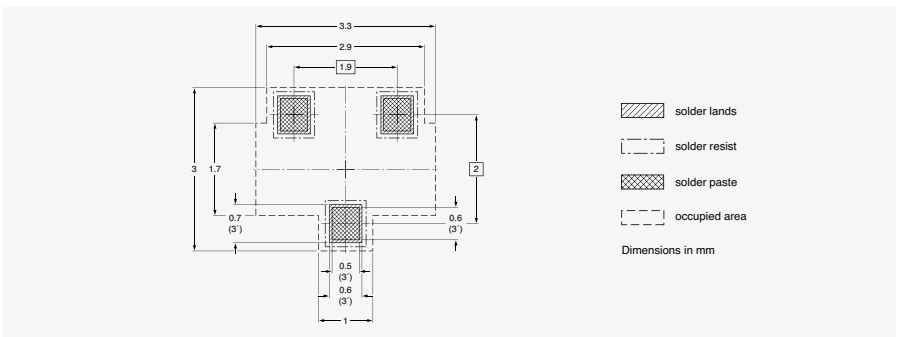
D²PAK (SOT404)



D²PAK (SOT404)



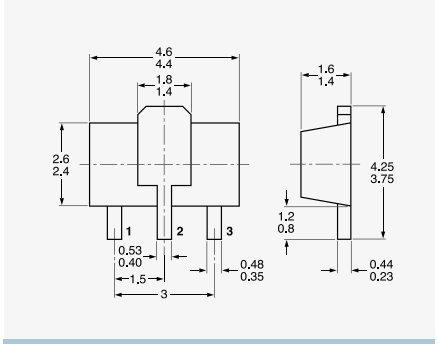
SOT23



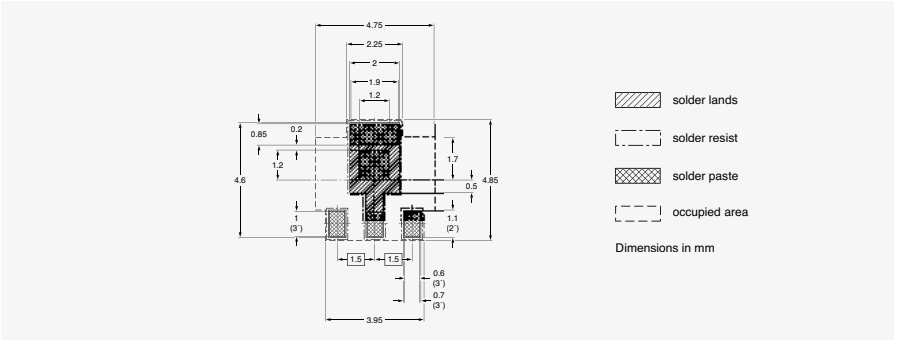
SOT23

Dimensions in mm

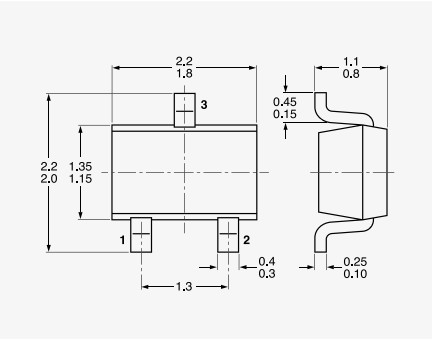
3-pin SMD packages



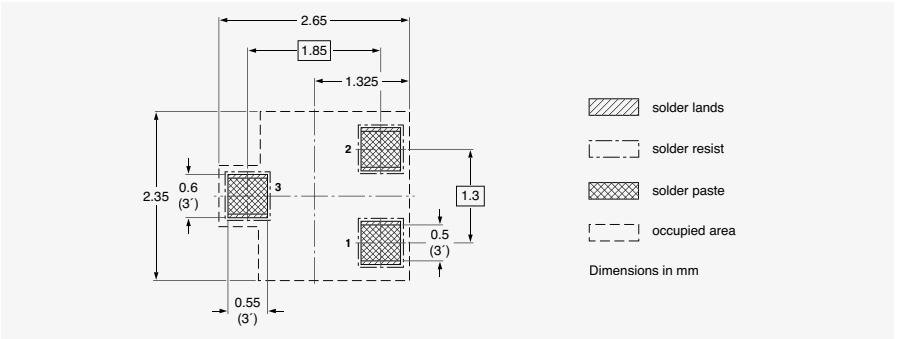
SOT89 (SC-62)



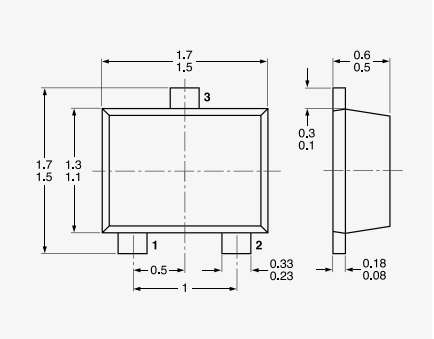
SOT89 (SC-62)



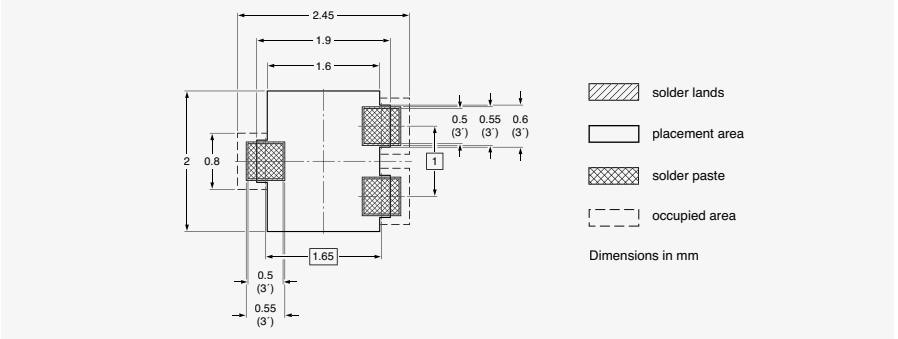
SOT323 (SC-70)



SOT323 (SC-70)

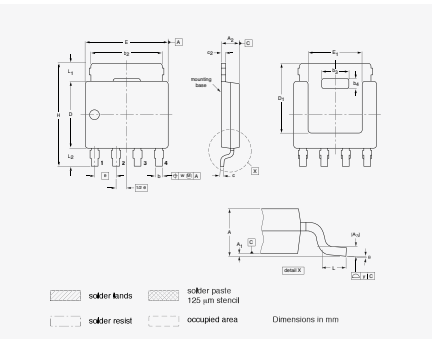


SOT663

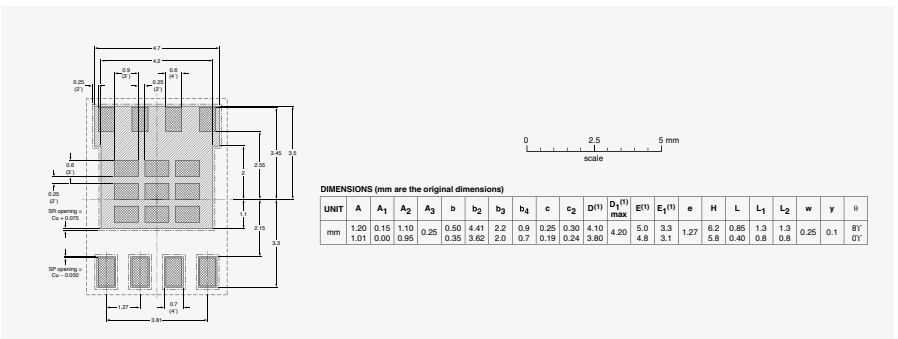


SOT663

4-pin SMD packages



LFPAK56 (SOT669)

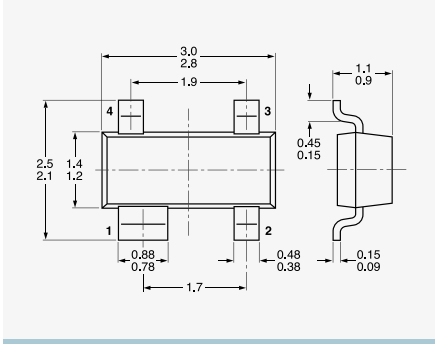


UNIT	A	A_1	A_2	A_3	b	b_2	b_3	b_4	c	c_2	$D^{(1)}$	$D_1^{(1)}$ max	$E^{(1)}$	$E_1^{(1)}$	e	H	L	L_1	L_2	w	y	θ
mm	1.20 1.01	0.15 0.00	1.10 0.95	0.25	0.50 0.35	4.41 3.62	2.2 2.0	0.9 0.7	0.25 0.19	0.30 0.24	4.10 3.80	4.20	5.0 4.8	3.3 3.1	1.27	6.2 5.8	0.85 0.40	1.3 0.8	1.3 0.8	0.25	0.1	8° 0°

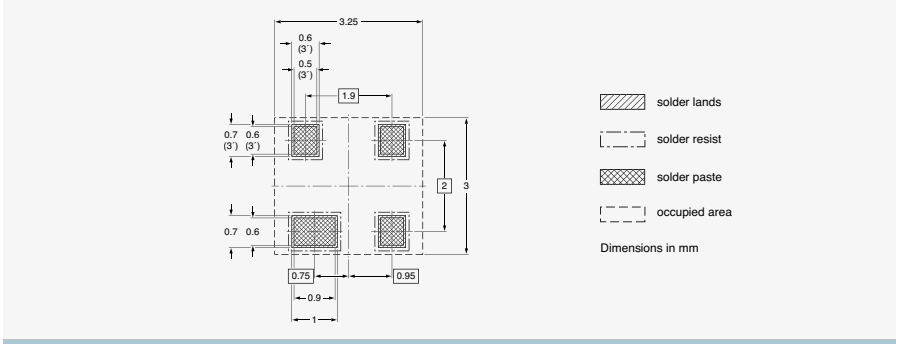
LFPAK56 (SOT669)

