

Selection guide 2017.

Discretes, Logic and MOSFETs



nexperia

EFFICIENCY WINS.

Introduction

Welcome to the 2017 edition of the Nexperia Selection Guide. For the first time, all our Discrete, Logic and MOSFET devices have been brought together in one single document to give you a complete overview of our portfolio. We hope that makes it even easier for you to find the right product for your design.

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

Alongside quality and efficiency, Nexperia customers value reliability and a consistent supply they can trust. We produce consistently reliable semiconductor components at high volume (85 billion annually) and we work at every step to safeguard the long-term availability of our manufacturing processes and products, to ensure secure supply for all our customers.

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

All the functionality you need in one spot

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

Bipolar transistors

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

Diodes

- › Broad choice of Zener, Schottky and switching diodes
- › Ultra-small, low-profile surface-mount package options

ESD protection, filtering and signal conditioning

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

MOSFETs

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

Logic

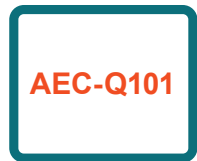
- › Comprehensive portfolio operating from 0.7 V to 15.0 V
- › Unrivalled package innovation and lowest power logic solutions

Packages

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

As a newly independent company we are bringing a fresh focus and renewed vigour to innovating our product areas and packages. So to discover all our latest product information, you should visit our website – www.nexperia.com

Our commitment: quality and reliability



AEC-Q101 qualified

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



Go for quality

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

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



Design for excellence

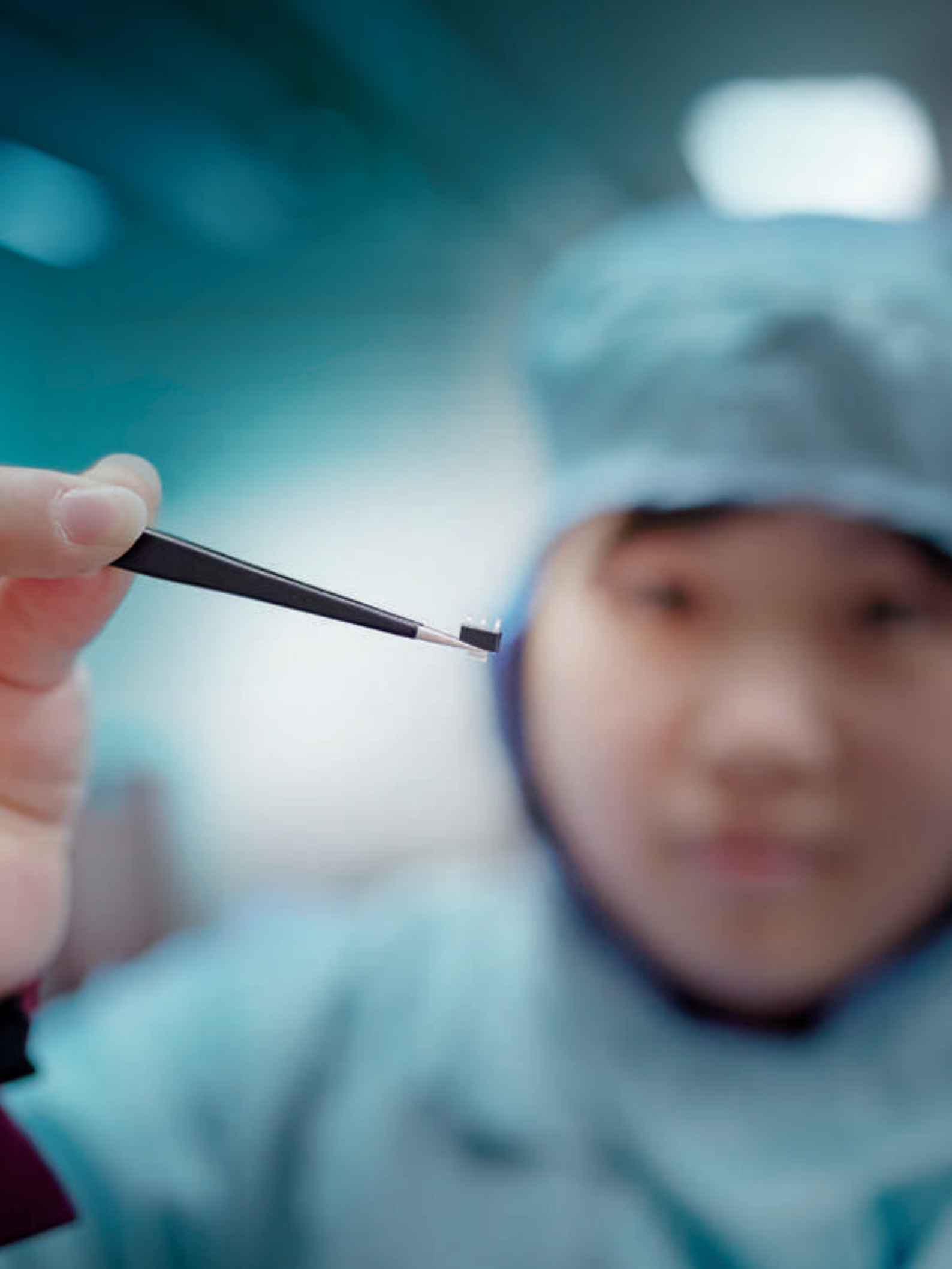
Nexperia's Design for Excellence (DfX) program ensures that each new development builds on past learning and that best practices are always employed. The result is continual product improvement.



Zero defect

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

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



Selection guide 2017.

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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 _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
25	100	450	1200	100					
30	100	110 - 200	450 - 800	100	BC848B	PMST5089			
		350	900	100		BC848W	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				
50	100	210 - 290	340 - 460	100 - 150	2PD601ART 2PD601ARL 2PD601ASL	PMBT6429	PMST6429		
		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				
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			

Transistors single PNP

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
30	100	125 - 220	500 - 800	100	BC858B	BC858W			
32	100	120 - 215	260 - 500	100	BCW29 / 30				
		180 - 380	310 - 630	100	BCW61B / C / D				
45	100	210 - 290	340 - 460	70 - 80	2PB709ART 2PB709ARL 2PB709ASL	2PB709ARW / SW			
		180 - 380	310 - 630	100	BCX71H / J / K				
		120 - 215	260 - 500	100	BCW69 / 70				
60	100	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				
		100 - 250	250 - 600	80	BC807 / -16 / -25 / -40	BC807W / -16W / -25W / -40W	BC807 / -25QA / -40QA		
45	500	100	600	80	BCX17				
50	500	85 - 170	170 - 340	100 - 140	2PB710ARL 2PB710ASL	2PB1219AQ / R / S			
60	500	100	-	50		PMSTA55			
80	500	100	-	50	PMBTA06	PMSTA06			
		100	-	50	PMBTA56	PMSTA56			

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	BC847BPN	BC847RAPN	BC847QAPN	
	50	100	120	560	100	PIMZ2	PUMZ2				
	65	100	200	450	100		BC846BPN				
	12	500	200	-	250 / 100				PEMZ7		
45	500	160	160	100 / 800	BC817DPN				BC817RAPN		

Switching transistors single

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT23	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)							1700	1300	250	200	250	250
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)	t _{off} (ns)						
NPN	40	200	100	300	180	1200			PMBS3904	PMSS3904		
	15	600	40	120	500	20			PMBT2369	PMST2369		
	40	200	100	300	300	250	250			MMBT3904		
										PMBT3904	PMST3904	PMBT3904M
	30	600	100	300	250	250			PMBT2222	PMST2222		
	40	600	100	300	300	250	250	PZT4401	PXT4401	PMBT4401	PMST4401	
						300	250			MMBT2222A		
							PZT2222A	PXT2222A	PMBT2222A	PMST2222A		
40	800	100	300	300	250				BSR14			
PNP	40	100	100	300	150	700			PMBS3906	PMSS3906		
	40	200	100	300	250	300			MMBT3906			
									PMBT3906	PMST3906	PMBT3906M	PMBT3906MB
	40	600	100	300	200	350	350	PZT4403	PXT4403	PMBT4403	PMST4403	
						365				PMBT2907		
60	600	100	300	200	300					PMST2907A		
						365			BSR16			
							PZT2907A	PXT2907A	PMBT2907A			

General purpose bipolar transistors

Switching transistors double

Package							SOT363 (SC-88)	SOT666	SOT457 (SC-74)
Size (mm)							2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.9 x 1.5 x 1.0
P _{tot} (mW)							300	300	750
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min(MHz)	t _{off} (ns)			
NPN	40	200	100	300	300	250	PMBT3904YS	PMBT3904VS	
	40	600	100	300	250	250	PMBT4401YS		
					300	250	PMBT2222AYS		
PNP	40	200	100	300	250	300	PMBT3906YS	PMBT3906VS	
	40	600	100	300	200	350	PMBT4403YS		
	60	600	100	300	200	365	PMBT2907AYS		
NPN / PNP	40	200	100	300	300 / 250	250 / 300	PMBT3946YPN	PMBT3946VPN	
					300 / 200	250 / 365			NMB2227A

Medium power transistors

Package						SOT223 (SC-73)	SOT89 (SC-62)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P _{tot} (mW)						1700	1300	1300	1300
Polarity	V _{CEO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min (MHz)				
NPN	20	2	85 - 160	375	40	BCP68 / -25	BC868 / -25	BC68PA / BC68-25PA	BC68PAS / BC68-25PAS
	45	1	63 - 100	160 - 250	100	BCP54 / -10 / -16	BCX54 / -10 / -16	BC54PA / BC54-10PA / BC54-16PA	BC54PAS / BC54-10PAS / BC54-16PAS
	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
PNP	20	2	85 - 160	250 - 375	40	BCP69 / -16 / -25	BC869 / -16 / -25	BC69PA / BC69-16PA / BC69-25PA	BC69PAS / BC69-16PAS / BC69-25PAS
	45	1	63 - 100	160 - 250	115 ¹⁾ - 145 ¹⁾	BCP51 / -10 / -16	BCX51 / -10 / -16	BC51PA / BC51-10PA / BC51-16PA	BC51PAS / BC51-10PAS / BC51-16PAS
	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

1) Typical value

Medium power transistors high performance (175 °C capable)

Package							SOT223 (SC-73)
Size (mm)							6.5 x 3.5 x 1.65
P _{tot} (mW)							1700
Polarity	V _{CEO} (V)	V _{ebo} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	80	7	1	63	160	100	BCP56-10H
					250	100	BCP56H
					100	100	BCP56-16H
PNP	80	70	1	63	100	100	BCP53-10H
					250	100	BCP53H
					100	100	BCP53-16H

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 _r 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 18.

LED driver

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

Constant current source

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
	45	1000	2000	200		BCV29	BCV27
			10000			BCV49	BCV47
	80	1000	2000	200		BSP51	BST51
			10000			BSP52	BST52
PNP	30	500	20000	125			PMBTA64
			2000	200		BCV28	BCV26
	45	1000	2000	200		BSP60	BST60
			10000		220		BCV48
	80	1000	2000	200		BSP61	BST61
			10000		220		BSP62









Schmitt triggers

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

Low noise transistors















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

Matched pair transistors - part 1

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

¹⁾ I_{C1} / I_{E2}


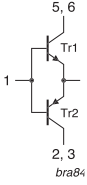

Matched pair transistors - part 2

Package							SOT353 (SC-88A)	SOT363 (SC-88)	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	1.1 x 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}

General purpose bipolar transistors






MOSFET driver

V_{CE0} (V)	I_c (A)	I_{cm} [A]	Type	Package	Remark	Configuration
30	0.1	0.2	BCV65	SOT143B 	General-purpose transistors	
40	0.6	1	PMD2001D	SOT457 	Switching transistors with reduced storage time	
	1	2	PMD3001D		Low V_{CEsat}	

Medium frequency transistors







						SOT23	SOT323 (SC-70)
Package							
Size (mm)						2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)						250	200
Polarity	V_{CE0} (V)	I_c (mA)	h_{FE} min	h_{FE} max	f_T typ (MHz)		
NPN	15	100	40	-	500	BF570	
	20	25		85	>275	BF520	BF520W
		30	65	225	260	BF519	
	40	25	67	220	380	BF840	
PNP	30	25	25	50	250	BF824	BF824W
	40		50	-	>325	BF550	

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

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P _{tot} (mW)							1700	1650	750	1300	1300
V _{CEO} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A					
12	5.3	10.6	300 / 530	0.5	2	18		PBSS301NX			
	5.8	11.6	300 / 530	0.5	2	18	PBSS301NZ				
	6	7	280 / 440	0.5	2	20			PBSS4612PA		
20	3	5	220 / 390	0.5	2	40		PBSS4320X			
	4	15	300 / 450	0.5	2	30			PBSS301ND		
	5	10	300 / 450	0.5	2	35		PBSS4520X			
	5.3	10.6	300 / 570	0.5	2	20		PBSS302NX			
	5.8	10.2	300 / 570	0.5	2	20	PBSS302NZ				
	6	7	280 / 440	0.5	2	20				PBSS4620PA	
	7	15	300 / 550	0.5	2	12		PBSS4021NX			
	8	20	300 / 550	0.5	2	9	PBSS4021NZ				
30	3	5	300 / 490	0.5	2	45		PBSS4330X			
	3	5	300 / 465	0.5	2	40				PBSS4330PA	PBSS4330PAS
	3.5	6	300 / 500	0.5	2	70			PBSS4032ND ³⁾		
	4.7	10	300 / 500	0.5	2	57		PBSS4032NX ³⁾			
	5.1	10.2	300 / 480	0.5	2	20		PBSS303NX			
	5.4	10	300 / 500	0.5	2	57	PBSS4032NZ ³⁾				
	5.5	11	300 / 480	0.5	2	20	PBSS303NZ				
	6	7	280 / 450	0.5	2	21				PBSS4630PA	
40	2	3	300 / -	0.5	5	140		PBSS4240X			
	4	15	300 / 520	0.5	2	35			PBSS302ND		
		10	300 / 500	0.5	2	21		PBSS4540X			
	5	10	300 / 500	0.5	2	25	PBSS4540Z				
50	2	5	300 / -	0.5	2	90 ²⁾		PBSS4250X			
	3	5	200 / 280	0.5	2	65			PBSS4350D		
			300 / 460	0.5	2	50		PBSS4350X			
			200 / 280	0.5	2	60 ¹⁾	PBSS4350Z				
60	3	6	200 / 360	0.5	5	45					PBSS4360PAS
			200 / -	0.5	5	45	PBSS4360Z				
			345 / 570	0.5	2	40			PBSS303ND		
	4.7	9.4	300 / 520	0.5	2	25		PBSS304NX			
	5.2	10.4	300 / 520	0.5	2	25	PBSS304NZ				
	6	7	280 / 440	0.5	2	22				PBSS4560PA	
	6.2	15	300 / 500	0.5	2	17		PBSS4041NX			
	7	15	300 / 500	0.5	2	13	PBSS4041NZ				
80	3	6	240 / 360	0.5	2	40			PBSS304ND		
	4	10	250 / 400	0.5	2	25		PBSS4480X			
	4.6	9.2	300 / 470	0.5	2	25		PBSS305NX			
	5.1	10.2	300 / 470	0.5	2	25	PBSS305NZ				
	5.6	7	270 / 425	0.5	2	25				PBSS4580PA	
100	1	3	150 / 290	0.25	10	75			PBSS8110D		
			150 / 290	0.25	10	73		PBSS8110X			
			150 / 290	0.25	10	73	PBSS8110Z				
	3	4	170 / 275	0.5	2	45			PBSS305ND		
	4.5	9	200 / 330	0.5	2	27		PBSS306NX			
	5.1	10.2	200 / 330	0.5	2	27	PBSS306NZ				
5.2	6	180 / 285	0.5	2	30				PBSS8510PA		






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

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

Package								SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
													
Size (mm)								2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)								480	350	430	250	250	750
V _{CEO} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A							
15	0.5	1	200/325	0.01	2	-				PBSS2515M	PBSS2515MB		
20	1	3	350/470	0.1	2	110 ²⁾	PBSS4120T						
	2	5	220/330	0.1	2	45	PBSS4320T						
	4.3	8	300/550	0.5	2	21	PBSS4021NT						
30	1	1.5	230/380	0.5	2	90						PBSS4130QA	
		3	300/450	0.5	2	120 ²⁾	PBSS4130T						
	2	3	300/450	0.5	2	70	PBSS4230T						
			230/380	0.5	2	75						PBSS4230QA	
2.6	5	300/500	0.5	2	80	PBSS4032NT ³⁾							
40	0.5	1	200/550	0.01	2	200 ²⁾				PBSS2540M	PBSS2540MB		
			300/440	0.5	5	130		PBSS4140U					
							300/510	0.5	5	120	PMMT491A		
	2	3	300/420	0.5	5	130	PBSS4140T						
			350/470	0.1	2	70			PBSS4240Y				
300/450	0.5	2	70	PBSS4240T									
50	2	5	300/495	0.5	2	60	PBSS4350T						
60	1	1.5	150/240	0.5	2	90						PBSS4160QA	
			200/420	0.5	5	120		PBSS4160U					
		200/350	0.5	5	110	PBSS4160T							
	2	3	150/240	0.5	2	75						PBSS4260QA	
3.8	8	300/500	0.5	2	29	PBSS4041NT							
100	1	3	150/400	0.25	10	80			PBSS8110Y				
			150/300	0.25	10	70	PBSS8110T						







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

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

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P _{tot} (mW)							1700	1650	750	1300	1300
V _{CEO} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A					
12	5.3	10.6	250/400	0.5	2	20		PBSS301PX			
	5.7	11.4	250/400	0.5	2	20	PBSS301PZ				
	6	7	220/335	0.5	2	20			PBSS5612PA		
20	3	5	200/-	0.5	2	80 ²⁾			PBSS5320D		
			220/450	0.5	2	50		PBSS5320X			
	4	15	250/400	0.5	2	35			PBSS301PD		
	5	10	300/430	0.5	2	45			PBSS5520X		
	5.1	10.2	250/370	0.5	2	25			PBSS302PX		
	5.5	11	250/370	0.5	2	25	PBSS302PZ				
	6	7	230/345	0.5	2	25				PBSS5620PA	
	6.2	15	250/400	0.5	2	18			PBSS4021PX		
30	2.7	5	200/350	0.5	2	87				PBSS4032PD ³⁾	
			200/380	0.5	2	50		PBSS5330X			
			200/320	0.5	2	45				PBSS5330PA	PBSS5330PAS
	4.2	10	200/350	0.5	2	70			PBSS4032PX ³⁾		
	4.4	10	200/350	0.5	2	70	PBSS4032PZ ³⁾				
	5.1	10.2	250/400	0.5	2	25			PBSS303PX		
	5.3	10.6	250/400	0.5	2	25	PBSS303PZ				
	6	7	200/335	0.5	2	25				PBSS5630PA	
40	2	3	215/-	0.5	5	170					
	4	15	200/310	0.5	2	46			PBSS5240X		
		10	250/370	0.5	2	33			PBSS5540X		PBSS302PD
5	10	250/350	0.5	2	40 ¹⁾	PBSS5540Z					
50	2	5	200/-	0.5	2	90 ²⁾					
	3	5	200/300	0.5	2	70				PBSS5350D	
			200/375	0.5	2	70			PBSS5350X		
			200/300	0.5	2	70	PBSS5350Z				
60	3	6	130/220	0.5	5	55					PBSS5360PAS
			130/-	0.5	5	55	PBSS5360Z				
			180/265	0.5	2	55			PBSS303PD		
	4.2	8.4	200/295	0.5	2	35			PBSS304PX		
	4.5	9	200/295	0.5	2	35	PBSS304PZ				
	5	6	170/260	0.5	2	35				PBSS5560PA	
	5	15	200/300	0.5	2	30			PBSS4041PX		
5.7	200/300		0.5	2	22	PBSS4041PZ					
80	3	5	155/225	0.5	2	55				PBSS304PD	
			180/265	0.5	2	40				PBSS5580PA	
	4	10	200/300	0.5	2	35			PBSS5480X		
		8	200/280	0.5	2	36			PBSS305PX		
4.5	9	200/280	0.5	2	36	PBSS305PZ					
100	1	3	150/350	0.5	5	100				PBSS9110D	
			150/350	0.5	5	90			PBSS9110X		
			150/-	0.5	5	90	PBSS9110Z				
	2	3	175/275	0.5	2	65				PBSS305PD	
	2.7	4	180/295	0.5	2	45				PBSS9410PA	
3.7	7.4	200/300	0.5	2	45				PBSS306PX		
4.1	8.2	200/300	0.5	5	45	PBSS306PZ					






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

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

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
												
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)							480	350	430	250	250	750
V _{CEO} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A						
15	0.5	1	200 / 260	0.01	2	150				PBSS3515M	PBSS3515MB	
20	1	2	300 / 450	0.1	2	125 ²⁾	PBSS5120T					
	2	3	225 / -	0.5	2	80 ²⁾	PBSS5220T					
		5	220 / 420	0.5	2	50	PBSS5320T					
	3.5	8	250 / 400	0.5	2	35	PBSS4021PT					
30	1	1.5	180 / 295	0.5	2	85					PBSS5130QA	
			260 / 350	0.5	2	110	PBSS5130T					
	2	3	300 / 450	0.1	2	70	PBSS5230T					
			180 / 295	0.5	2	70					PBSS5230QA	
2.4	5	200 / 320	0.5	2	95	PBSS4032PT ³⁾						
40	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					
	2	5	200 / 360	0.5	2	55	PBSS5350T					
60	1	1.5	120 / 185	0.5	2	125					PBSS5160QA	
			150 / 250	0.5	5	135		PBSS5160U				
		150 / 250	0.5	5	120	PBSS5160T						
	1.7	2.5	120 / 185	0.5	2	105					PBSS5260QA	
2.7	8	200 / 300	0.5	2	49	PBSS4041PT						
100	1	3	150 / -	0.25	5	93			PBSS9110Y			
			150 / 350	0.5	5	95	PBSS9110T					






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

Low V_{CEsat} (BISS) transistors double

Package										SOT96 (SO8)	SOT457 (SC-74)	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			PBSS2515VNP			
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05						
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05					PBSS4220PANS	
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05					PBSS5220PAPS	
	7.5	NPN / NPN	300	0.5	2	15	150	4	0.2	PBSS4021SN					
	6.3	PNP / PNP	250	0.5	2	24	225	4	0.2	PBSS4021SP					
	7.5 / 6.3	NPN / PNP	300 / 250	0.5	2	15 / 24	150 / 225	4	0.2	PBSS4021SPN					
30	1	NPN / NPN	210	0.5	2	75	100	0.5	0.05					PBSS4130PAN	
		PNP / PNP	170	0.5	2	85	140	0.5	0.05					PBSS5130PAP	
		NPN / PNP	210 / 170	0.5	2	75 / 85	100 / 140	0.5	0.05					PBSS4130PANP	
	2	NPN / NPN	230	0.5	2	60	80	0.5	0.05					PBSS4230PAN	
		PNP / PNP	210	0.5	2	75	110	0.5	0.05					PBSS5230PAP	
		NPN / PNP	230 / 210	0.5	2	60 / 75	80 / 100	0.5	0.05					PBSS4230PANP	
	5.7	NPN / NPN	300	0.5	2	57	250	4	0.4	PBSS4032SN 3)					
	4.8	PNP / PNP	200	0.5	2	70	390	4	0.4	PBSS4032SP 3)					
	5.7 / 4.8	NPN / PNP	300 / 200	0.5	2	57 / 70	250 / 390	4	0.4	PBSS4032SPN 3)					
40	1	NPN / PNP	300 / 250	0.5	5	130 / 150	500	1	0.1					PBSS4140DPN	
	2	NPN / PNP	300 / 250	0.5	5	80 / 100	400 / 530	2	0.2					PBSS4240DPN	
50	2.7	2 x NPN	300	0.5	2	50	340	2.7	0.27	PBSS4350SS					
		2 x PNP	200	0.5	2	60	370	2.7	0.27	PBSS5350SS					
		NPN / PNP	300 / 200	0.5	2	50 / 60	340 / 370	2.7	0.27	PBSS4350SPN					
60	1	2 x NPN	200	0.5	5	115	250	1	0.1					PBSS4160DS	
		2 x PNP	150	0.5	5	120	330	1	0.1					PBSS5160DS	
		NPN / PNP	200 / 150	0.5	5	115 / 120	250 / 330	1	0.1					PBSS4160DPN	
	1	NPN / NPN	150	0.5	2	90	120	0.5	0.05					PBSS4160PAN	PBSS4160PANS
		PNP / PNP	120	0.5	2	125	180	0.5	0.05					PBSS5160PAP	PBSS5160PAPS
		NPN / PNP	150 / 120	0.5	2	90 / 125	120 / 180	0.5	0.05					PBSS4160PANP	PBSS4160PANPS
	2	NPN / NPN	210	0.5	2	70	90	0.5	0.05					PBSS4260PAN	PBSS4260PANS
		PNP / PNP	140	0.5	2	100	140	0.5	0.05					PBSS5260PAP	PBSS5260PAPS
		NPN / PNP	210 / 140	0.5	2	70 / 100	90 / 140	0.5	0.05					PBSS4260PANP	PBSS4260PANPS
	6.7	NPN / NPN	300	0.5	2	20	190	4	0.2	PBSS4041SN					
	5.9	PNP / PNP	200	0.5	2	35	330	4	0.2	PBSS4041SP					
	6.7 / 5.9	NPN / PNP	300 / 200	0.5	2	20 / 35	190 / 330	4	0.2	PBSS4041SPN					
120	1	NPN / NPN	240	0.1	2	90	120	0.5	0.05					PBSS4112PAN	
		PNP / PNP	190	0.1	2	150	220	0.5	0.05					PBSS5112PAP	
		NPN / PNP	240 / 190	0.1	2	90 / 150	120 / 220	0.5	0.05					PBSS4112PANP	

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

Low V_{CEsat} (BISS) transistors load switches

Package				SOT457 (SC-74)	SOT363 (SC-88)	
						
Size (mm)				2.9 x 1.5 x 1.0		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

Package				SOT223 (SC-73)	SOT89 (SC-62)	SOT1215	SOT23	
Size (mm)				6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	1.1 x 1.0 x 0.37	2.9 x 1.3 x 1.0	
P_{tot} (mW)				1700	1300	750	250	
Polarity	V_{CEO} [max] (V)	I_C (A)	hFE [min]					
NPN	150	0.5	100			PBHV8515QA		
			70				PBHV8115TLH	
		1	100				PBHV8115T	
					PBHV8115X			
			PBHV8115Z					
			PBHV8215Z					
	180	1	100				PBHV8118T	
	400	1	100			PBHV8540Z		PBHV8540T
							PBHV8140Z	
		0.5	100			PBHV8540X		
	500	0.15	50				PMBTA45	
	600	0.5	70		PBHV8560Z			
0.1		70		PBHV2160Z				
PNP	140	4	100					
	150	0.5	100			PBHV9515QA		
			70				PBHV9115TLH	
		1	100				PBHV9115T	
					PBHV9115X			
			PBHV9115Z					
			PBHV9215Z					
	400	0.25	100				PBHV9040T	
	500	0.5	100			PBHV9040Z		
						PBHV9540Z		
	600	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 (k Ω)	R2 (k Ω)	NPN	PNP
40	600	R1 = R2	1	1	PBRN113ET	PBRP113ET
			2.2	2.2	PBRN123ET	PBRP123ET
		R1 \neq R2	1	10	PBRN113ZT	PBRP113ZT
			2.2	10	PBRN123YT	PBRP123YT

Low V_{CEsat} (BISS) transistors

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

Package											DFN2020-6 (SOT1118)
Size (mm)											2.0 x 2.0 x 0.62
P_{tot} (mW)											1300
V_{CE0} (V)	I_C (A)	h_{FE} min	h_{FE} max	@ I_C (mA)	@ V_{CE} (V)	R_{CEsat} typ (m Ω)	V_{DS} (V)	V_{GS} (V)	I_D (A)	R_{Dson} typ (m Ω)	
40	2	300	800	100	5	240	30	0.7	0.66	390	PBSM5240PF
		100	-	100	5	240	30	0.7	0.66	390	PBSM5240PFH



Low V_{CEsat} (BISS) power transistors single

Package							LFPAK56 (SOT669)
Size (mm)							5 x 6 x 1.1
V_{CE0} (V)	I_C (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	Polarity		
40	6	200 / 400	0.5	2	NPN	PHPT60406NY	
			0.5	2	PNP	PHPT60406PY	
	10	200 / 400	0.5	2	NPN	PHPT60410NY	
			0.5	2	PNP	PHPT60410PY	
	15	200 / 400	0.5	2	NPN	PHPT60415NY	
			0.5	2	PNP	PHPT60415PY	
60	3	200 / 400	0.5	2	NPN	PHPT60603NY	
			0.5	2	PNP	PHPT60603PY	
	6	200 / 400	0.5	2	NPN	PHPT60606NY	
			0.5	2	PNP	PHPT60606PY	
	10	200 / 400	0.5	2	NPN	PHPT60610NY	
			0.5	2	PNP	PHPT60610PY	
100	2	150 / 250	0.5	10	NPN	PHPT61002NYC	
		150 / 220	0.5	10	PNP	PHPT61002PYC	
	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	



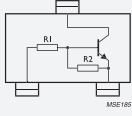
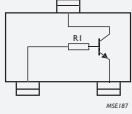