Dimensions in mm

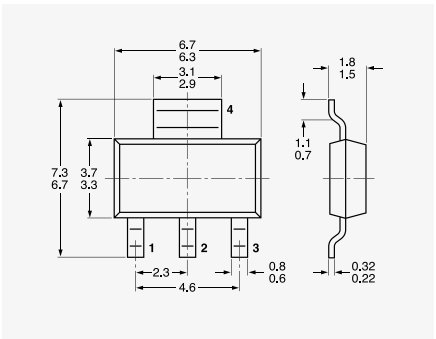
4-pin SMD packages



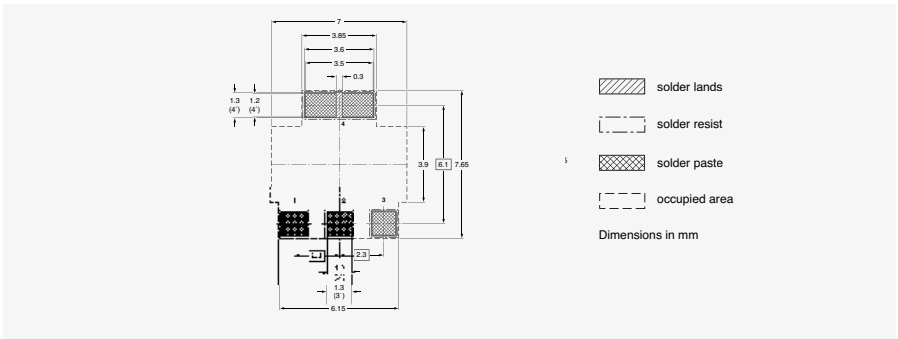
SOT143B



SOT143B

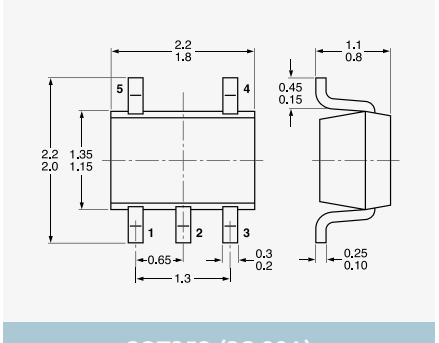


SOT223 (SC-73)

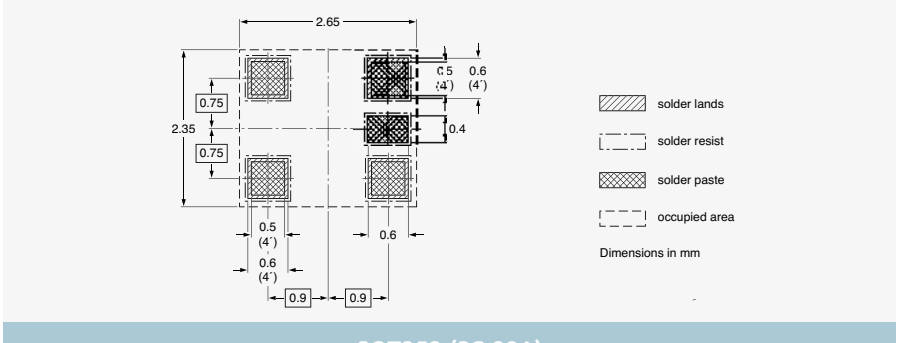


SOT223 (SC-73)

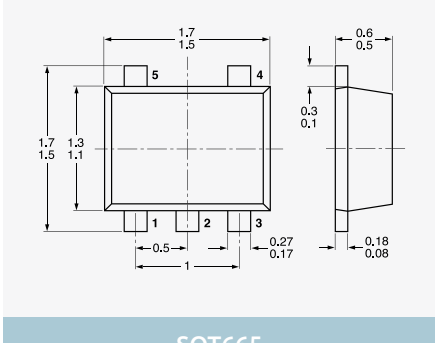
5-pin SMD packages



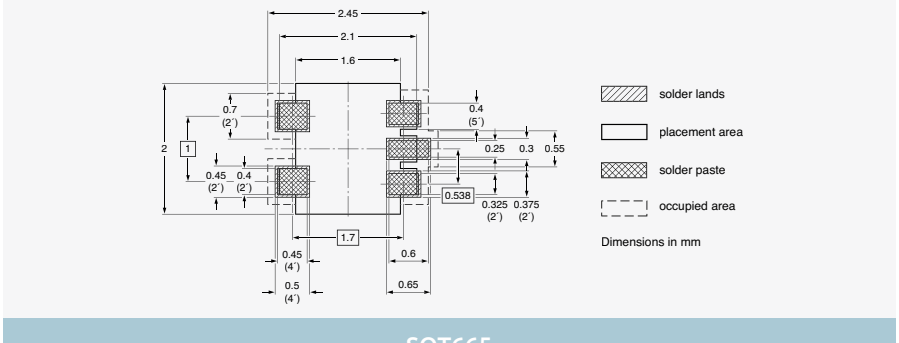
SOT353 (SC-88A)



SOT353 (SC-88A)



SOT665

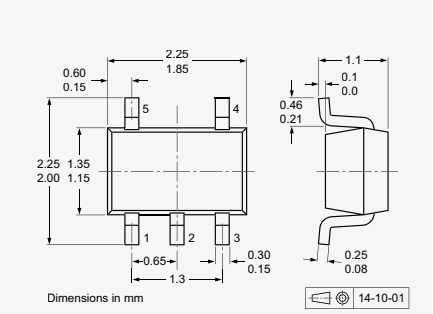


SOT665

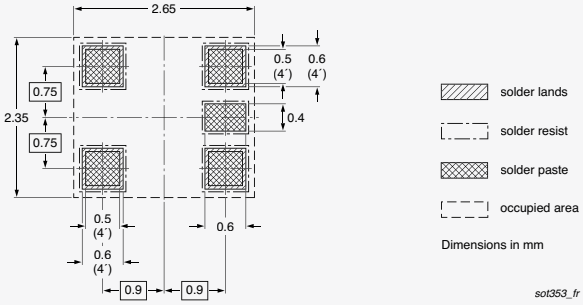
Dimensions in mm

Minimized outline drawings and reflow soldering footprint

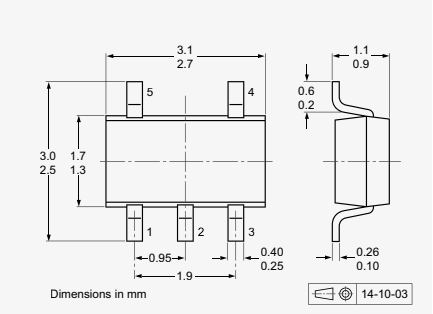
5-pin SMD packages



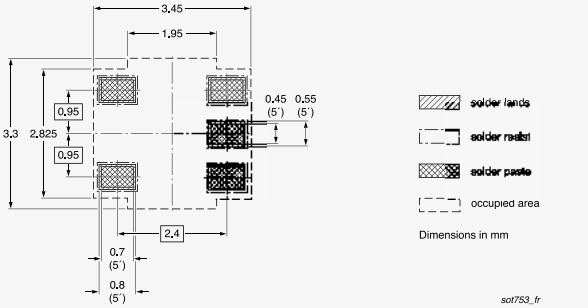
SOT353 GW



SOT353 GW

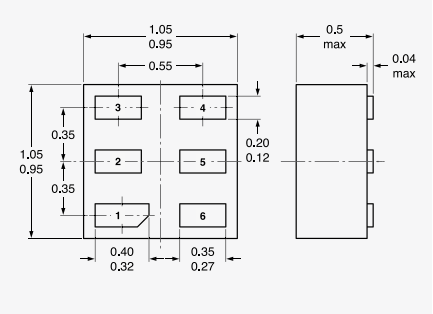


SOT753-1 GV

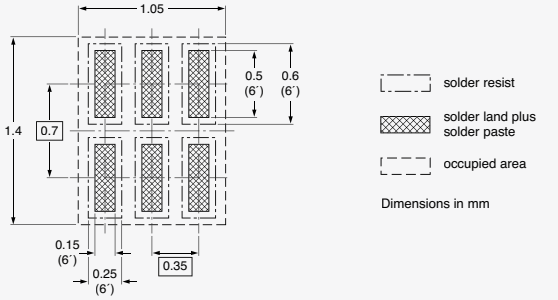


SOT753-1 GV

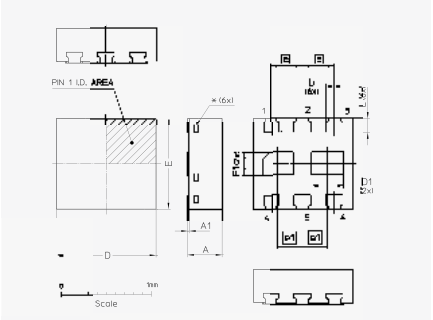
6-pin SMD packages



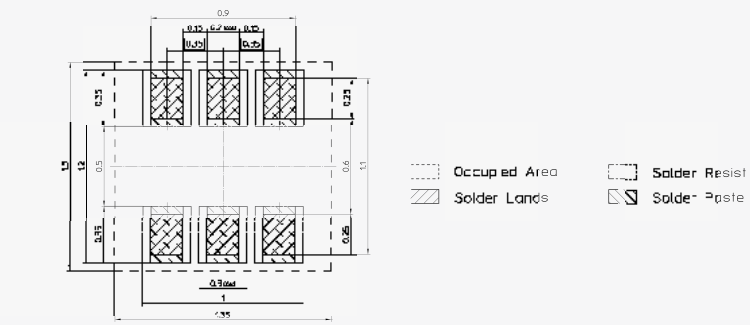
DFN1010-6 (SOT891)



DFN1010-6 (SOT891)



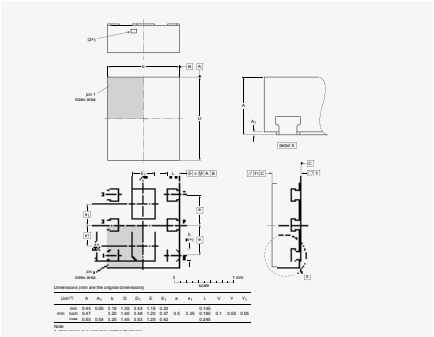
DFN1010B-6 (SOT1216)