Low V_{CEsat} (BISS) power transistors double




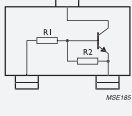
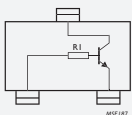
Package											LFPAK56D (SOT1205)	
Size (mm)											5 x 6 x 1.1	
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)	Polarity	h_{FE1}/h_{FE2}	
100	3	6	150	0.5	10	50	300	3	0.2	2XNPN	-	PHPT610030NK
						70	400	3	0.2	2XPNP	-	PHPT610030PK
						50 / 70	300 / 400	3	0.2	NPN/PNP	-	PHPT61003NPK
						50	300	3	0.2	2XNPN	0.95	PHPT610035NK
						70	400	3	0.2	2XPNP	0.9	PHPT610035PK



RETs 100 mA single - part 1

Package					SOT23		SOT323 (SC-70)		
									
Size (mm)					2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		
P _{tot} (mW)					250		200		
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP	
50	100		1	1			PDTA113ET		PDTA113EU
			2.2	2.2	PDTC123ET		PDTA123ET	PDTC123EU	PDTA123EU
			4.7	4.7	PDTC143ET		PDTA143ET	PDTC143EU	PDTA143EU
			10	10	PDTC114ET		PDTA114ET	PDTC114EU	PDTA114EU
			22	22	PDTC124ET		PDTA124ET	PDTC124EU	PDTA124EU
			47	47	PDTC144ET		PDTA144ET	PDTC144EU	PDTA144EU
			100	100	PDTC115ET		PDTA115ET	PDTC115EU	PDTA115EU
			1	10			PDTA113ZT		PDTA113ZU
			2.2	10	PDTC123YT		PDTA123YT	PDTC123YU	PDTA123YU
			2.2	47	PDTC123JT		PDTA123JT	PDTC123JU	PDTA123JU
			4.7	10	PDTC143XT		PDTA143XT	PDTC143XU	PDTA143XU
			4.7	47	PDTC143ZT		PDTA143ZT	PDTC143ZU	PDTA143ZU
			10	47	PDTC114YT		PDTA114YT	PDTC114YU	PDTA114YU
			22	47	PDTC124XT		PDTA124XT	PDTC124XU	PDTA124XU
		47	10	PDTC144VT		PDTA144VT	PDTC144VU	PDTA144VU	
		47	22	PDTC144WT		PDTA144WT	PDTC144WU	PDTA144WU	
			2.2	-	PDTC123TT		PDTA123TT	PDTC123TU	PDTA123TU
			4.7	-	PDTC143TT		PDTA143TT	PDTC143TU	PDTA143TU
			10	-	PDTC114TT		PDTA114TT	PDTC114TU	PDTA114TU
			22	-	PDTC124TT		PDTA124TT	PDTC124TU	PDTA124TU
			47	-	PDTC144TT		PDTA144TT	PDTC144TU	PDTA144TU
			100	-	PDTC115TT		PDTA115TT	PDTC115TU	PDTA115TU





RETs 100 mA single - part 2

Package					DFN1006-3 (SOT883)		DFN1006B-3 (SOT883B)		SOT1215		
											
Size (mm)					1.0 x 0.6 x 0.48		1.0 x 0.6 x 0.37		1.1 x 1.0 x 0.37		
P _{tot} (mW)					250		250		750		
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN	PNP	NPN	PNP	NPN	PNP	
50	100		1	1			PDTA113EM		PDTA113EMB		
			2.2	2.2	PDTC123EM		PDTA123EM	PDTC123EMB	PDTA123EMB		
			4.7	4.7	PDTC143EM		PDTA143EM	PDTC143EMB	PDTA143EMB	PDTC143EQA	PDTA143EQA
			10	10	PDTC114EM		PDTA114EM	PDTC114EMB	PDTA114EMB	PDTC114EQA	PDTA114EQA
			22	22	PDTC124EM		PDTA124EM	PDTC124EMB	PDTA124EMB	PDTC124EQA	PDTA124EQA
			47	47	PDTC144EM		PDTA144EM	PDTC144EMB	PDTA144EMB	PDTC144EQA	PDTA144EQA
			100	100	PDTC115EM		PDTA115EM	PDTC115EMB	PDTA115EMB		
			1	10			PDTA113ZM		PDTA113ZMB		
			2.2	10	PDTC123YM		PDTA123YM	PDTC123YMB	PDTA123YMB		
			2.2	47	PDTC123JM		PDTA123JM	PDTC123JMB	PDTA123JMB	PDTC123XQA	PDTA123XQA
			4.7	10	PDTC143XM		PDTA143XM	PDTC143XMB	PDTA143XMB	PDTC143XQA	PDTA143XQA
			4.7	47	PDTC143ZM		PDTA143ZM	PDTC143ZMB	PDTA143ZMB	PDTC143ZQA	PDTA143ZQA
			10	47	PDTC114YM		PDTA114YM	PDTC114YMB	PDTA114YMB	PDTC114YQA	PDTA114YQA
			22	47	PDTC124XM		PDTA124XM	PDTC124XMB	PDTA124XMB		
		47	10	PDTC144VM		PDTA144VM	PDTC144VMB	PDTA144VMB			
		47	22	PDTC144WM		PDTA144WM	PDTC144WMB	PDTA144WMB			
			2.2	-	PDTC123TM		PDTA123TM	PDTC123TMB	PDTA123TMB		
			4.7	-	PDTC143TM		PDTA143TM	PDTC143TMB	PDTA143TMB		
			10	-	PDTC114TM		PDTA114TM	PDTC114TMB	PDTA114TMB		
			22	-	PDTC124TM		PDTA124TM	PDTC124TMB	PDTA124TMB		
			47	-	PDTC144TM		PDTA144TM	PDTC144TMB	PDTA144TMB		
			100	-	PDTC115TM		PDTA115TM	PDTC115TMB	PDTA115TMB		





Resistor equipped transistors (RETs)

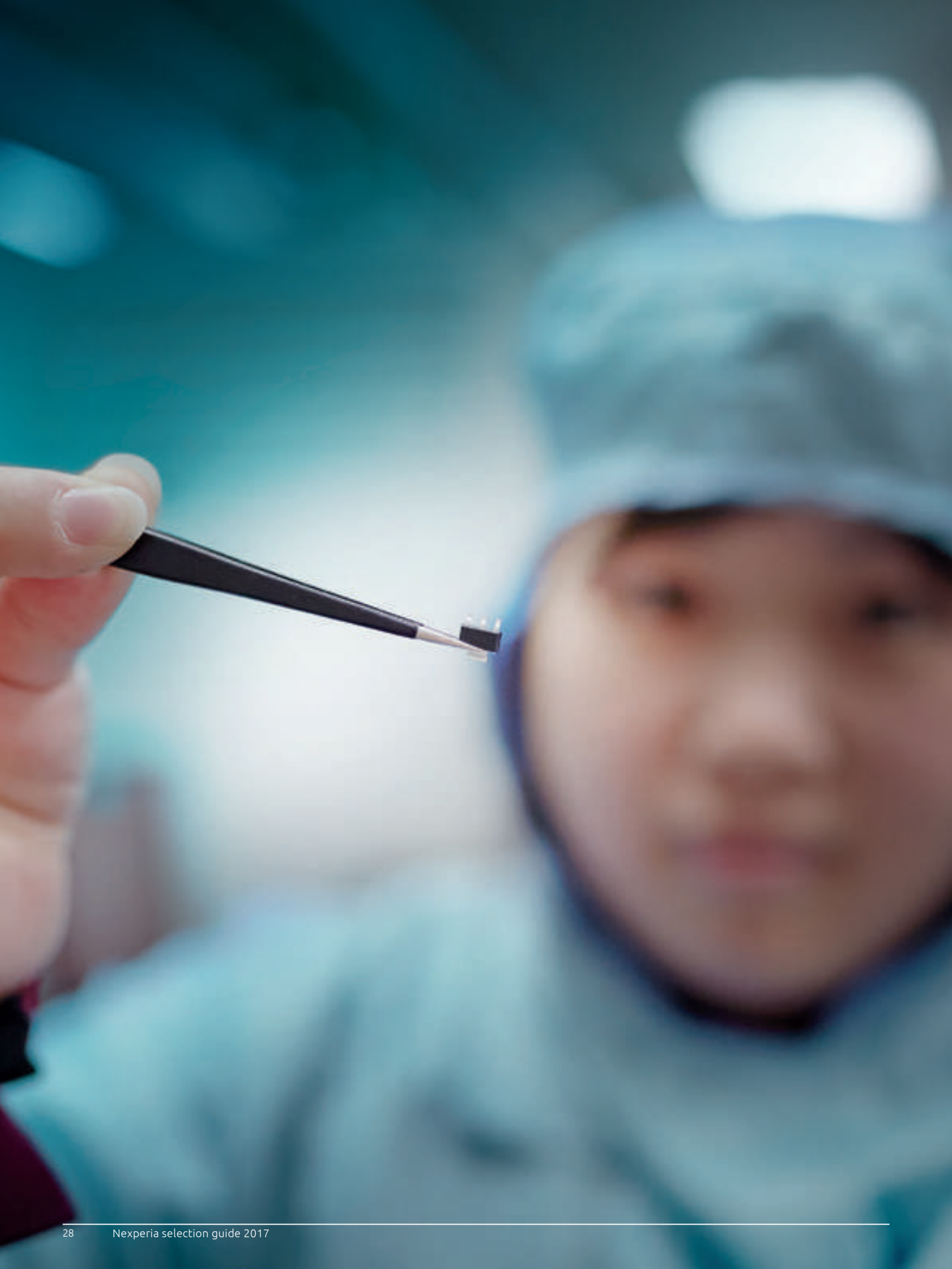
RETs 100 mA double

types in **bold** represent new products

Package					DFN1010B-6 (SOT1216)			DFN1412-6 (SOT1268)			SOT363 (SC-88)			SOT666					
																			
Size (mm)					1.1 x 1.0 x 0.37			1.4 X 1.2 X 0.5			2.0 x 1.25 x 0.95			1.6 x 1.2 x 0.55					
P _{tot} (mW)					350			480			300			300					
V _{CE0} (V)	I _c (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP			
50	100	R1 = R2	2.2	2.2								PUMH20	PUMD20	PUMB20	PEMH20	PEMD20	PEMB20		
			4.7	4.7									PUMH15	PUMD15	PUMB15	PEMH15	PEMD15	PEMB15	
			10	10	PQMH11	PQMD3	PQMB11	PRMH11	PRMD3	PRMB11	PUMH11	PUMD3	PUMB11	PEMH11	PEMD3	PEMB11			
			22	22		PQMD2			PRMD2		PUMH1	PUMD2	PUMB1	PEMH1	PEMD2	PEMB1			
			47	47	PQMH2	PQMD12		PRMH2	PRMD12		PUMH2	PUMD12	PUMB2	PEMH2	PEMD12	PEMB2			
			100	100							PUMH24	PUMD24	PUMB24	PEMH24	PEMD24	PEMB24			
		R1 ≠ R2	2.2	47	PQMH10	PQMD10		PRMH10	PRMD10		PUMH10	PUMD10	PUMB10	PEMH10	PEMD10	PEMB10			
			4.7	10							PUMH18	PUMD18	PUMB18	PEMH18	PEMD18	PEMB18			
			4.7	47	PQMH13	PQMD13		PRMH13	PRMD13		PUMH13	PUMD13	PUMB13	PEMH13	PEMD13	PEMB13			
			10	47	PQMH9			PRMH9			PUMH9	PUMD9	PUMB9	PEMH9	PEMD9	PEMB9			
			22	47		PQMD16			PRMD16		PUMH16	PUMD16	PUMB16	PEMH16	PEMD16	PEMB16			
			47	22							PUMH17	PUMD17	PUMB17	PEMH17	PEMD17	PEMB17			
		47 / 2.2	47 / 47								PUMD48				PEMD48				
		Only R1	2.2	-									PUMH30	PUMD30	PUMB30	PEMH30	PEMD30	PEMB30	
			4.7	-									PUMH7	PUMD6	PUMB3	PEMH7	PEMD6	PEMB3	
			10	-									PUMH4	PUMD4	PUMB4	PEMH4	PEMD4	PEMB4	
			22	-									PUMH19	PUMD19	PUMB19	PEMH19	PEMD19	PEMB19	
			47	-									PUMH14	PUMD14	PUMB14	PEMH14	PEMD14	PEMB14	




































RETs 500mA single / double

Package					SOT457 (SC-74)		SOT23		SOT323 (SC-70)		SOT1215	
												
Size (mm)					2.9 x 1.5 x 1.0		2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		1.1 x 1.0 x 0.37	
P _{tot} (mW)					750		250		200		750	
V _{CE0} (V)	I _c (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	NPN	PNP	NPN	PNP	NPN	PNP
50	500	R1 = R2	1	1			PDTD113ET	PDTB113ET	PDTD113EU	PDTB113EU	PDTD113EQA	PDTB113EQA
			2.2	2.2			PDTD123ET	PDTB123ET	PDTD123EU	PDTB123EU	PDTD123EQA	PDTB123EQA
			4.7	4.7			PDTD143ET	PDTB143ET	PDTD143EU	PDTB143EU	PDTD143EQA	PDTB143EQA
			10	10			PDTD114ET	PDTB114ET	PDTD114EU	PDTB114EU	PDTD114EQA	PDTB114EQA
		R1 ≠ R2	1	10	PIMN31	PIMC31	PDTD113ZT	PDTB113ZT	PDTD113ZU	PDTB113ZU	PDTD113ZQA	PDTB113ZQA
			2.2	10			PDTD123YT	PDTB123YT	PDTD123YU	PDTB123YU	PDTD123YQA	PDTB123YQA
			4.7	10			PDTD143XT	PDTB143XT	PDTD143XU	PDTB143XU	PDTD143XQA	PDTB143XQA
		Only R1	2.2	-					PDTD123TT	PDTB123TT		



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General purpose Zener diodes