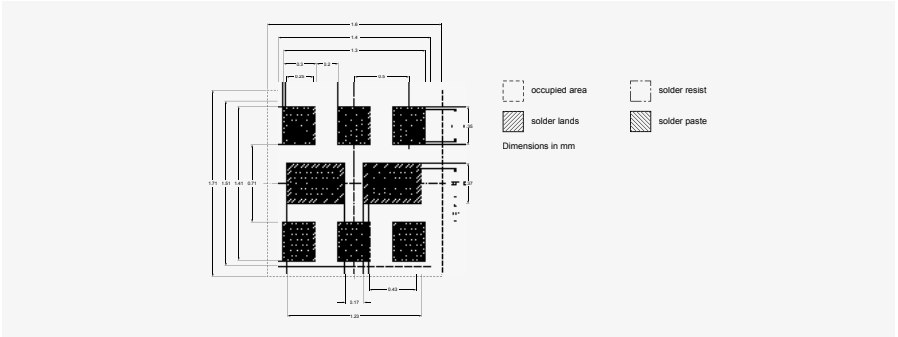
DFN1010B-6 (SOT1216)

Dimensions in mm

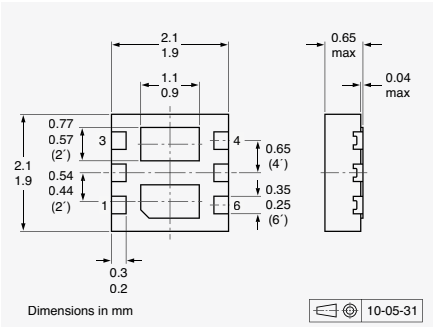
6-pin SMD packages



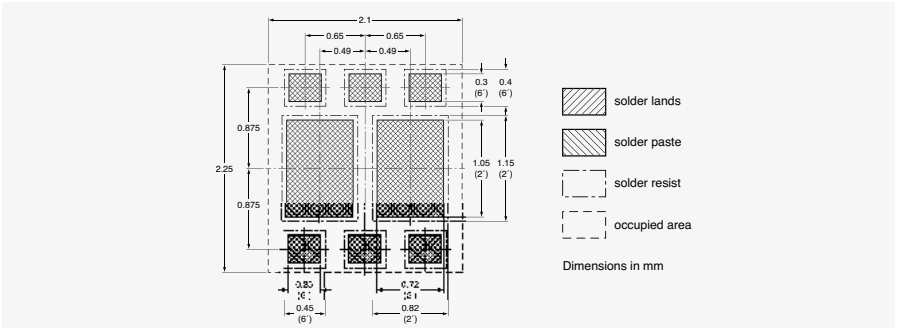
DFN1412-6 (SOT1268)



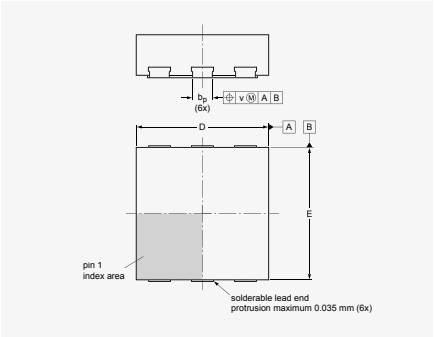
DFN1412-6 (SOT1268)



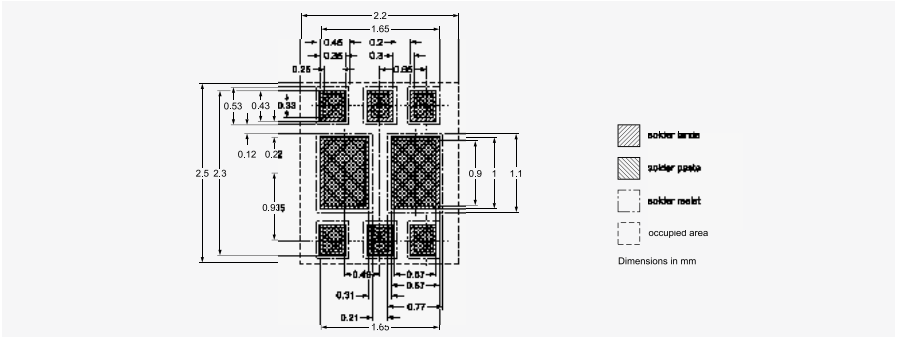
DFN2020-6 (SOT1118)



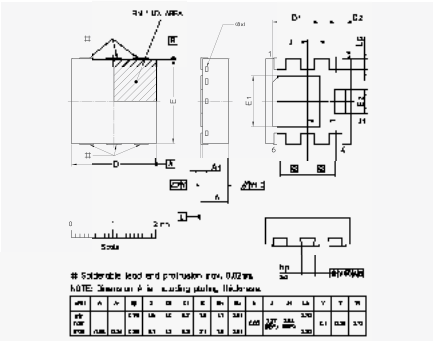
DFN2020-6 (SOT1118)



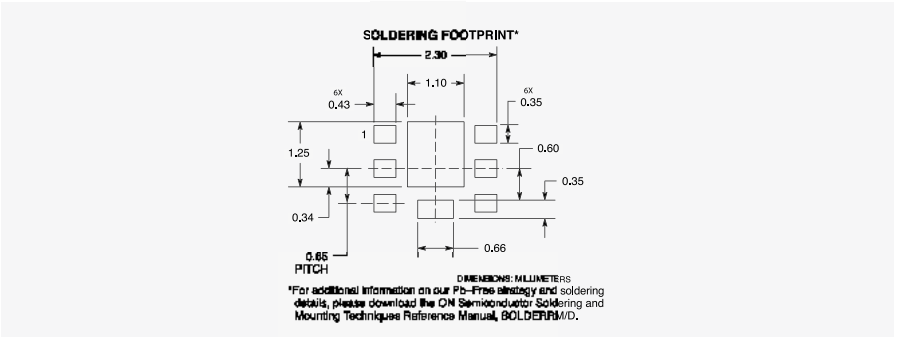
DFN2020D-6 (SOT1118D)



DFN2020D-6 (SOT1118D)



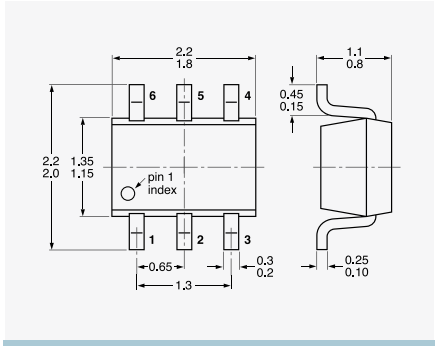
DFN2020MD-6 (SOT1220)



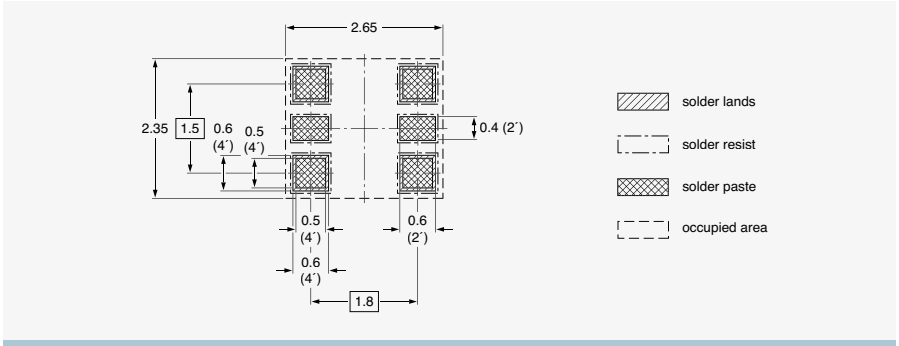
DFN2020MD-6 (SOT1220)

Dimensions in mm

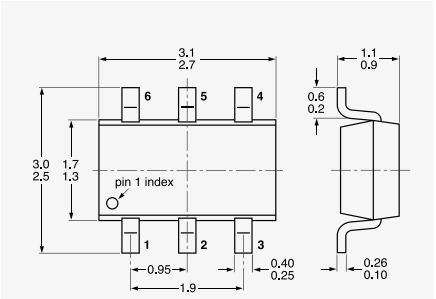
6-pin SMD packages



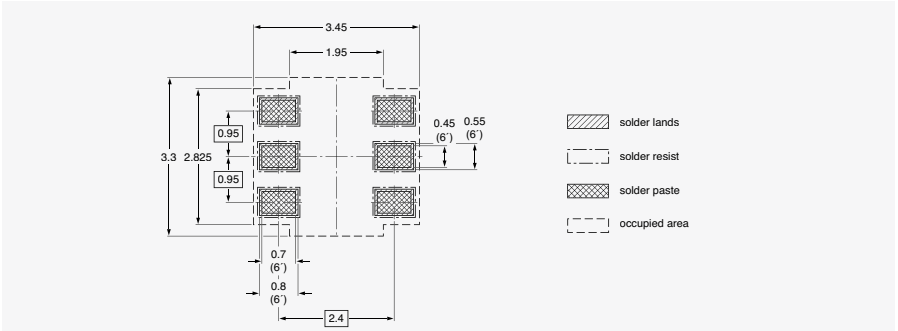
SOT363 (SC-88)



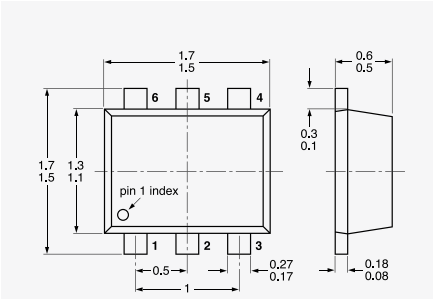
SOT363 (SC-88)



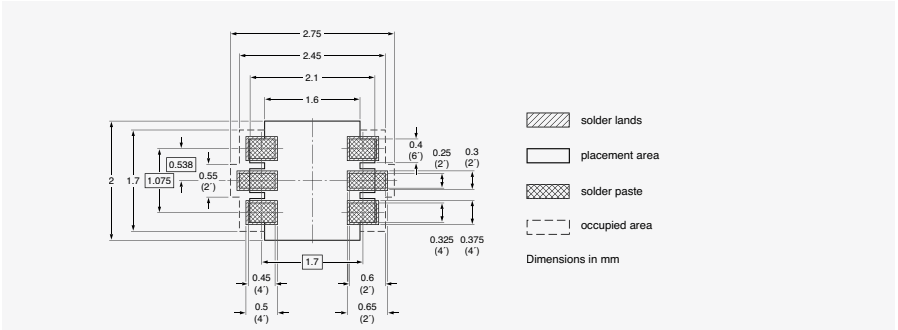
SOT457 (SC-74)



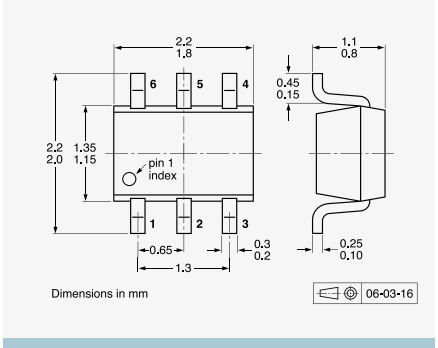
SOT457 (SC-74)



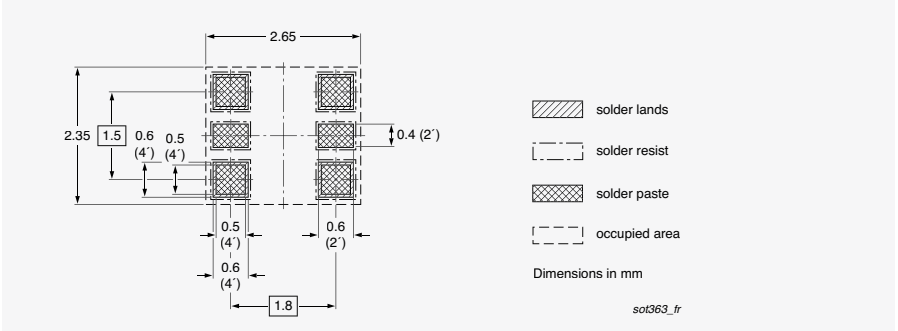
SOT666



SOT666



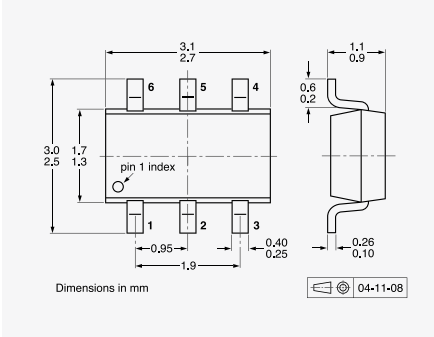
SOT363 GW



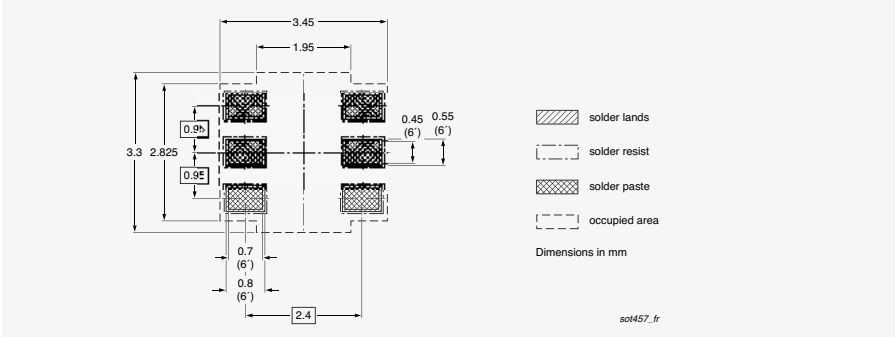
SOT363 GW

Dimensions in mm

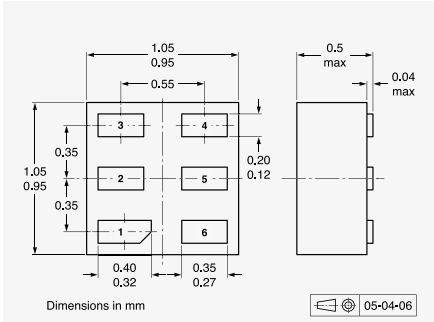
6-pin SMD packages



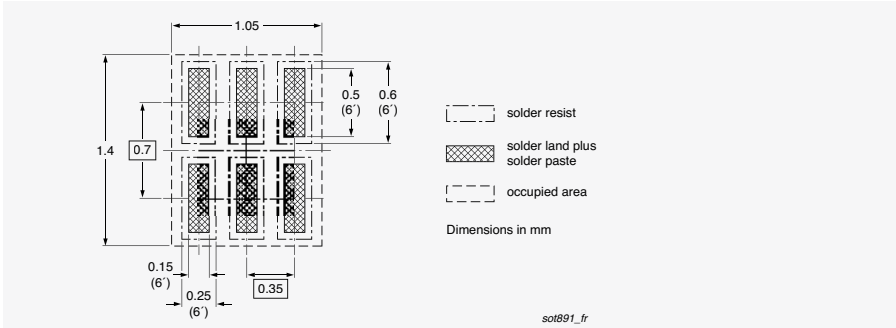
SOT457 GV



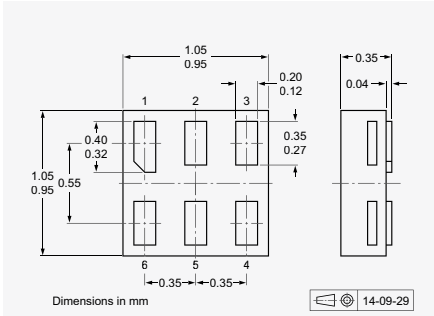
SOT457 GV



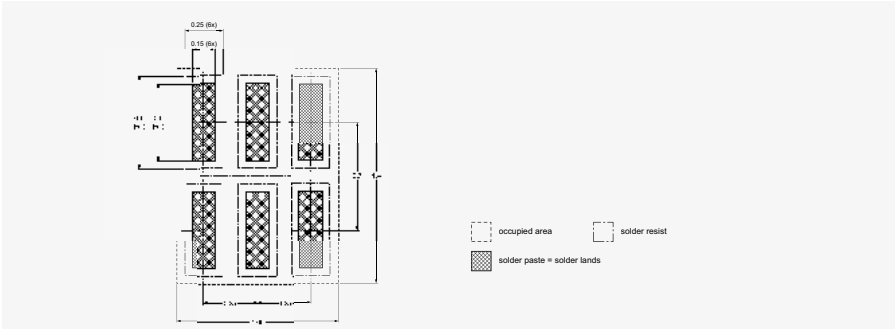
SOT891 GF



SOT891 GF

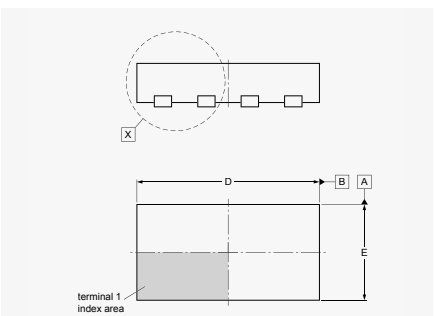


SOT1202 GS

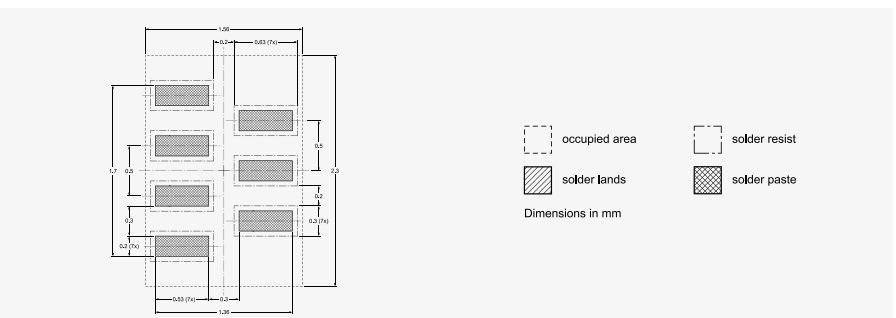


SOT1202 GS

7-pin SMD packages



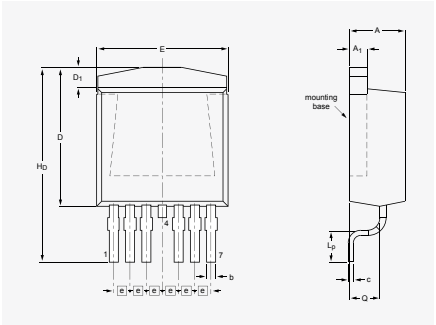
DFN2111-7 (SOT1358)



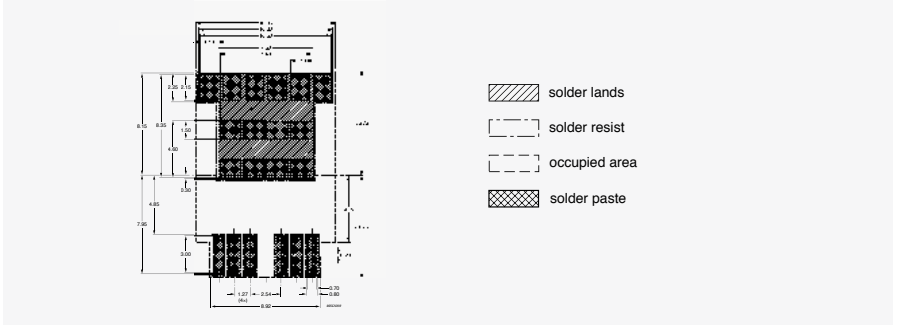
DFN2111-7 (SOT1358)