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration	Series	Package	Size (mm)	P_{tot} (mW)		
500	-	3.3~24	C	Europe	Single		1N47xxA series	SOD66 (DO-41)		4.8 x 2.6 x 0.81	1000
	60	3.6~75					BZV85 series				
250	-	2.1~36	About 2%	Special	Single		NZX series	SOD27 (DO-35)		4.25 x 1.85 x 0.56	400
	40	2.4~75	B, C	Europe			BZX79 series				
400	40	2.4~75	C	Europe	Single		BZV90 series	SOT223 (SC-73)		6.5 x 3.5 x 1.65	1500
250	40	2.4~75	C	Europe	Single		BZV49 series	SOT89 (SC-62)		4.5 x 2.5 x 1.5	1000
250	40	2.4~75	B, C	Europe	Single		BZV55 series	SOD80C (MiniMelf)		3.5 x 1.5 x 1.5	400
200	40	2.4~75	B, C	Europe	Dual c.a.		BZB84 series	SOT23		2.9 x 1.3 x 1.0	250
			A, B, C		Single		BZX84 series				
250	30	5~6.8	0.2 V	Ave	Single		PLVA600A series				
250	40	2.4~75	C	Europe	Single		BZT52 series	SOD123		2.7 x 1.6 x 1.2	550
200		2.4~36	B, C	Japan			PDZ-GW series				
250	-	3.0~30	About 2.5%	Special	Single		NZH series	SOD123F		2.6 x 1.6 x 1.1	830
	40	2.4~75	B, C	Europe			BZT52H series				
200	40	10	B2	Japan	Dual isolated		PZU10DB2 series	SOT353 (SC-88A)		2.0 x 1.25 x 0.95	300
200	40	2.4~15	C	Europe	Dual c.a.		BZB784 series	SOT323 (SC-70)		2.0 x 1.25 x 0.95	350
200	30	100	C	Europe	Back-to-back		BZB100A	SOD323 (SC-76)		1.7 x 1.25 x 0.95	300
	40	2.4~36	B2	Japan	Single		PDZ-B series				
250	40	2.4~75	B, C	Europe			BZX384 series				
200	40	2.4~36	B, B1, B2, B3	Japan	PZUxBA series						
200	60	100	C	Europe	Single		BZX100A	SOD323F (SC-90)		1.7 x 1.25 x 0.7	550
200	40	2.4~36	B, B1, B2, B3	Japan	PZUxB series						
250	40	2.4~75	B, C	Europe	BZX84J series						
200	40	2.4~15	C	Europe	Dual c.a.		BZB984 series	SOT663		1.6 x 1.2 x 0.55	350
200	40	2.4~75	B, C	Europe	Single		BZX585 series	SOD523 (SC-79)		1.2 x 0.8 x 0.6	300
200	40	2.4~75	B, C	Europe	Single		BZX884 series	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250
		2.4~36	B, B2	Japan			PZUxBL series				
250	40	2.4~30	B	Europe	Single		TDZxJ series	SOD323F		1.7 x 1.25 x 0.7	500

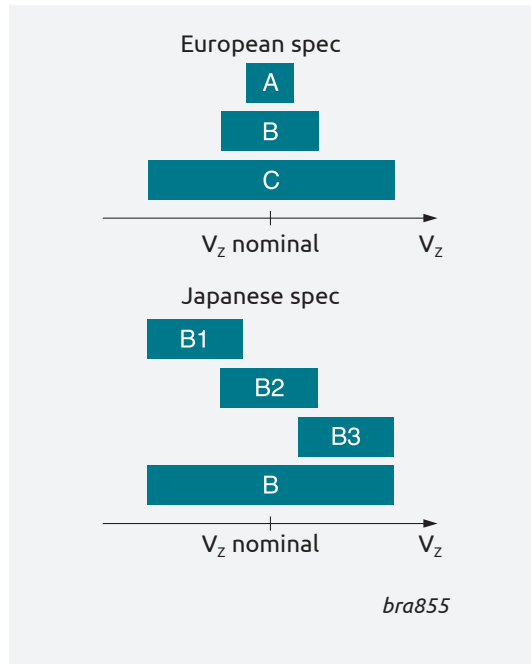
Notes:

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

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

Zener diodes specifications

Differences in Zener specifications



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

Switching diodes





















General purpose, high speed switching diodes <= 90V

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_{tr} max (ns)	Package	SOD80C (MiniMelf)	SOT23	SOT143B	SOT323 (SC-70)	SOT363 (SC-88)	DFN1412-6 (SOT1268)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	
															
							Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.5	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48
P_{tot} (mW)	400	250	250	200	350	480	325	250							
50	1	50	100	50	4			BAL74							
								BAV74							
70	1	50	1000	70	4			BAL99							
75	1	50	1000	75	4				BAS28						
		100	5000	75	4		BAS32L								
80	1	50	500	80	4					1PS300					
										1PS301					
										1PS302					
90	1	50	500	80	4			BAW56		BAW56W			BAW56QA	BAW56M	
											BAW56S	BAW56SRA			
											BAW756S				































General purpose, high speed 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_{tr} max (ns)	Package	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOT666	DFN1412-6 (SOT1268)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-2 (SOD882)	DFN1006-3 (SOT883)	DFN1006D-2 (SOD882D)
																				
							Size (mm)	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.6 x 1.2 x 0.55	1.4 x 1.2 x 0.5	1.2 x 0.8 x 0.6	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48
P_{tot} (mW)	250	380	375	200	300	300	300	300	180	480	250	325	250	325	250	250	250			
100	1	50	500	80	4			BAS16GW	BAS16H			BAS316	BAS16J			BAS516		BAS16L		BAS16LD
							BAS16		BAS16W							BAS16QA				
										BAS-16VY		BAS-16VV								
							BAV70		BAV70W							BAV70QA		BAV70M		
										BAV70S			BAV70SRA							
							BAV99		BAV99W							BAV99QA				
							BAV99S													







General purpose, switching diodes $\geq 100V$

types in **bold** represent new products

V_R max (V)	V_F max (V)	I_F (mA)	I_R max (mA)	ϕV_R (V)	t_T max (ns)	Package	SOD80C (MiniMelf)	SOT457 (SC-74)	SOT23	SOT143B	SOD123	SOD123F	SOT323 (SC-70)	SOT353 (SC-88A)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOD523 (SC-79)	DFN1006D-2 (SOD892(D))						
																									
							Size (mm)																		
							P_{tot} (mW)																		
100	1	100	100	100	50				BAS19																
150	1	100	100	150	50		BAV102																		
								BAS20																	
≥ 200	1	100	100	200	50		BAV103			BAS21GW	BAS21H					BAS321				BAS21L(D)					
								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						


















Switching diodes

Controlled avalanche switching diodes

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_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	

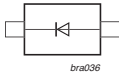


Low leakage current switching diodes

types in **bold** represent new products

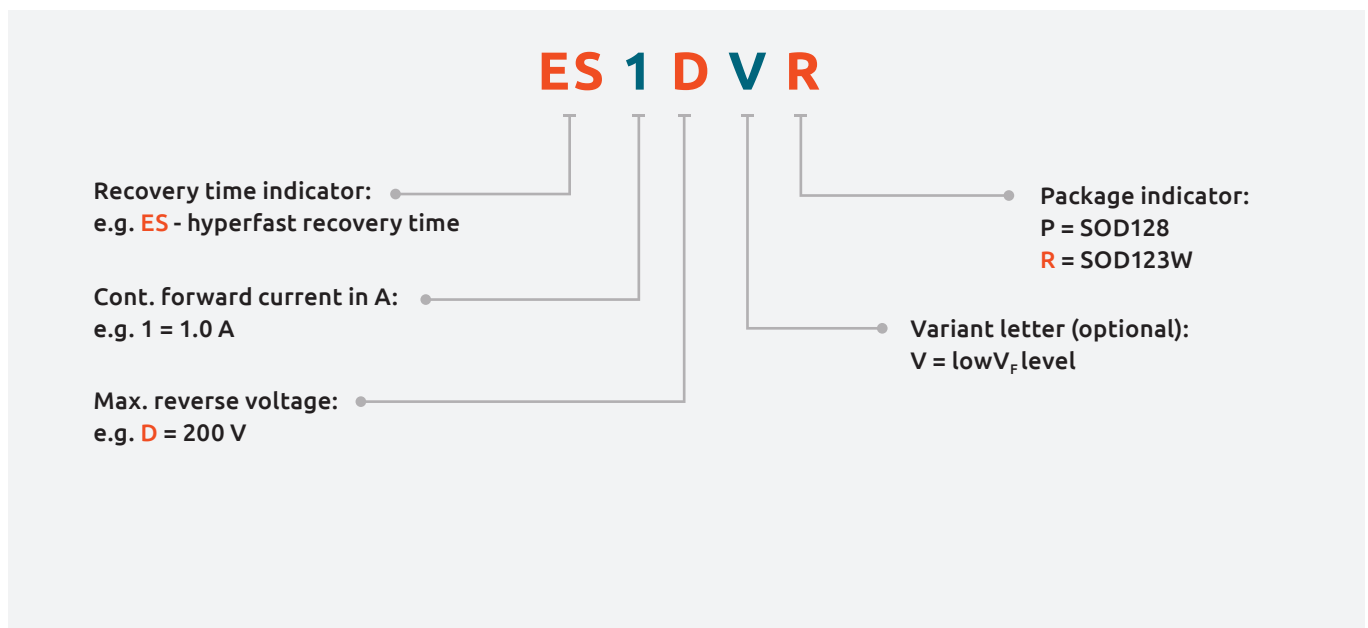
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	t_{rr} max (μs)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006-2 (SOD882)
																
					Size (mm)	3.5 x 1.5 x 1.5	3.04 x 1.6 x 0.55	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48
P_{tot} (mW)						400	300	250	380	375	250	250	250	305	250	250
75	1	10	5	3					BAS116GW	BAS116H		BAS416	BAS716			BAS116L
								BAS116					BAS116QA			
								BAV199		BAV199W						
								BAW156								
								BAV170				BAV170QA	BAV170M			
125	1	100	1	1.5 typ		BAS45AL	BAS45A									

PN rectifiers






types in **bold** represent new products

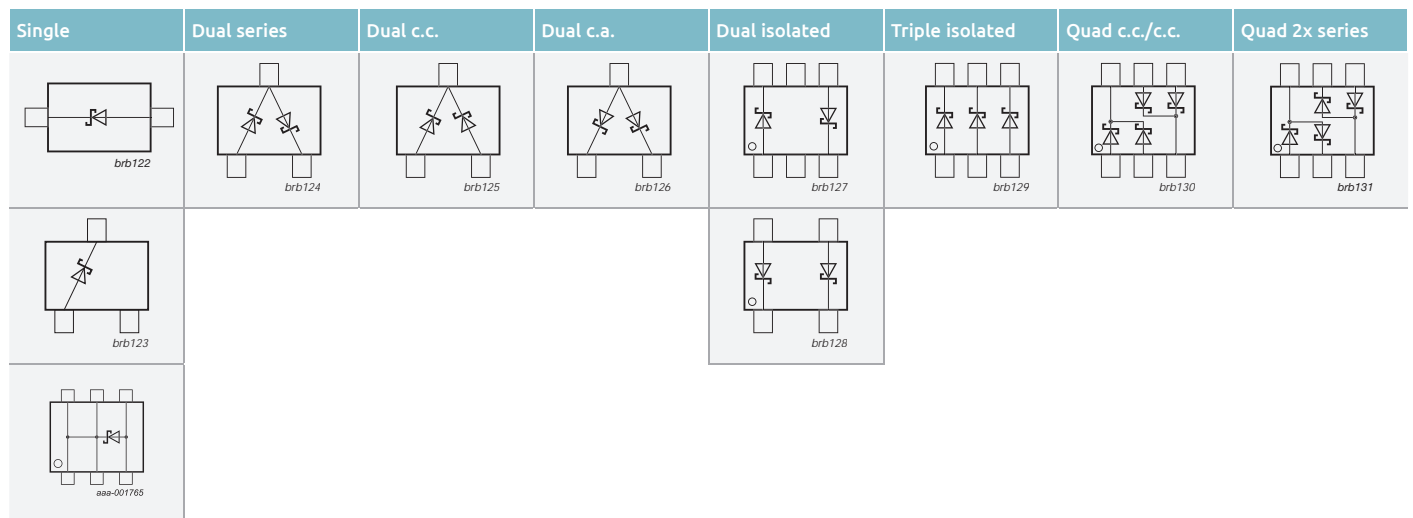
V_R max (V)	V_F max (V)	I_F (A)	I_R max (μ A)	V_R (V)	t_{rr} max (ns)		CFP5 (SOD128)	CFP3 (SOD123W)	
									
							Size (mm)	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
							P_{tot} (mW) @ 1cm ²	1050	950
200	0.875	1	0.2	200	25		ES1DVR		
	0.93	1	0.2	200	25		ES1DR		
	0.95	2	0.2	200	25		ES2DVR		
	0.98	2	0.2	200	25		ES2DR		
	0.95	2	0.2	200	25		ES2DP		
	0.98	3	0.2	200	30		ES3DP		
400	1.1	1	1	400	1800	PNS40010ER	PNS40010ER		

PN rectifier nomenclature











General purpose schottky diodes <= 250 mA

IF max (mA)	VR max (V)	VF max (mV)	@ IF (mA)	IR max (µA)	@ VR (V)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOT143B	SOD123	
												
							Size (mm)	3.5 x 1.5 x 1.5	3.04 x 1.6 x 0.55	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2
P _{tot} (mW)	300	500	250	250	357							
70	70	750	10	0.1	50	single			BAS70			
						dual series			BAS70-04			
						dual c.c.			BAS70-05			
						dual c.a.			BAS70-06			
						dual isolated				BAS70-07		
						triple isolated						
						quad 2x series						
120	40	370	1	0.5	30	single						
						dual series			BAS40			
						dual c.c.			BAS40-04			
						dual c.a.			BAS40-05			
						dual c.a.			BAS40-06			
						dual isolated				BAS40-07		
						quad c.c./c.c.						
200	30	300	10	30	10	single						
						dual series			BAT754			
						dual c.c.			BAT754S			
						dual c.c.			BAT754C			
						dual c.a.			BAT754A			
	triple isolated											
	40	400	10	2	25	25	single	BAS85	BAT85	BAT54		BAT54GW
							dual series			BAT54S		
							dual c.c.			BAT54C		
							dual c.a.			BAT54A		
							dual isolated				BAT74	
	triple isolated											
	quad c.c./c.c.											
	quad 2x series											
	50	40	450	10	5	40	single	BAS86	BAT86			
dual series									BAT721			
dual c.c.									BAT721S			
dual c.c.									BAT721C			
dual c.a.									BAT721A			
250	100	850	250	4	75	single					BAT46GW	










types in **bold** represent new products

SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)	DFN1006-2 (SOD882)/DFN1006-3 (SOT883)
							
2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
375	250	300	385	400	300	275	250
BAS70H	BAS70W BAS70-04W BAS70-05W BAS70-06W	BAS70-07S BAS70XY		1PS76SB70		1PS79SB70	BAS70L
BAS40H	BAS40W BAS40-04W BAS40-05W BAS40-06W			RB751V40 1PS76SB40		RB751S40 1PS79SB40	RB751CS40 BAS40L
					BAS40-07V BAS40-05V		
						1PS79SB31	
BAT54H	BAT54W BAT54SW BAT54CW BAT54AW	BAT754L	BAT54J	1PS76SB10		1PS79SB10	BAT54L BAT54CM
		BAT74S BAT54XY			BAT74V BAT54VV BAT54CV		
						RB521S30 RB520S30	RB521CS30L RB520CS30L
				1PS76SB21			
						1PS79SB30	
	BAT854W BAT854SW BAT854CW BAT854AW						
BAT46WH			BAT46WJ				




Diodes






Low capacitance schottky diodes

I_F max (mA)	V_R max (V)	V_F max (mV) @ I_F (mA)	C_j max (pF) @ $V_R = 0$ V	Package	SOT23	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)	DFN1006-2 (SOD882)	
												