Minimized outline drawings and reflow soldering footprint

7-pin SMD packages

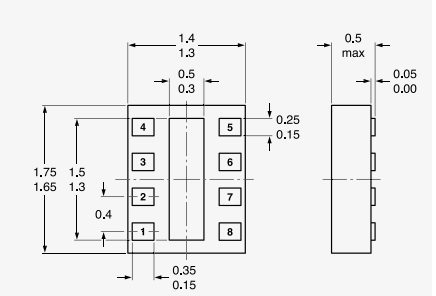


D2PAK-7 (SOT428)

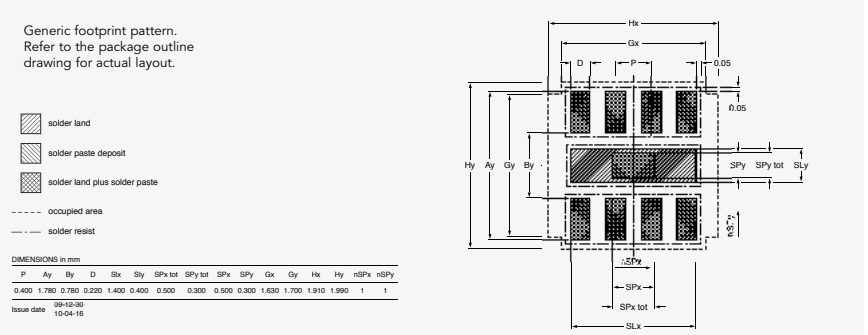


D2PAK-7 (SOT428)

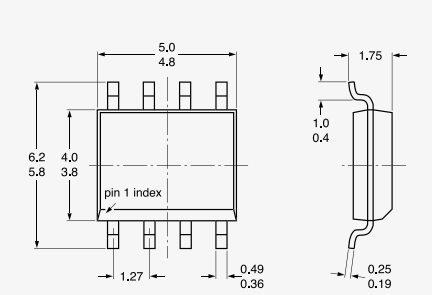
8-pin SMD packages



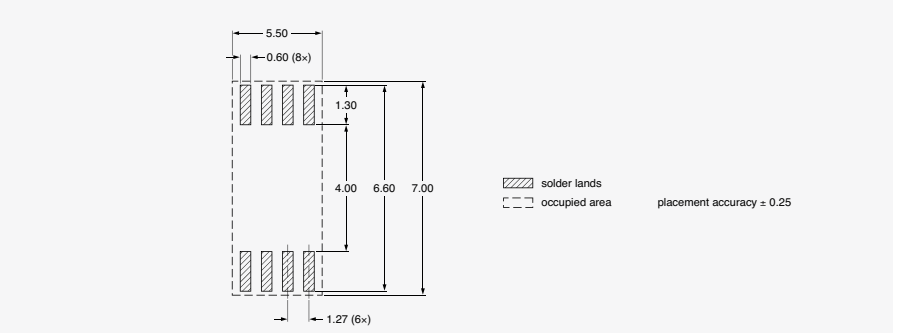
DFN1714U-8 (SOT983)



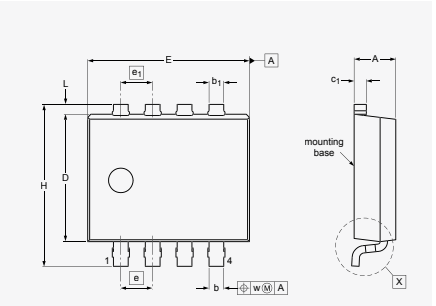
DFN1714U-8 (SOT983)



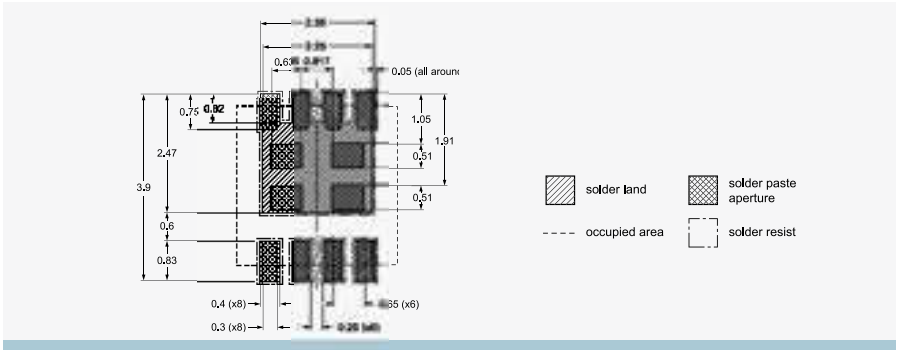
SOT96 (SO8)



SOT96 (SO8)



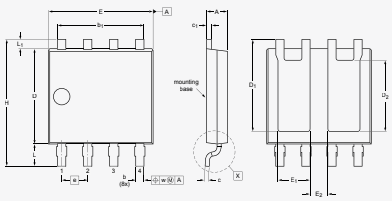
LFPAK33 (SOT1210)



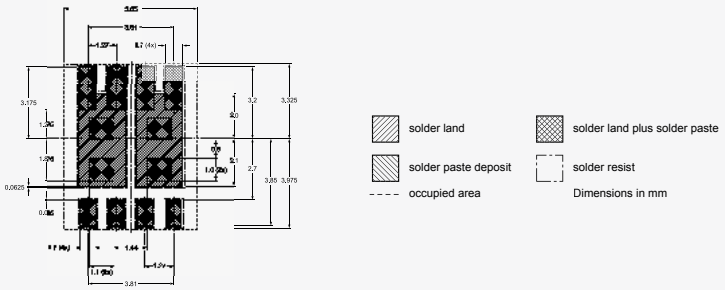
LFPAK33 (SOT1210)

Dimensions in mm

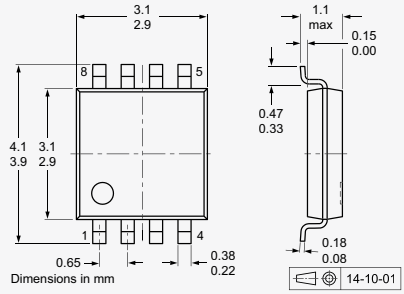
8-pin SMD packages



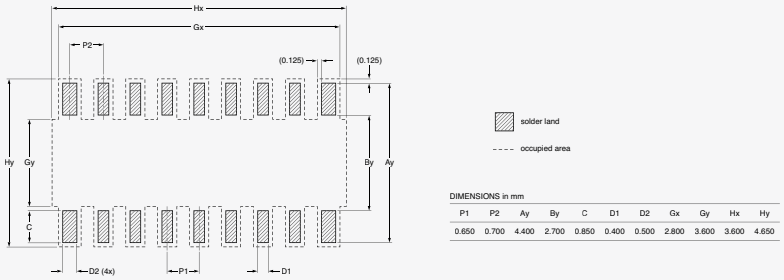
LFPAK56D (SOT1205)



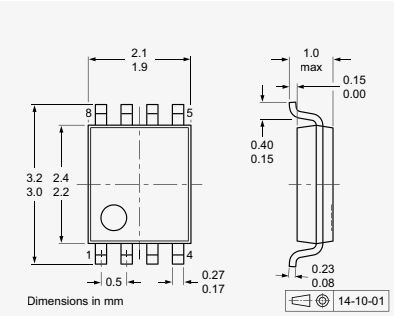
LFPAK56D (SOT1205)