30	4	450	1	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	
				single	BAT17			1PS76SB17		1PS79SB17		
				triple isolated					1PS66SB17			
	15	340	1	1	dual series	PMBD353 PMBD354 ¹⁾						
					single		1PS70SB82				1PS10SB82	
					triple isolated			1PS88SB82		1PS66SB82		
					dual series		1PS70SB84					
				dual c.c.		1PS70SB85						
				dual c.a.		1PS70SB86						




¹⁾Diodes have matched capacitance

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

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	DSN0603-2 (SOD962)	DSN1006-2 (SOD993)	DSN1006U-2 (SOD995)		
									
					Size (mm)	0.6 x 0.3 x 0.3	1.0 x 0.6 x 0.28	1.0 x 0.6 x 0.28	
					P_{tot} (mW) @ 1 cm ²	525	1.000	1.190	
				Optimization					
0.2	20	420	0.045	Low V_F	PMEG2002AESF				
		490	0.0035	Low I_R	PMEG2002ESF				
	30	470	0.08	Low V_F	PMEG3002AESF				
		480	0.05	low V_F					
		535	0.009	Low I_R	PMEG3002ESF				
	40	525	0.08	Low V_F	PMEG4002AESF				
		600	0.0065	Low I_R	PMEG4002ESF				
		600	0.01	low I_R					
		600	0.1	low V_F					
	0.5	20	390	0.2	low V_F				
410			0.3	low V_F					
440			1.5	low V_F					
500			0.03	low I_R					
550			0.045	Low V_F	PMEG2005AESF				
620			0.0035	Low I_R	PMEG2005ESF				
30		500	0.5	low V_F					
		630	0.08	Low V_F	PMEG3005AESF				
		720	0.009	Low I_R	PMEG3005ESF				
40		590	0.01	low I_R					
		820	0.08	Low V_F	PMEG4005AESF				
		880	0.0065	Low I_R	PMEG4005ESF				
1		20	375	1.9	low V_F				
			415	0.6	low V_F				
	490		0.2	low V_F					
	30	480	1.25	Low V_F		PMEG3010AESB	PMEG3010AESA		
		565	0.045	Low I_R		PMEG3010ESF			
	40	505	0.115	Low V_F		PMEG4010AESB			
		600	0.02	low I_R					
		610	0.04	Low I_R		PMEG4010ESB			
	60	625	0.65	Low V_F		PMEG6010AESB			
		730	0.03	Low I_R		PMEG6010ESB			
1.5	20	420	0.9	low V_F					
	40	610	0.03	low I_R					
2	20	420	1.9	low V_F					
		450	0.9	low V_F					
	30	470	2.5	low V_F					
	40	535	0.1	low V_F					
	60	530	0.2	low V_F					
		575	0.25	low V_F					

DFN2020-3 (SOT1061)	DFN2020-3S (SOT1061)	DFN1608D-2 (SOD1608)	DFN1006-2 (SOD882)	DFN1006D-2 (SOD882D)
				
2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62	1.6 x 0.8 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
960	960	780	565	660
			PMEG3002AEL	PMEG3002AELD
			PMEG4002EL	PMEG4002ELD
			PMEG6002EL	PMEG6002ELD
				PMEG2005BELD
		PMEG2005EPK		
			PMEG2005AEL	PMEG2005AELD
			PMEG2005EL	PMEG2005ELD
			PMEG3005EL	PMEG3005ELD
		PMEG4005EPK		
PMEG2010EPA	PMEG2010EPAS			
		PMEG2010EPK		
				PMEG2010BELD
		PMEG4010EPK		
		PMEG2015EPK		
		PMEG4015EPK		
PMEG2020EPA	PMEG2020EPAS			
		PMEG2020EPK		
PMEG3020EPA	PMEG3020EPAS			
PMEG4020EPA	PMEG4020EPAS			
		PMEG4020EPK		
PMEG6020EPA	PMEG6020EPAS			






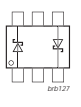
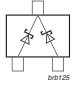










Medium power low VF schottky rectifiers single ≥ 200 mAtypes in **bold** represent new products

I_F max (A)	V_F max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)	
								
				Size (mm)	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0	
				P_{tot} (mW) @ 1 cm ²	2150	1050	950	
				Optimization				
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	
		505	0.01	Low V_F		PMEG4010ETP	PMEG4010ETR	
	60	530	0.06	Low $V_{F2}/$ Low I_R			PMEG40T10ER	
				Low V_F		PMEG6010EP	PMEG6010ER	
		Low V_F			PMEG6010ETR	PMEG6010ELR		
	100	660	0.0003	Low I_R			PMEG6010ELR	
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	
	60	535	0.014	Low $V_{F2}/$ Low I_R			PMEG40T20EP	PMEG40T20ER
				Low V_F		PMEG6020EP	PMEG6020ER	
		Low V_F		PMEG6020ETP	PMEG6020ETR			
		680	0.0007	Low I_R		PMEG6020AELP	PMEG6020AELR	
	100	760	0.0003	Low I_R			PMEG6020ELR	
				770	0.0003	Low I_R		PMEG10020AELP
		830	0.00015	Low I_R			PMEG10020ELR	
		830	0.00015	Low I_R				
3	30	360	5	Low V_F		PMEG3030EP		
		450	0.15	Low I_R	PMEG030V030EPD	PMEG3030BEP		
	40	490	0.12	Low V_F	PMEG040V030EPD			
				Low V_F		PMEG4030EP		
		535	0.02	Low $V_{F2}/$ Low I_R			PMEG4030ETP	
				Low I_R			PMEG40T30EP	PMEG40T30ER
	540	0.1	Low I_R			PMEG4030ER		
	45	495	0.036	Low $V_{F2}/$ Low I_R	PMEG045T030EPD			
	50	530	0.1	Low V_F	PMEG050V030EPD			
	60	475	0.4	Low V_F			PMEG6030EVP	
				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	
				Low V_F			PMEG4050ETP	
		520	0.12	Low V_F	PMEG040V050EPD			PMEG40T50EP
				Low $V_{F2}/$ Low I_R				
	45	490	0.3	Low V_F	PMEG045V050EPD			
		545	0.036	Low $V_{F2}/$ Low I_R	PMEG045T050EPD			
	60	560	0.4	Low V_F	PMEG060V050EPD			
6	100	840	0.00045	low leakage	PMEG100V060ELPD			
8	100	850	0.0005	low leakage	PMEG100V080ELPD			
10	45	490	0.6	Low V_F	PMEG045V1000EPD			
		Low V_F		PMEG45U10EPD				
		540	0.5	Low I_R	PMEG45A10EPD			
	60	565	0.061	Low $V_{F2}/$ Low I_R	PMEG045T100EPD			
		560	0.7	Low V_F	PMEG060V100EPD			
	100	850	0.0008	low leakage	PMEG100V100ELPD			
15	45	490	1	Low V_F	PMEG045V150EPD			
		550	0.1	Low $V_{F2}/$ Low I_R	PMEG045T150EPD			
		580		Low $V_{F2}/$ Low I_R	PMEG45T15EPD			
		590	76	Low $V_{F2}/$ Low I_R	PMEG045T150EIPD			
	50	500	1	Low V_F	PMEG050V150EPD			
550		0.1	Low I_R	PMEG050T150EPD				

Medium power low VF schottky rectifiers single ≥ 200 mA - leaded packagestypes in **bold** represent new products

I_F max (A)	V_F max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	SOT457 (SC-74)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323F (SC-90)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)	
														
					Size (mm)	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 cm ²	540	420	660	830	400	830	570	570	500
					Optimization									
0.2	30	480	0.05	low V_F							PMEG3002EJ		PMEG3002AEB	
	40	600	0.01	low I_R							PMEG4002EJ		PMEG4002EB	
	60	600	0.1	low V_F							PMEG6002EJ		PMEG6002EB	
0.5	20	390	0.2	low V_F		PMEG2005ET	PMEG2005EGW	PMEG2005EH		PMEG2005EJ	PMEG2005AEA	PMEG2005AEV		
		480	0.03	low I_R									PMEG2005EB	
	30	430	0.15	low V_F		PMEG3005ET	PMEG3005EGW	PMEG3005EH		PMEG3005EJ	PMEG3005AEA	PMEG3005AEV		
		500	0.5	low V_F										PMEG3005EB
	40	470	0.1	low V_F		PMEG4005ET	PMEG4005EGW	PMEG4005EH		PMEG4005EJ	PMEG4005AEA	PMEG4005AEV		
		550	1.1	low V_F		BAT720			1PS70SB20					
	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	PMEG2010BEA BAT760	PMEG2010BEV 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 cm ²	1500	400	1000	1000	400
0.2	30	480	0.03	low V_F						PMEG3002TV
	60	600	0.1	low V_F						
0.5	20	390	0.2	low V_F			PMEG2005CT			
	30	430	0.15	low V_F			PMEG3005CT			
	40	470	0.1	low V_F			PMEG4005CT			
1.0	25	450	1.0	low V_F		BAT120S				
				low V_F		BAT120C				
				low V_F		BAT120A				
	40	500	0.05	low V_F				PMEG4010CPA	PMEG4010CPAS	
				low V_F				PMEG6010CPA	PMEG6010CPAS	
	60	650	0.35	low V_F		BAT160S				
				low V_F		BAT160C				
				low V_F		BAT160A				
2.0	20	420	1.0	low V_F				PMEG2020CPA	PMEG2020CPAS	
	30	440	2.0	low V_F				PMEG3020CPA	PMEG3020CPAS	

Nomenclature of low V_F (MEGA) schottky rectifiers

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)

Variant letter (optional):
T = high temperature

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

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

Diodes

Nomenclature of schottky rectifiers in SOT1289, AEC-Q101 qualified

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

Package indicator:
PD = SOT1289

Variant letter (optional):
L = low leakage current

International configuration:
E = single die







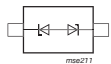






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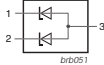




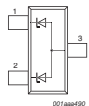





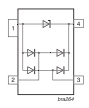

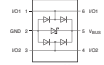

Low capacitance ESD protection for high-speed interfaces

types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	ESD rating max (kV) ^[1]	I_R max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional										
1	0	5	0.45	0.5	20			PESD5V0C1USF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3	
		5	0.6	0.75	10			PESD5V0F1USF			
		5	0.95	1.15	8			PESD5V0X1ULD		DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.37
			1.55	1.75	15			PESD5V0X1UALD			
		16	0.83	0.98	8			PESD16VX1UL	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.48	
		5	0.95	1.15	8			PESD5V0X1UB	SOD523 (SC-79)	1.2 x 0.8 x 0.6	
			1.55	1.75	15		PESD5V0X1UAB				
		3.3	0.6	1.5	30	2		PESD3V3U1UT	SOT23	2.9 x 1.3 x 1.0	
		5	0.6	1.5	30	1		PESD5V0U1UT			
		12	0.6	1.5	30	0.05		PESD12VU1UT			
		15	0.6	1.5	30	0.05		PESD15VU1UT			
		24	0.6	1.5	23	0.05		PESD24VU1UT			
		0	1	5	0.2	0.3	8		PESD5V0F1BSH	DSN0402-2 (SOD992)	0.4 x 0.2 x 0.12
				3.3	0.2	0.25	20			PESD3V3C1BSF	DSN0603-2 (SOD962)
0.28	0.35				20		PESD3V3Z1BSF				
5	0.1			0.15	10		PESD5V0R1BSF				
	0.15			0.19	15		PESD5V0H1BSF				
	0.2			0.25	20		PESD5V0C1BSF				
5	0.45			0.5	20		PESD5V0C1USF				
5.5	0.25			0.3	10		PESD5V0F1BSF				
3.3	-			1.1	20		PESD5V0F1BRSF				
	-			1.1			PESD3V3X1BCSF				
5.0	-			1.1		PESD5V0X1BCSF					
18	0.28			0.45	10		PESD18VF1BSF				
24	0.25			0.4			PESD24VF1BSF				
5	0.4			0.55	10		PESD5V0F1BLD		DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.37	
3.3	1.3			1.6	9		PESD5V0F1BRLD				
	5.5			0.4	0.55	10	PESD3V3X1BL		DFN1006-2 (SOD882)		
5	0.49			0.6	8		PESD5V0F1BL				
	0.85			0.95	15		PESD5V0X1BCL				
	0.9			1.3	9		PESD5V0X1BCAL				
	18			0.35	0.5	10			PESD5V0X1BL		
	24	0.3	0.45	10		PESD18VF1BL					
					PESD24VF1BL						

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

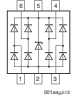

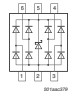

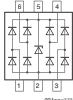

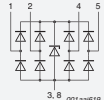


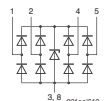

Low capacitance ESD protection for high-speed interfaces

Number of protected lines		V_{RWM} (V)	$C_{line\ typ}$ (pF)	$C_{line\ max}$ (pF)	ESD rating max (kV) ^[1]	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional									
2	1	5	0.5	0.65	10		PESD5V0X2UMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37	
							PESD5V0X2UM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.48	
			PESD5V0X2UAMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37					
			PESD5V0X2UAM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.48					
				0.9	1.3	9		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
	3	0	5.5	1	1.5	8		PRTR5V0U2X	SOT143B 	2.9 x 1.3 x 1.0
				1.8	-	12		PRTR5V0U2AX		
1				1.5	8		PRTR5V0U2F	DFN1410-6 (SOT886) 	1.45 x 1.0 x 0.48	

ESD protection, TVS, filtering and signal conditioning

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

Low capacitance ESD protection for high-speed interfaces

Number of protected lines		V_{RWM} (V)	$C_{line\ typ}$ (pF)	$C_{line\ max}$ (pF)	ESD rating max (kV) ^[1]	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional								
4	0	5.5	1	-	8		IP4220CZ6	DFN1410-6 (SOT886) 	1.45 x 1.0 x 0.48
							IP4221CZ6-S	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
							PRTR5V0U4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
	0	0.7	0.85	12	-		PUSB2X4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
							PUSB2X4Y	SOT363 (SC-88) 	2.0 x 1.25 x 0.95
		0.6	-	8		IP4283CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48	

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

Low capacitance ESD protection for high-speed interfaces

types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	ESD rating ⁽¹⁾ max (kV)	I_R max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional									
4	0	5.5	0.5	-	10	-		IP4294CZ10-TBR PUSB3F96	DFN2510A-10 (SOT1176)	 2.5 x 1.0 x 0.48
		3.3	0.27	-	15	0.1		PUSB3FR4		
0	4	3.3	0.17	0.2	15	-		PUSB3AB4	DFN2111-7 (SOT1358)	 2.1 x 1.1 x 0.48
6	0	3.3	0.25	-	15	-		PUSB3FR6		
0	6	5.5	0.27	0.35	10	0.1		PUSB3TB6	DFN2111-7 (SOT1358)	 2.1 x 1.1 x 0.48
		3.3	0.15	0.2	15	0.1		PUSB3AB6		