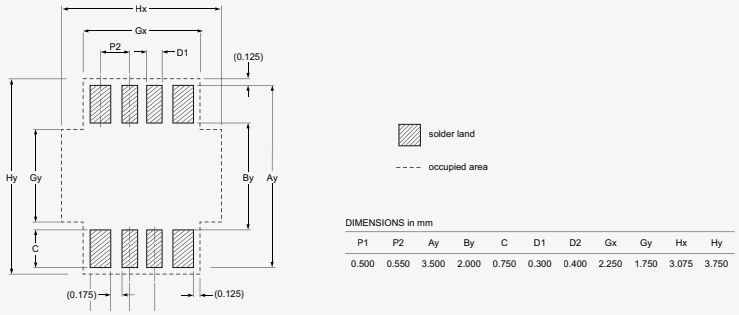
SOT505-2 DP



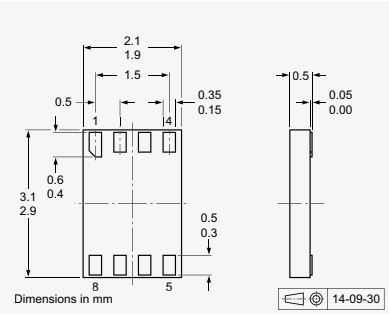
SOT505-2 DP



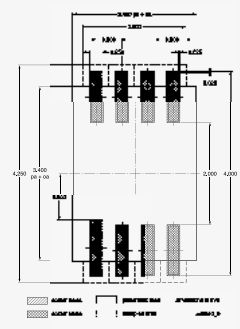
SOT765-1 DC



SOT765-1 DC



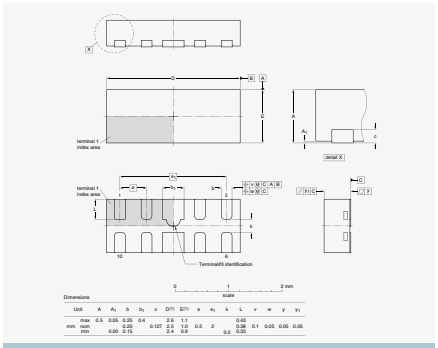
SOT996 GD



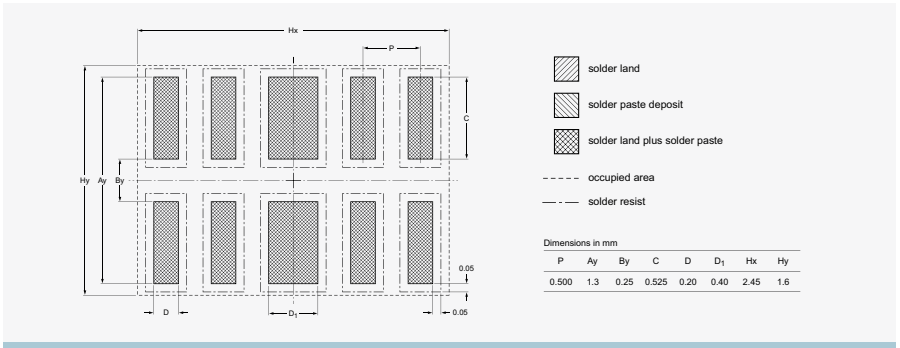
SOT996 GD

Dimensions in mm

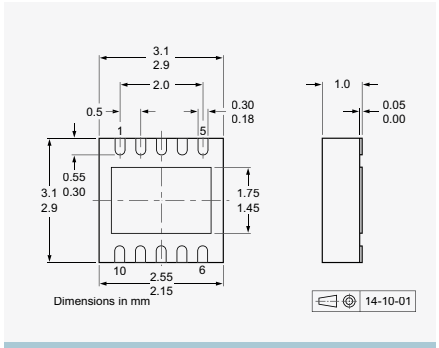
More than 8-pin SMD packages



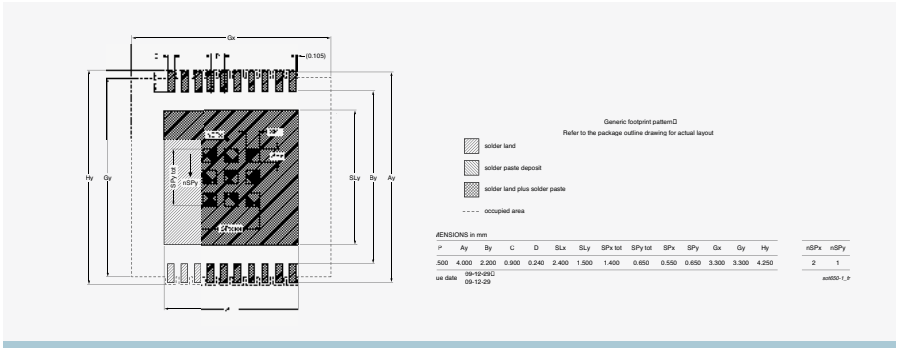
DFN2510-10 (SOT1165)



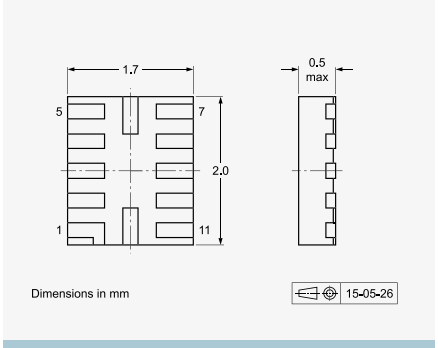
DFN2510-10 (SOT1165)



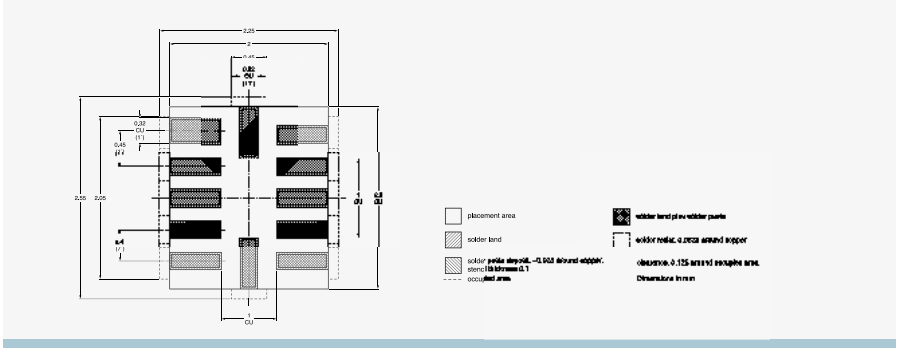
SOT650-1 TK



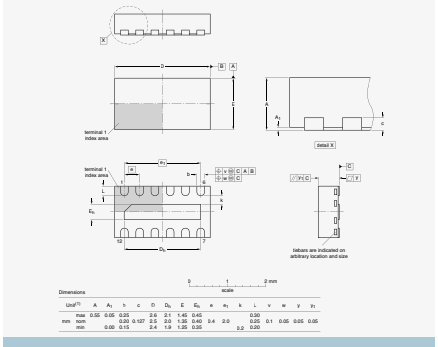
SOT650-1 TK



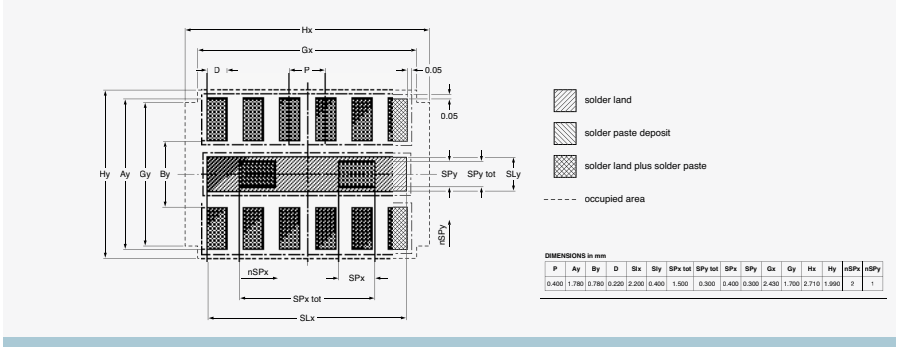
SOT1174 GM



SOT1174 GM



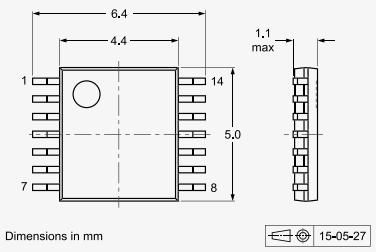
DFN2514-12 (SOT1167)



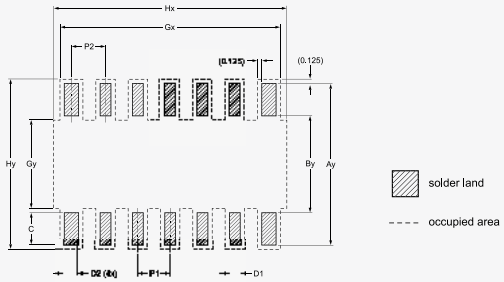
DFN2514-12 (SOT1167)

Dimensions in mm

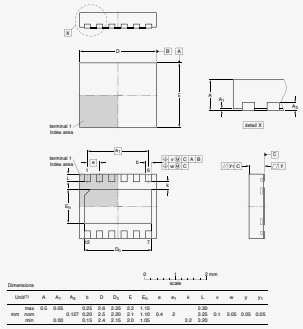
More than 8-pin SMD packages



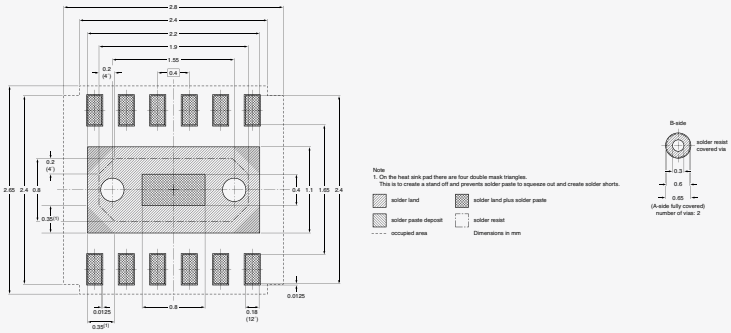
SOT402-1 PW



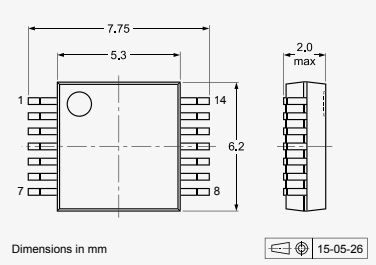
SOT402-1 PW



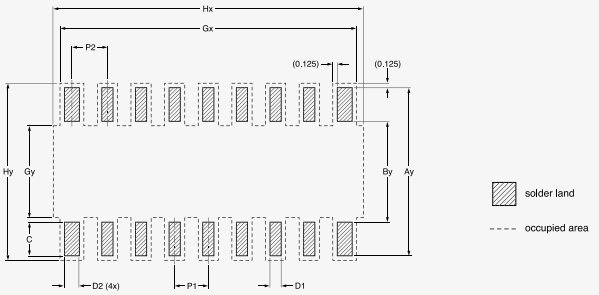
DFN2521-12 (SOT1156)



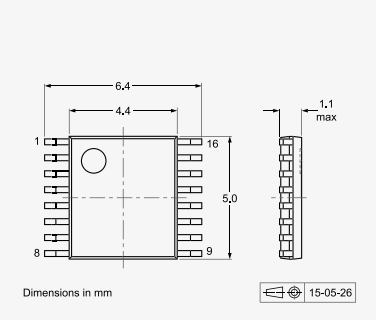
DFN2521-12 (SOT1156)