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

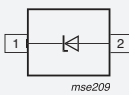
ESD protection, TVS, filtering and signal conditioning

TrEOS protection devices

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

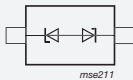









Type	device	V_{RWM} (V)	Uni- or bidirectional	C_j typ (pF)	ESD rating max (kV) (Ω)	R_{dyn} TLP (Ω)	Number of protected lines	Package	Size (mm)
PUSB3FR4	ESD protection	3.3	uni	0.29	15	0.27	4	DFN2510A-10	2.5 x 1.0 x 0.48
PUSB3FR6				0.35	15	0.29	6	DFN2111-7	2.1 x 1.1 x 0.48
PUSB3AB4			bi	0.17	15	0.4	4	DFN2510A-10	2.5 x 1.0 x 0.48
PUSB3AB6				0.15	15	0.4	6	DFN2111-7	2.1 x 1.1 x 0.48
PCMF1USB3S	Common Mode Filter with ESD protection	5	uni	0.3	15	0.14	2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3S							4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3S							6	WLCSP15	2.4 x 1.2 x 0.5
PESD3V3Z1BSF	ESD protection	3.3	bi	0.28	20	0.19	1	DSN0603-2	0.6 x 0.3 x 0.3
PESD3V3C1BSF				0.2	20	0.23			
PESD5V0R1BSF				5	0.1	10			
PESD5V0H1BSF		0.15	15		0.25				
PESD5V0C1BSF		0.2	20		0.23				
PESD5V0C1USF		uni	0.45		20	0.1			

General purpose ESD protection devices LP

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 _{fr} max (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)		
Unidirectional	Bidirectional												
1	0	5	35	42	40	30	0.1		PESD5V0S1USF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3		
		5.5	12	15.4	10	30	0.1		PESD5V0L1USF				
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UL	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5		
			34	40	45	30	0.3		PESD3V3L1UL				
			207	300	150	30	2		PESD3V3S1UL				
		5	2	2.6	-	9	0.1		PESD5V0U1UL				
			25	30	42	26	0.1		PESD5V0L1UL				
		5	152	200	150	30	1		PESD5V0S1UL				
		12	38	75	150	30	0.05		PESD12VS1UL				
		15	32	70	150	30	0.05		PESD15VS1UL				
		24	23	50	150	23	0.05		PESD24VS1UL				
		36	18	30	150	30	0.01		PESD36VS1UL				
		5	25	30	42	26	0.1		PESD5V0L1ULD			DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.4
			152	200	150	30	1		PESD5V0S1ULD				
			12	38	75	150	30		0.05	PESD12VS1ULD			
			15	32	70	150	30		0.05	PESD15VS1ULD			
		24	23	50	150	23	0.05		PESD24VS1ULD				
		2.5	229	300	260	30	6		PESD5Z2.5	SOD523 (SC-79)	1.2 x 0.8 x 0.6		
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UB				
			34	40	45	30	0.3		PESD3V3L1UB				
			172	200	260	30	0.05		PESD5Z3.3				
			207	300	330	30	2		PESD3V3S1UB				
		5	2	2.6	-	9	0.1		PESD5V0U1UB				
			25	30	42	26	0.1		PESD5V0L1UB				
			89	150	180	30	0.05		PESD5Z5.0				
		152	200	260	30	1	PESD5V0S1UB						
		6	78	150	180	30	0.01		PESD5Z6.0				
		7	69	150	180	30	0.01		PESD5Z7.0				
		12	35	75	200	30	0.01		PESD5Z12				
			38	75	180	30	0.05		PESD12VS1UB				
		15	32	70	160	30	0.05		PESD15VS1UB				
		24	23	50	160	23	0.05		PESD24VS1UB				
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UA			SOD323 (SC-76)	1.7 x 1.25 x 0.95
		5	2	2.6	-	9	0.1		PESD5V0U1UA				
			25	30	42	26	0.1		PESD5V0L1UA				
			480	530	890	30	4		PESD5V0S1UA				
		12	160	180	600	30	0.1		PESD12VS1UA				
		24	23	50	160	23	0.05		PESD24VS1UA				
		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				

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

General purpose ESD protection protection devices

Number of protected lines		V _{RWM} (V)	C _{line typ} (pF)	C _{line max} (pF)	P _{PP} max (W) [1]	ESD rating max (kV) [2]	I _R max (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)																
Unidirectional	Bidirectional																										
0	1	3.3	5.5	6	-	20	0.1		PESD3V3U1BCSF		0.6 x 0.3 x 0.3																
			8.5	10	-	30	0.1		PESD3V3V1BCSF																		
		5.5	5.3	6	5.5	20	0.1		PESD5V0V1BCSF																		
					20	20	0.1		PESD5V0V1BDSF																		
			4.5	8	15	0.1	PESD5V0V1BSF																				
			12	15.4	35	290	15		0.01			PESD12VV1BL															
						30	0.1		PESD5V0L1BSF																		
						30	0.1		PESD5V0S1BSF																		
			35	45	100	30	0.1																				
		5	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
																					24	11	-	200	23	0.05	
			5	5	2.9	3.5	-		10			0.1				PESD5V0V1BL		DFN1006-2 (SOD882)	1.7 x 1.25 x 0.95								
	11									13	45					30				0.01	PESD5V0S1BL						
	35									45	130					30				0.1	PESD5V0T1BLD						
	60									80	-					30				0.1							
	11	13								45	30		0.01	PESD5V0V1BLD													
	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								45	30		0.1	PESD5V0S1BA													
	PESD5V0U1BL		DFN1006-2 (SOD882)																								
	PESD5V0U1BLD				DFN1006D-2 (SOD882D)																						
	PESD5V0U1BB						SOD523 (SC-79)																				
	PESD5V0U1BA									SOD323 (SC-76)																	

ESD protection, TVS, filtering and signal conditioning

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

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

General purpose ESD protection devices

types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	P_{PP} max (W) ^[1]	ESD rating max (kV) ^[2]	I_R max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional											
2	1	3.3	22	28	30	15	0.3		PESD3V3L2UM	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.5	
					30	15	0.025		PESD5V0L2UM			
		5	16	19	-	15	0.025		PESD5V0L2UMB	DFN1006B-3 (SOT883B)		1 x 0.6 x 0.37
			3.3	200	275	150	30	3		PESD3V3S2UQ	SOT663	1.6 x 1.2 x 0.55
			5	150	215	150	30	0.3		PESD5V0S2UQ		
			12	38	100	150	30	0.03		PESD12VS2UQ		
			15	32	70	150	30	0.05		PESD15VS2UQ		
			24	23	50	150	23	0.05		PESD24VS2UQ	SOT23	2.9 x 1.3 x 1
			3.3	207	300	330	30	2		PESD3V3S2UT		
			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		SOT323 (SC-70)		
		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		2 x 1.25 x 0.95	
		6	34	40	60	30	0.018 (@ 4.3 V)		PESD6V0L2UU			
	0	2	3.3	101	-	350	30	2		PESD3V3L2BT	SOT23	2.9 x 1.3 x 1
			5	75	-		30	1		PESD5V0L2BT		
			12	19	-		30	0.05		PESD12VL2BT		
			15	16	-	200	30	0.05		PESD15VL2BT		
24			11	-	23		0.05	PESD24VL2BT				
			35	45	130	30	0.1	PESD5V0S2BT		DFN1006-3 (SOT883)		
			2.9	3.5	-	10	0.1	PESD5V0U2BT				
			18	20	110	30	0.01	PESD5V0V2BM				
			2.9	3.5	-	10	0.1	PESD5V0U2BMB			DFN1006B-3 (SOT883B)	1 x 0.6 x 0.37
			18	20	110	30	0.01	PESD5V0V2BMB			DFN1010D-3 (SOT1215)	1.1 x 1.0 x 0.37
		35	45	130	30	0.1	PESD5V0S2BQA					

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

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




















General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	$P_{PP max}$ (W) [1]	ESD rating max (kV) [2]	$I_R max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional											
4	3	3.3	22	28	30	20	0.3	 006aaa756	PESD3V3L4UF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5	
			110	300	110	30	1 (@ 3 V)		PESD3V3S4UF			
		5	16	19	30	20	0.025		PESD5V0L4UF			
			85	220	110	30	0.1 (@ 4.3 V)		PESD5V0S4UF			
		3.3	22	28	30	20	0.3	 msd215	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	 msd214	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)
		3.3	215	300	200	30	0.8	PESD3V3S4UD				
		5	165	220	200	30	0.2	PESD5V0S4UD				
		15	37	48	-	8	0.1	BZA420A				
		24	40	70	200	23	0.01	PESD24VS4UD				
0	4	5	2.9	3.5	-	10	0.1	 00114	PESD5V0U4BF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5	
			45	75	-	15	0.1	 BZA408B	BZA408B	SOT457 (SC-74)	2.9 x 1.5 x 1.0	
			2.9	3.5	-	10	0.1	 006aaa759	PESD5V0U4BW	SOT665	1.6 x 1.2 x 0.55	
5	4	3.3	20	24	28	15	2	 006aaa759	PESD3V3LSUK	DFN1010-6 (SOT891)	1 x 1 x 0.5	
			5	18.5	22	30	20		0.5			PESD5V0LSUK
		3.3	22	28	25	20	0.3		 006aaa759	PESD3V3LSUF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5
		5	16	19	25	20	0.025			PESD5V0LSUF		
		3.3	22	28	25	20	0.3	PESD3V3LSUV				
		5	16	19	25	20	0.025	PESD5V0LSUV				
		3.3	22	28	25	20	0.3	 msd17	PESD3V3LSUY	SOT363 (SC-88)	2 x 1.25 x 0.95	
		5	16	19	25	20	0.025		PESD5V0LSUY			
		3.3	215	300	200	30	0.8		PESD3V3SSUD			
		5	165	220	200	30	0.2		PESD5V0SSUD			
		12	73	100	200	30	0.015	 msd17	PESD12VSSUD	SOT457 (SC-74)	2.9 x 1.5 x 1.0	
		15	60	90	200	30	0.015		PESD15VSSUD			
24	45	70	200	23	0.015	PESD24VSSUD						
0	5	5	2.9	3.5	-	10	0.1	 00114	PESD5V0U5BF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5	
								 006aaa759	PESD5V0U5BV	SOT666	1.6 x 1.2 x 0.55	

ESD protection, TVS, filtering and signal conditioning

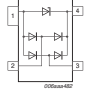

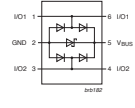

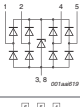


[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 [2] according to IEC 61000-4-5 (contact discharge)

Audio interface protection

Lines	$V_{RWM}(V)$	$V_{BR\ min}(V)$	$V_{BR\ max}(V)$	$C_D\ typ\ (pF)$	$C_D\ max\ (pF)$	$I_{PPM}\ 8/20\mu s\ (A)$	$V_{CL}\ 8/20\mu s\ @\ I_{ppm}\ (V)$	$V_{ESD}\ (hV)$	Configuration	Type	Package	
1	4.5	4.7 V		65	85	30	15	30		PTVS4V5D1BLD	DFN1006D-2 (SOD882D) 	
	5	5.5	9.5	70	90	28	11.5	30		PESD5V0S2BQA	DFN1010D-3 (SOT1215) 	
				60	80	22.5	14	30		PESD5V0T1BLD	DFN1006D-2 (SOD882D) 	
				35	45	12	14	30		PESD5V0S1BL	DFN1006-2 (SOD882) 	
				35	45	12	14	30		PESD5V0S1BLD	DFN1006D-2 (SOD882D) 	
				11	13	4.8	12.5	30		PESD5V0V1BL	DFN1006-2 (SOD882) 	
		5.8	7.8	11	13	4.8	12.5	30		PESD5V0V1BLD	DFN1006D-2 (SOD882D) 	
	12			14.6	16.8	17	25	7.8	38	30		PESD12VV1BL
	2	5	5.8	7.8	18	20	9	12.5	30		PESD5V0V2BM	DFN1006-3 (SOT883) 
					18	20	9	12.5	30		PESD5V0V2BMB	DFN1006B-3 (SOT883B) 

Automotive high-speed network protection

types in **bold** represent new products

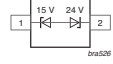

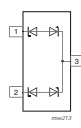


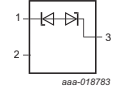

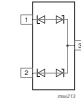
Number of protected lines	V_{RWM} (V)	C_{line} typ (pF)	I_{RM} max (μA)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
2	5 V	1	0.1	8		PESD2ETH-X	SOT143B 	2.9 x 1.3 x 1.0
		1.8	0.1	12		PESD2ETH-AX		
2	5 V	1	0.1	8		PESD2ETH-D	SOT457 	2.9 x 1.5 x 1.0
		1.8	0.1	12		PESD2ETH-AD		
4	5.5	0.6	1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

ESD protection, TVS, filtering and signal conditioning

Automotive in-vehicle network bus line protection



types in **bold** represent new products

Number of protected lines 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)
1	15 (diode 1) 24 (diode 2)	13	17	160	23	0.05		PESD1LIN	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
2	24	11	17	200	23	0.05		PESD1CAN	SOT23	2.9 x 1.3 x 1.0
		25	30	230	30	0.01		PESD2CAN		
		11	17	200	23	0.05		PESD1FLEX	SOT323	2.0 x 1.25 x 0.95
		9.3	12	150	23	0.05		PESD1CAN-U		
1	26.5	9.3	11	150	23	0.05		PESD1IVN-U	SOT323 	2.0 x 1.25 x 0.95
2								PESD2IVN-U		

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

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

Battery and charger port protection

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

HDMI and display port protection

types in **bold** represent new products

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

Antenna protection (NFC, WiFi,...)