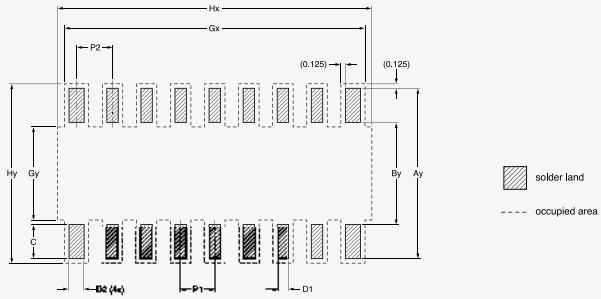
SOT337-1 DB



SOT337-1 DB



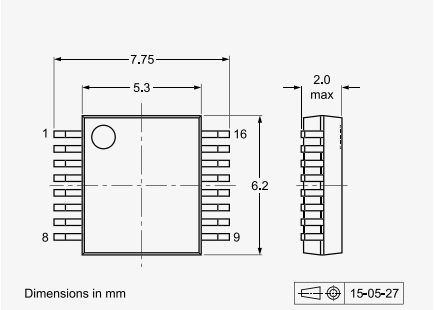
SOT403-1 PW



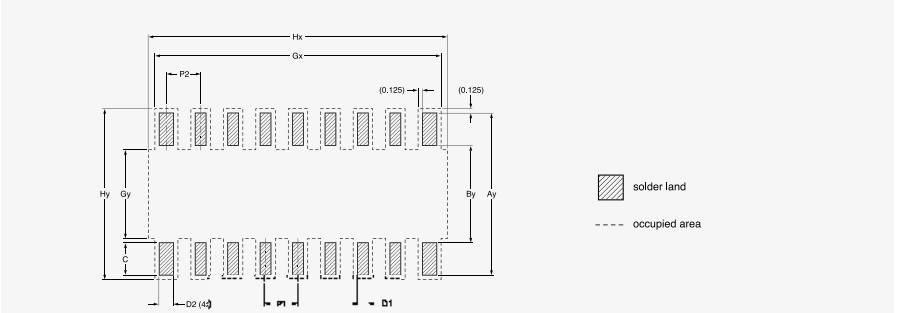
SOT403-1 PW

Dimensions in mm

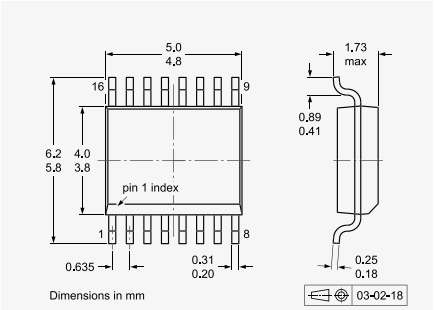
More than 8-pin SMD packages



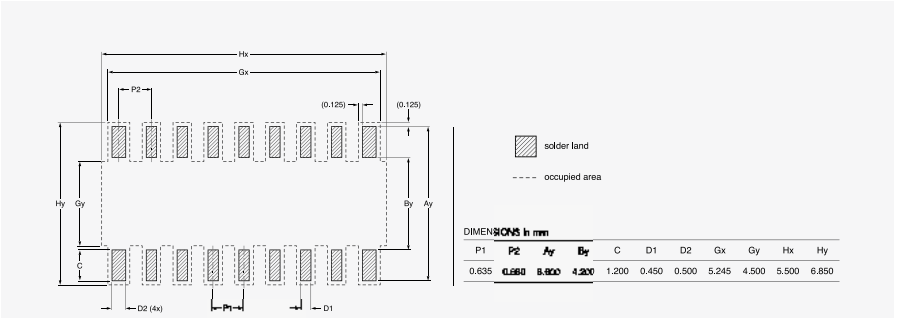
SOT338-1 DB



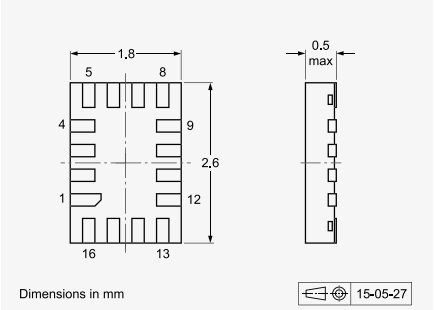
SOT338-1 DB



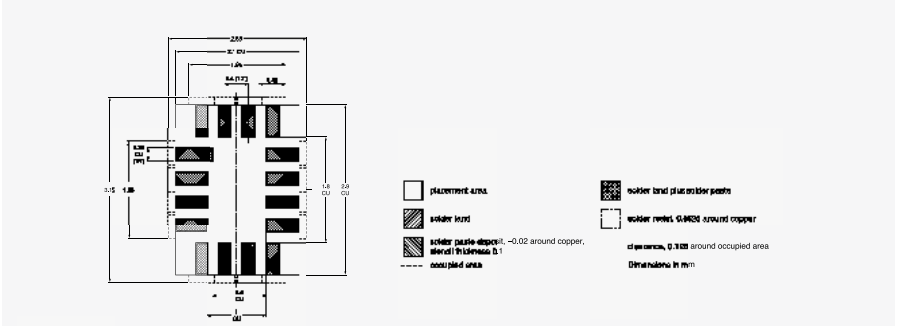
SOT519-1 DS



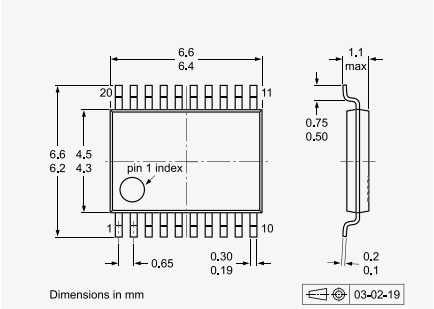
SOT519-1 DS



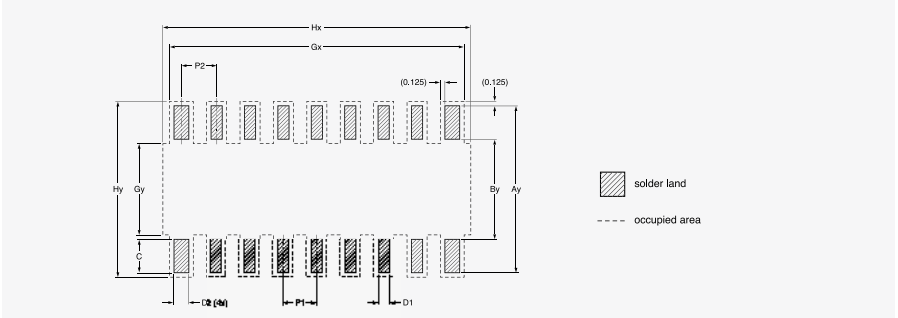
SOT1161 GU



SOT1161 GU



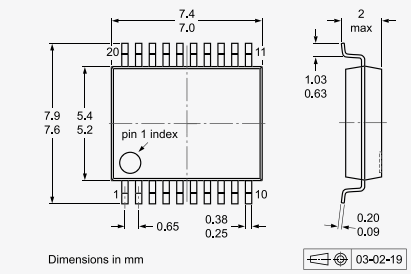
SOT360-1 PW



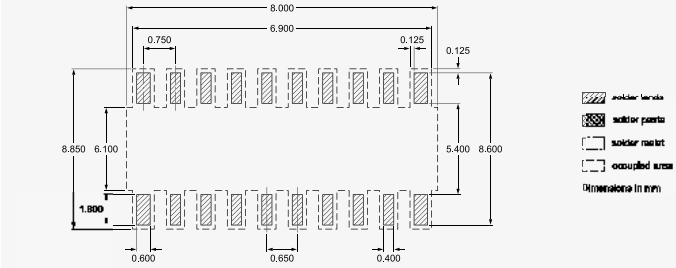
SOT360-1 PW

Dimensions in mm

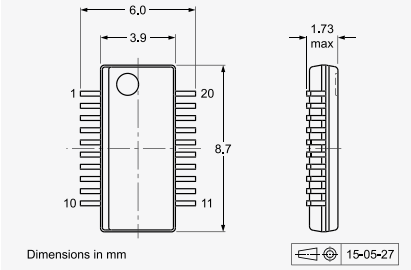
More than 8-pin SMD packages



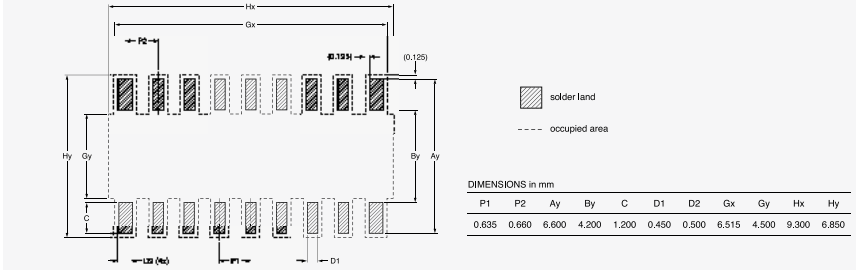
SOT339-1 DB



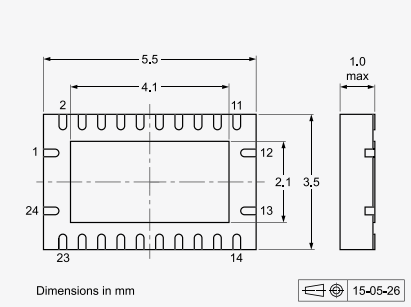
SOT339-1 DB



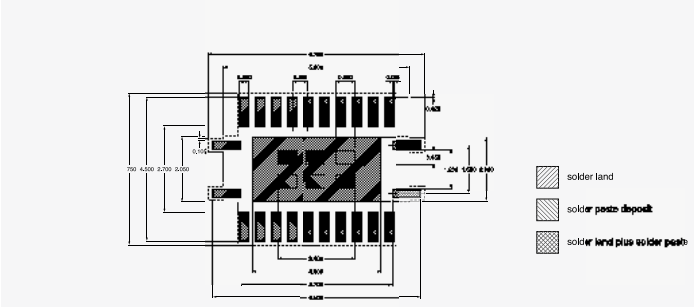
SOT724-1 DS



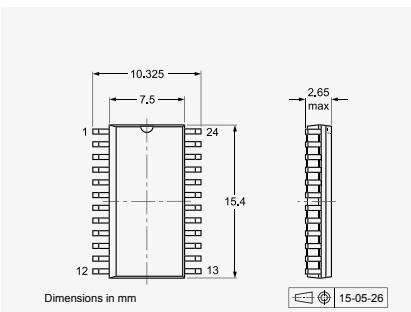
SOT724-1 DS



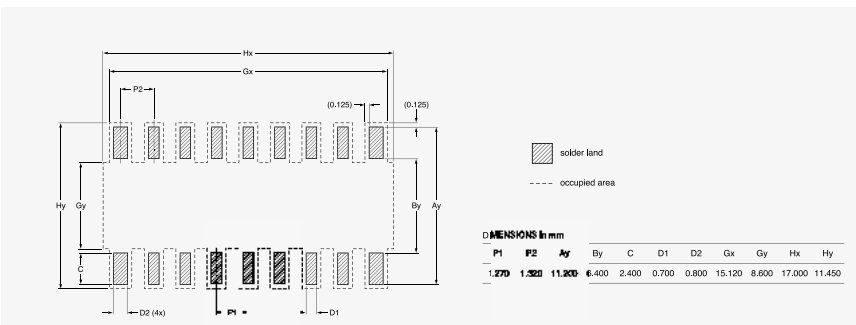
SOT815-1 BQ



SOT815-1 BQ



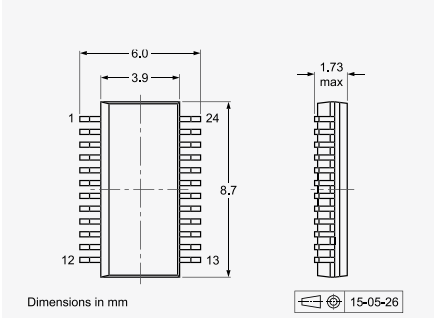