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

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


USB and SATA protection

Interface	Number of protected lines	R_{line}	C_{line} (pF)	Remark	Type	Package	Size (mm)		
USB2.0 (Plastic package)	2		1.0	ESD protection for up to 2 ultra high-speed datalines	PRTR5V0U2X	SOT143B	2.9 x 1.3 x 1.0		
			1.8	ESD protection for up to 2 ultra high-speed datalines with 12 kV ESD robustness	PRTR5V0U2AX				
			3 + 1			ESD protection for up to 2 ultra high-speed datalines	PRTR5V0U2F	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48
						USB protection for USB OTG with 5.5 V Vbat protection	PUSBM5V5X4-TL	DFN1616-6 (SOT1189)	1.6 x 1.6 x 0.48
		USB protection for USB OTG with 12 V Vbat protection			PUSBM12VX4-TL				
	4			0.8	Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4Y	SOT363 (SC-88)	2.0 x 1.25 x 0.95	
					Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4D	SOT457 (SC-74)	2.9 x 1.5 x 1.0	
					Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	IP4220CZ6			
					Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	PRTR5V0U4D	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48	
		ESD protection for USB2.0 high-speed, SD-card, SIM card	IP4221CZ6-S						

ESD protection, TVS, filtering and signal conditioning

Common mode filter for USB 2.0







types in **bold** represent new products

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

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

Common mode filter for USB 3.x




types in **bold** represent new products

Interface	Number of protected line pairs	Type	Differential Mode 3dB Frequency	Common Mode rejection 800 MHz - 10 GHz	C_d typical	V_{RWM}	ESD rating	Channel series resistance	Package	Size (mm)
USB3.x	1	PCMF1USB3S	6 GHz	>12	0.3	5	15	3	WLCSP5 	0.8 x 1.2 x 0.5
	2	PCMF2USB3S							WLCSP10 	1.6 x 1.2 x 0.5
	3	PCMF3USB3S							WLCSP15 	2.4 x 1.2 x 0.5
	1	PESD1USB3S	17 GHz	ESD protection only	0.5				WLCSP5 	0.8 x 1.2 x 0.5
	2	PESD2USB3S							WLCSP10 	1.6 x 1.2 x 0.5
	3	PESD3USB3S							WLCSP15 	2.4 x 1.2 x 0.5

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

Common mode filter for HDMI and MIPI

types in **bold** represent new products

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

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

HDMI signal conditioning

Interface	Number of protected lines	Buffer	Level shifter	C_{line} (pF)	Resistor (Ω)	LDO	Remark	Type	Package	Size (mm)
HDMI2.0 Tx	13			100 Ω differential impedance		CEC LDO, 5 V LDO	Fully integrated HDMI source solution with current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4786CZ32	DFN5050-32 (SOT617)	5.0 x 5.0 x 0.85
							Fully integrated HDMI sink solution with buffer, and level shifter for DDC, CEC, and Hot Plug			
							Fully integrated HDMI source solution with enhanced ESD protection, current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug			
							Fully integrated HDMI source solution with small package, current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4786CZ32S	DFN4040-32 (SOT1318-1)	4.0 x 4.0 x 0.50
HDMI2.0 Rx	13	yes	yes	100 Ω differential impedance	integrated	-	Fully integrated HDMI source solution with current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4786CZ32	DFN5050-32 (SOT617)	5.0 x 5.0 x 0.85
							Fully integrated HDMI source solution with enhanced ESD protection, current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4788CZ32		
							Fully integrated HDMI source solution with current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4787CZ32		
SD3.0	6	yes	yes	-	internal	-	SD 3.0-compliant memory card with integrated dual voltage-level translator with EMI filter and ESD protection	IP4856CX25/C	WLCSP25	2.4 x 2.4 x 0.4
							Fully integrated SD 3.0 card level shifter with buffer technology, LDO, and EMI filter	IP4855CX25	WLCSP25	




ESD protection, TVS, filtering and signal conditioning

LCD and camera RC filter with integrated protection

Number of protected lines	Line small-signal equivalents			Digital interface clock speed (MHz)	Insertion loss S21 ~-3 dB (MHz)	Type	Package	Size (mm)
	R_{line} (Ω)	C_{line} (pF)	L_{line} (nH)					
4	40	18	-	~100	300	IP4252CZ8-4-TTL	DFN1714-8 (SOT1166)	1.7 x 1.35 x 0.52
	100	45	-	~40	130	IP4254CZ8-4-TTL		
8	40	18	-	~100	300	IP4252CZ16-8-TTL	DFN3314-16 (SOT1168)	3.3 x 1.35 x 0.53
	100	45	-	~40	130	IP4254CZ16-8-TTL		
		15	-	~110	330	IP4251CZ16-8-TTL		





Memory and SIM card filter with integrated protection

types in **bold** represent new products

Interface	Number of protected lines	Line small-signal equivalents		Digital interface clock speed (MHz)	Remark	Type	Package	Size (mm)
		R_{line}	C_{line} (pF)					
SIM card	3	47 Ω / 100 Ω	20	~20	Integrated SIM-card EMI filter and ESD protection	IP4264CZ8-20-TTL	DFN1714-8 (SOT1166) 	1.7 x 1.35 x 0.52
	4	-	1	~240	Quad-channel, low-capacitance ESD protection	IP4221CZ6-S	DFN1410-6 (SOT886) 	1.0 x 1.0 x 0.48
SD 3.0	6	-	0.27	5000	6-line bidirectional ESD protection for ultra high-speed interfaces	PUSB3TB6	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.5
			PUSB3FR6					
			PUSB3AB6					
			0.35					
			0.15					

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

types in **bold** represent new products

Baseband interface	Number of protected lines	C_d (pF)	ESD rating max (kV)	R_{dyn} (Ω)	Remark	Type	Package	Size (mm)
USB3.0 - 5 Gbps	4	0.55	8	0.3 / 0.4	ESD Protection for high-speed interfaces	IP4292CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.5	10			IP4294CZ10-TBR		
		PUSB3F96						
USB3.1 - 10 Gbps	6	0.29	15	0.27	TrEOS Protection	PUSB3FR4	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48
		0.17	15	0.4		PUSB3AB4		
		0.29	15	0.27		PUSB3FR6		
	1	0.27	15	0.5		PUSB3TB6		
		0.15	15	0.4		PUSB3AB6		
		0.1	10	0.45		PESD5V0R1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		0.15	15	0.25		PESD5V0H1BSF		
		0.2	20	0.23		PESD5V0C1BSF		
		0.2	20	0.23		PESD3V3C1BSF		
		0.45	20	0.1		PESD5V0C1USF		
	0.28	20	0.19	PESD3V3Z1BSF				
	0.25	15	0.16	PESD1USB3S		WLCSP5		
	2	0.25	15	0.14		Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3S	


TVS diodes for mobile applications

types in **bold** represent new products

P_{RWM} 10/1000µs	V_{RWM}	V_{BR} min	V_{BR} max	I_{PPM} 8/20µs	V_{CL} 8/20µs	I_{PPM} 10/1000µs	V_{CL} 10/1000µs	Type	Package	Size
300	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	95	35	10	32.6	PTVS20VU1UPA		
	22	24.4	26.9	87	37	9	36.1	PTVS22VU1UPA		
	24	26.7	29.5	80	40	8.1	40	PTVS24VU1UPA		
26	28.9	31.9	69	43.5	7	43	PTVS26VU1UPA			

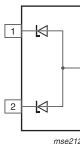
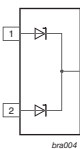
TVS diodes for mobile applications

types in **bold** represent new products

V_{RWM} (V)	V_{BR} min (V)	V_{BR} max (V)	8/20µs pulse		10/1000µs pulse		I_{RM} typ @ V_{RWM} (nA)	I_{RM} max @ V_{RWM} (nA)	R_{dyn} (TLP) - 8/20µs	Type	Package	Size
			V_{CL} @ I_{PPM} 8/20µs (V) max	I_{PPM} 8/20µs (A)	V_{CL} @ I_{PPM} 10/1000µs (V) max	I_{PPM} 10/1000µs (A)						
5	6.4	7.8	19.4	100	12	20	25	1000	0.1	PTVS5V0Z1USKP	DSN1608-2 (SOD964) 	1.6 x 0.8 x 0.27
			18	80	12	20	25	1000	0.06	PTVS5V0Z1USK		
7.5	8.33	9.65	22	100	13.5	17	1	200	0.08	PTVS7V5Z1USK		
10	11.1	12.9	27	75	18.2	12.5	0.1	200	0.11	PTVS10VZ1USK		
12	13.3	15.4	29	65	21.8	10.5	0.1	200	0.11	PTVS12VZ1USK		
15	16.7	19.4	36	52	27.4	7.5	0.1	200	0.13	PTVS15VZ1USK		
18	20	23.2	44	41	32.8	6.4	0.1	200	0.17	PTVS18VZ1USK		
20	22.2	25.4	48.3	41	36.9	6	1	200	0.2	PTVS20VZ1USK		
22	24.4	26.9	51	39	40	5	0.1	200	0.2	PTVS22VZ1USK		
26	28.9	33.4	57.5	32	46	4.5	0.1	200	0.15	PTVS26VZ1USK		


ESD protection, TVS, filtering and signal conditioning

TVS diodes, 24 W/40 W (automotive)

Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV) [1]	C_{line} typ (pF)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)				
24	3	5.32	5.6	5.88	20	30	210	8	3	5	 mos212	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		 brs004			MMBZ12VAL			
		12	14.25	15	15.75	1	30	85	21	1.9					0.005			MMBZ15VAL
		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			MMBZ22VAL
		26	31.35	33	34.65	1	30	45	46	0.87					0.005			MMBZ23VAL
		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		MMBZ22VCL					
26	31.35	33	34.65	1	30	45	46	0.87	0.005	MMBZ23VCL								

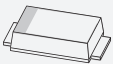
Transient voltage surge suppressor (TVS)

TVS diodes, 400 W

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

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

TVS diodes, 600W

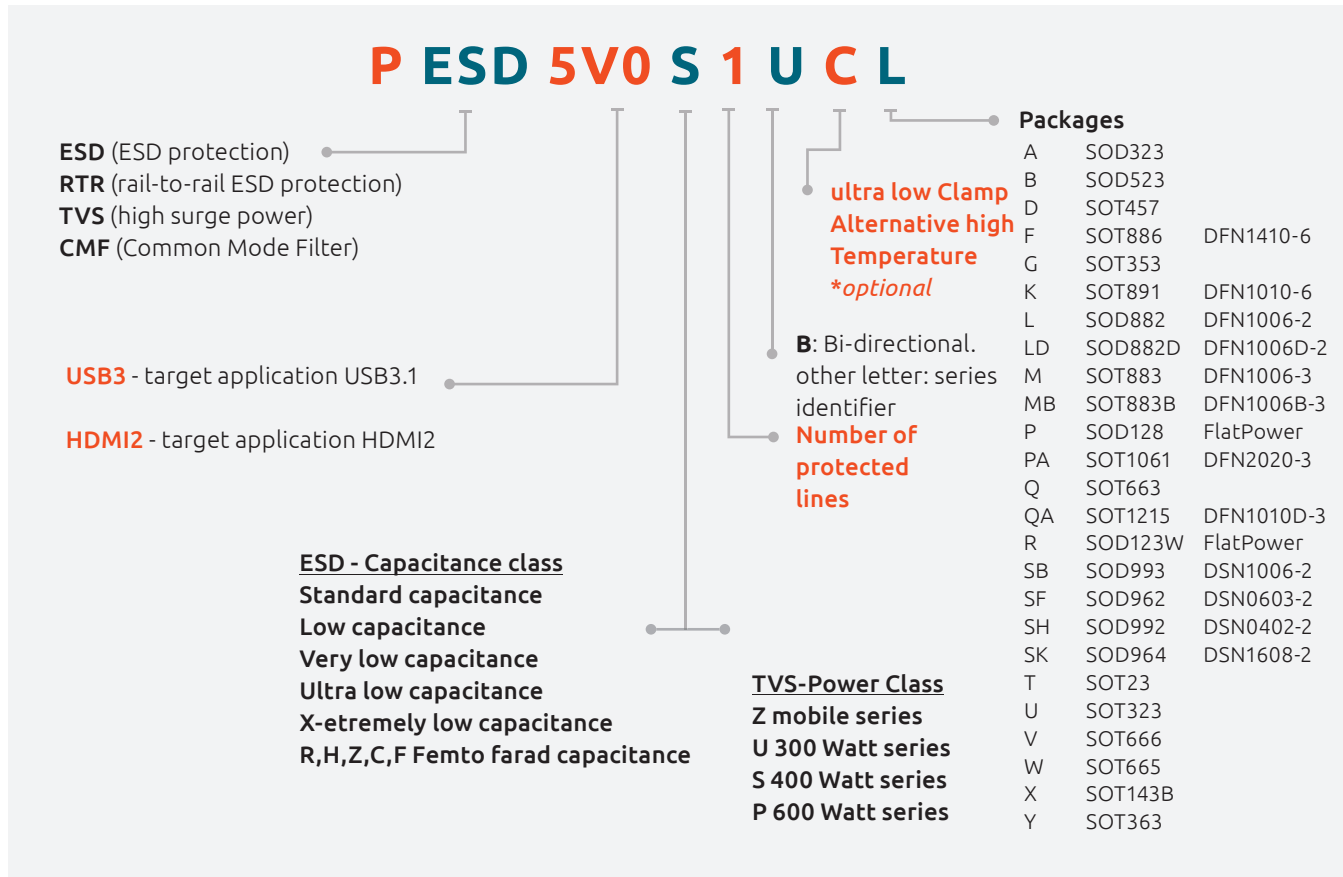
Power (W) (10 / 1000 µs waveform) ⁽¹⁾	V _{RWM} (V)	V _{BR} min (V) @ I _R	V _{BR} typ (V) @ I _R	V _{BR} max (V) @ I _R	I _R (mA)	V _{CL} max (V) @ I _{PP} ⁽¹⁾	I _{PP} (A) ⁽¹⁾	I _{RM} typ (µA) @ V _{RWM}	I _{RM} max (µA) @ V _{RWM}	Type (T _J max = 150 °C)	Type (T _J max = 185 °C)	Package	Size (mm)
600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

ESD protection, TVS, filtering and signal conditioning

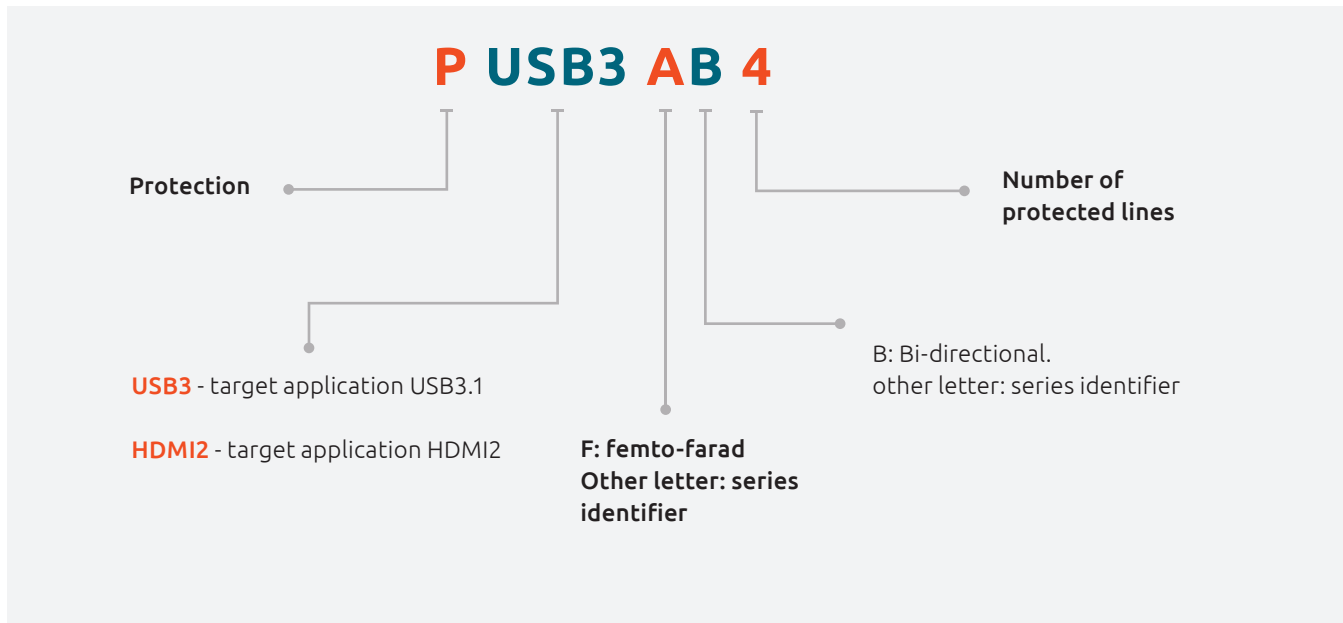
⁽¹⁾ 10 / 1000 µs according to IEC 61643-321