SOT137-1 D



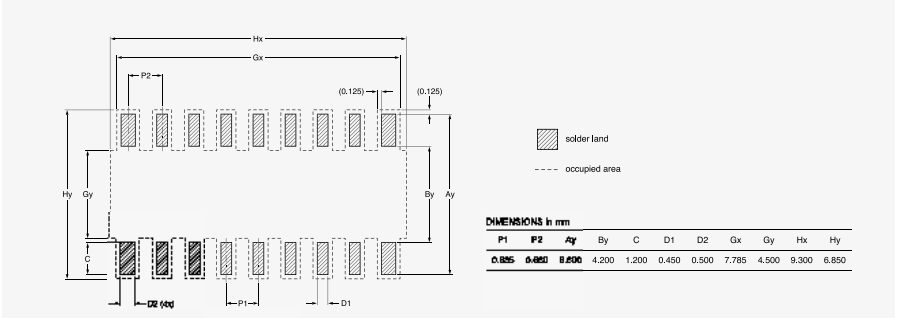
SOT137-1 D

Dimensions in mm

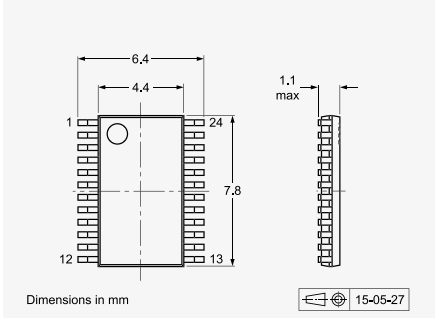
More than 8-pin SMD packages



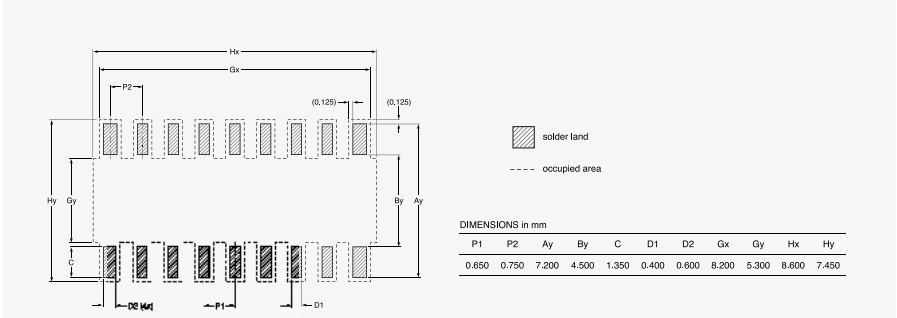
SOT556-1 DK



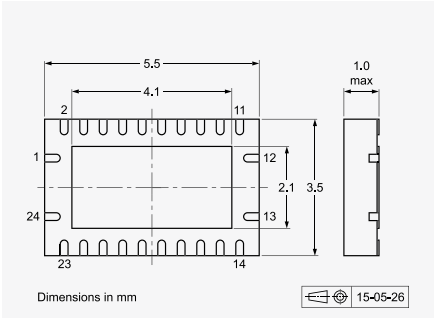
SOT556-1 DK



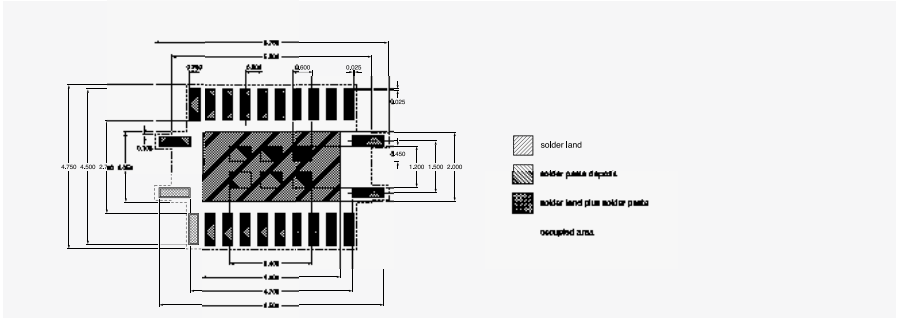
SOT355-1 PW



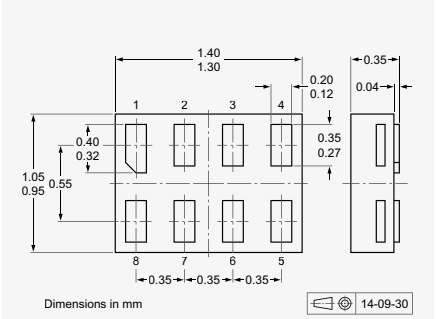
SOT355-1 PW



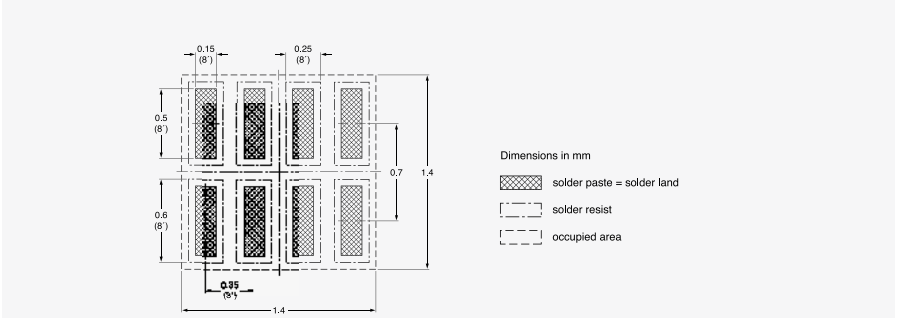
SOT815-1 BQ



SOT815-1 BQ



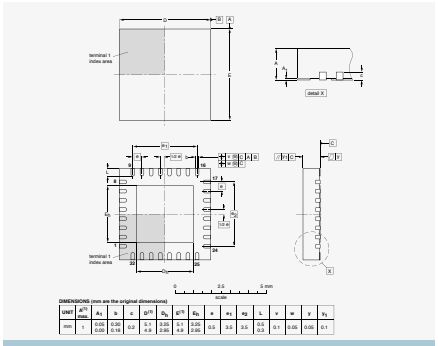
SOT1203 GS



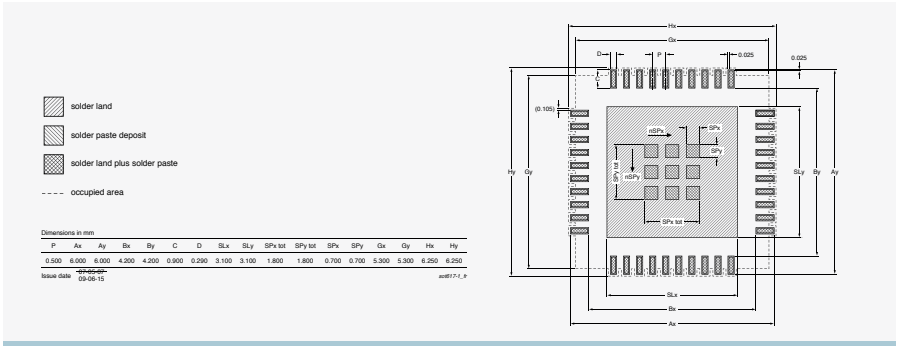
SOT1203 GS

Dimensions in mm

More than 8-pin SMD packages

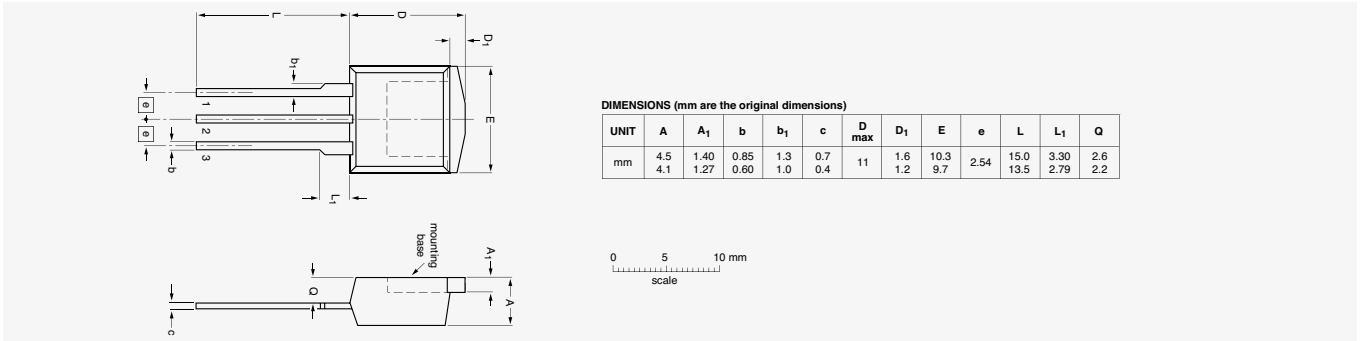


DFN5050-32 (SOT617)



DFN5050-32 (SOT617)

Single-ended and through-hole packages



DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1	b	b_1	c	D max	D_1	E	e	L	L_1	Q
mm	4.5 4.1	1.40 1.27	0.85 0.60	1.3 1.0	0.7 0.4	11	1.6 1.2	10.3 9.7	2.54	15.0 13.5	3.30 2.79	2.6 2.2

0 5 10 mm
scale

SOT226

Dimensions in mm



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Date of release:
May 2018

Printed:
In the Netherlands

nexperia.com