Nomenclatures

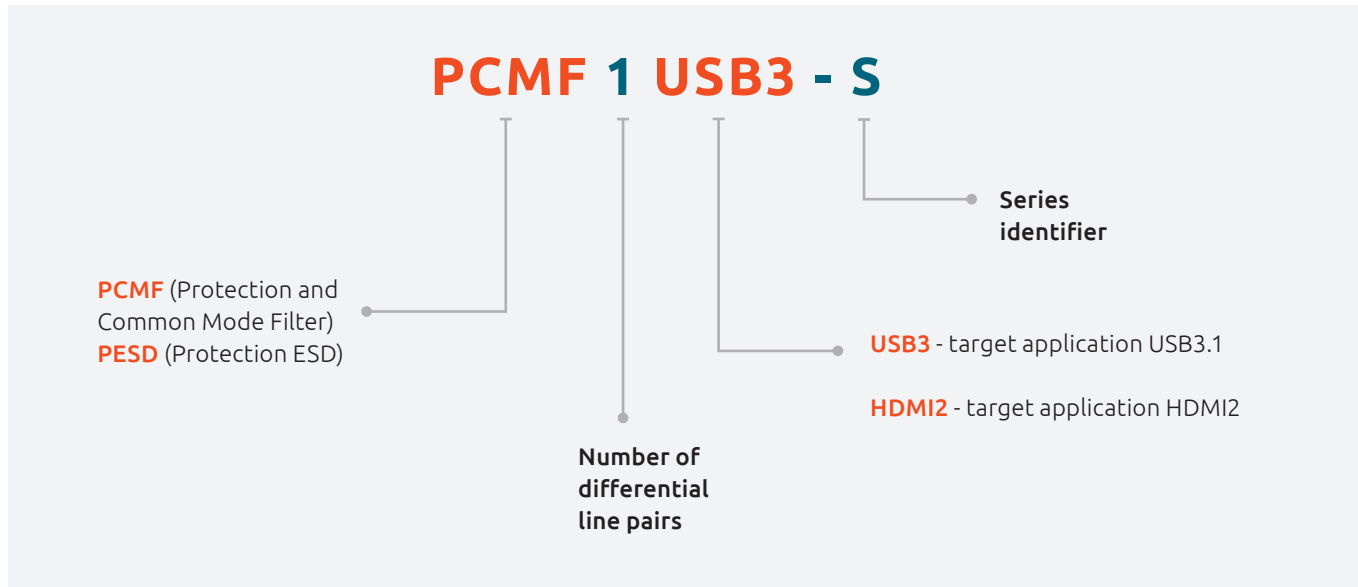
Nomenclature - protection devices



Nomenclature - application specific ESD protection



Nomenclature - common mode filter with ESD protection



ESD protection, TVS, filtering and signal conditioning



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Automotive grade MOSFETs nomenclature

BUK 7 Y 3R5 - 40 E

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

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

Voltage rating
BV_{DSS} rating

3R5 = R_{DS(on)} <3.5mΩ max at 25°C

30V N-channel automotive power MOSFETs

Package name	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ 10 V (mΩ)	R _{DS(on)} [max] @ 5 V (mΩ)	I _D [max] @ 25 °C (A)	R _{th(j-mb)} [max] (K/W)
D ² PAK (SOT404)	BUK962R8-30B	30	2.4	2.8	75	0.5
	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
	BUK9607-30B	30	5	7	75	0.95
	BUK7607-30B	30	7		75	0.95
DPAK (SOT428)	BUK9207-30B	30	5	7	75	0.95
	BUK7207-30B	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
LFPAK56D (SOT1205)	BUK7Y20-30B	30	20		39.5	2.53
	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
LFPAK33 (SOT1210)	BUK7K5R6-30E	30	5.6		40	2.36
	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

40V N-channel automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	BUK751R8-40E	40	1.8		120	0.43
	BUK752R3-40E	40	2.3		120	0.51
	BUK753R1-40E	40	3.1		100	0.64
	BUK758R3-40E	40	7.4		75	1.56
D ² PAK (SOT404)	BUK961R6-40E	40	1.4	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 ² PAK (SOT226)	BUK7E1R8-40E	40	1.8		120	0.43
	BUK7E1R9-40E	40	1.9		120	0.46
	BUK7E2R3-40E	40	2.3		120	0.51
	BUK7E3R1-40E	40	3.1		100	0.64
	BUK7E8R3-40E	40	7.4		75	1.56
LFPAK56; Power-SO8 (SOT669)	BUK9Y3R0-40E	40	2.5	3	100	0.77
	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
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

40V N-channel automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
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	

55V-60V N-channel automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	BUK953R5-60E	60	3.4	3.7	120	0.51
	BUK954R8-60E	60	4.5	4.9	100	0.64
D ² PAK (SOT404)	BUK7610-55AL	55	10		75	0.5
	BUK7610-55AL	55	10		75	0.5
	BUK9620-55A	55	18	20	54	1.2
	BUK7620-55A	55	20		54	1.2
	BUK9624-55A	55	22	24	46	1.4
	BUK7624-55A	55	24		47	1.4
	BUK9628-55A	55	25	28	42	1.5
	BUK7628-55A	55	28		42	1.5
	BUK9635-55A	55	32	35	34	1.8
	BUK7635-55A	55	35		35	1.7
	BUK9675-55A	55	68	75	20	2.4
BUK7675-55A	55	75		20.3	2.4	
D ² PAK (SOT404)	BUK962R5-60E	60	2.3	2.5	120	0.43
	BUK762R4-60E	60	2.4		120	0.43
	BUK962R8-60E	60	2.5	2.8	120	0.46
	BUK762R6-60E	60	2.6		120	0.46
	BUK963R3-60E	60	3	3.3	120	0.51
	BUK763R1-60E	60	3.1		120	0.51
	BUK964R2-60E	60	3.9	4.2	100	0.57
	BUK763R9-60E	60	3.9		100	0.57
	BUK964R8-60E	60	4.4	4.8	100	0.64
	BUK764R4-60E	60	4.5		100	0.64
	BUK966R5-60E	60	5.9	6.5	75	0.82
	BUK766R0-60E	60	6		75	0.82
	BUK969R0-60E	60	8	9	75	1.09
	BUK768R3-60E	60	8.3		75	1.09
	BUK9614-60E	60	13	14	56	1.56
	BUK7613-60E	60	13		58	1.56

55V-60V N-channel automotive power MOSFETs







Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
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
	BUK9277-55A	55	69	77	18	2.93
	BUK7277-55A	55	77		18	2.9
	BUK92150-55A	55	125	140	11	4.1
	BUK92150-55A	55	125	140	11	4.1
	BUK72150-55A	55	150		11	4.1
iPAK (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
LFP56; 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

55V-60V N-channel automotive power MOSFETs







Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205)	BUK7K12-60E	60	9.3			2.21
	BUK7K13-60E	60	10		40	2.36
	BUK9K12-60E	60	11	12	35	2.21
	BUK9K13-60E	60	12	13	40	2.36
	BUK7K17-60E	60	14		30	2.84
	BUK9K17-60E	60	16	17	26	2.84
	BUK7K35-60E	60	30		20.7	3.96
	BUK9K35-60E	60	32	35	22	3.96
	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			

75V-80V N-channel automotive power MOSFETs

Types in **bold red** are in development

Package name	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ 10 V (mΩ)	R _{DS(on)} [max] @ 5 V (mΩ)	I _D [max] @ 25 °C (A)	R _{th(j-mb)} [max] (K/W)	
TO-220AB (SOT78)		BUK753R8-80E	80	4		120	0.43
D ² PAK (SOT404)		BUK7613-75B	75	13		75	0.95
		BUK9616-75B	75	14	16	67	0.95
		BUK7623-75A	75	23		53	1.1
		BUK763R8-80E	80	3.8		120	0.43
		BUK964R2-80E	80	4	4.2	120	0.43
		BUK764R2-80E	80	4.2		120	0.46
		BUK964R7-80E	80	4.5	4.7	120	0.46
		BUK769R6-80E	80	9.6		75	0.82
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
		BUK9214-80E	80	14		63	
		BUK9230-80E	80	30		32	
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
		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)		BUK9K19-80E	80	17	19		2.21
		BUK9K21-80E	80	19	21		2.36
		BUK7K19-80E	80	19			2.21
		BUK9K29-80E	80	21	29		2.84
		BUK7K21-80E	80	21			2.36
		BUK7K29-80E	80	29			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

100V N-channel automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	 BUK755R4-100E	100	5.2		120	0.43
D ² PAK (SOT404)	 BUK765R0-100E	100	5		120	0.43
	BUK965R8-100E	100	5.6	5.8	120	0.43
	BUK768R1-100E	100	8.1		100	0.57
	BUK969R3-100E	100	8.9	9.3	100	0.57
	BUK7613-100E	100	13		72	0.82
	BUK9615-100E	100	14	15	66	0.82
	BUK7631-100E	100	31		34	1.56
	BUK9637-100E	100	36	37	31	1.56
	BUK9660-100A	100	58	60	26	1.4
	BUK7660-100A	100	60		26	1.4
	BUK9675-100A	100	72	75	23	1.5
	BUK7675-100A	100	75		23	1.5
	BUK96180-100A	100	173	180	11	2.8
DPAK (SOT428)	 BUK7227-100B	100	27		48	0.95
	BUK9230-100B	100	28	30	47	0.95
	BUK9240-100A	100	39	40	33	1.3
	BUK7240-100A	100	40		34	1.3
	BUK9275-100A	100	72	75	21.7	1.7
	BUK7275-100A	100	75		21.7	1.7
I ² PAK (SOT226)	 BUK7E5R2-100E	100	5.2		120	0.43
LFPAK56; Power-SO8 (SOT669)	 BUK9Y12-100E	100	12	12	85	0.63
	BUK7Y12-100E	100	12		85	0.63
	BUK9Y15-100E	100	15	15	69	0.77
	BUK7Y15-100E	100	15		68	0.77
	BUK9Y19-100E	100	18	19	56	0.9
LFPAK56; Power-SO8 (SOT669)	 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	

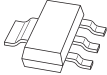






100V N-channel automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205)	BUK7K29-100E	100	25		29.5	2.21
	BUK9K29-100E	100	27	29	30	2.21
	BUK7K32-100E	100	28		29	2.36
	BUK9K32-100E	100	31	33	26	2.36
	BUK7K45-100E	100	38		21.4	2.84
	BUK9K45-100E	100	42	45	21	2.84
	BUK7K89-100E	100	83		13	3.96
	BUK9K89-100E	100	85	89	12.5	3.96
	BUK7K134-100E	100	121		9.8	4.68
	BUK9K134-100E	100	154	159	8.5	4.68
LFPAK33 (SOT1210)	BUK9M34-100E	100	34	34	29	1.89
	BUK9M43-100E	100	43	44	26	1.88
	BUK9M120-100E	100	119	120	11.5	3.4
	BUK9M156-100E	100	150	156	9.3	4.17
SOT223	BUK98180-100A/CU	100	173	180	4.6	
	BUK9875-100A/CU	101	72	75	7	

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	-	
		20	0.9	0.75	1.25	2	-	212	269	-	
			5.5	1	2.5	2	17	22	-	-	
			3.9	1	2.5	2	30	39	-	-	
	40	15	3.7	1	2.5	2	54	70	-	-	
			7	1.4	2.1	0.5	-	18	22	-	
		20	7	2.4	4	0.5	19	-	-	-	
			2.7	1	2.5	1	64	79	-	-	
	60	20	2.5	1	2.5	1	95	120	-	-	
			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	-	-	
	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	
		12	2.3	0.45	0.95	-	-	120	150	200	
			10.3	0.47	0.9	2	-	19	22	28	
			5.7	0.75	1.25	2	-	27	39	-	
	5.3		0.75	1.25	2	-	28	42	-		
	5		0.47	0.9	2	-	39	45	56		
	30	20	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	-	
	40	20	2.4	1	2.5	2	-	97	147	-	
			4.2	1	3	2	35	47	-	-	
	70	20	1.5	1	2.5	1	180	220	-	-	
			5	1.5	3	1	32	42	-	-	
				2.3	1	3	2	156	177	-	-

types in **bold** represent new products

SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	DFN2020MD-6 (SOT1220)	DFN2020D-6 (SOT1118D)	DFN1010D-3 (SOT1215)
						
6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65	1.1 x 1.0 x 0.37
1700	600	250	200	1250	1250	1000
	PMN28UNEA	PMV28UNEA	PMF63UNEA			
		PMV65UNEA		PMPB10XNEA		
				PMPB12UNEA		
		PMV20XNEA		PMPB20XNEA		
				PMPB13XNEA		
				PMPB29XNEA		
					PMDPB56XNEA	
			PMF250XNEA			
	PMN25ENEA	PMV25ENEA		PMPB25ENEA		
		PMV50ENEA		PMPB50ENEA		
		PMV100ENEA		PMPB100ENEA		
				PMPB20LNA		
		PMV65ENEA		PMPB20SNA		
		PMV130ENEA				
				PMPB40ENA		
	PMN55ENEA	PMV55ENEA		PMPB55ENEA		
				PMPB85ENEA		
	PMN120ENEA	PMV120ENEA				
	PMN230ENEA	PMV230ENEA				
		PMV450ENEA				
				PMPB95ENEA		
				PMPB215ENEA		
						PMXB360ENEA
PMT280ENEA		PMV280ENEA				
PMT560ENEA				PMPB15XPA		
		PMV27UPEA				
	PMN40UPEA					
		NX2301P				
		BSH205G2		PMPB20XPEA		
	PMN27XPEA					
	PMN30XPEA	PMV30XPEA		PMPB30XPEA		
				PMPB43XPEA		
	PMN42XPEA					
		PMV48XPA				
		PMV65XPEA				
	PMN70XPEA					
		PMV100XPEA		PMPB100XPEA		
	PMN50EPEA	PMV50EPEA		PMPB50EPEA		
		PMV250EPEA				
				PMPB45EPA		
PMT200EPEA						






Automotive MOSFETs

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




Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	30	8	0.4	0.6	1.1	2	-	1000	1400	2000	
			0.36	0.9	1.5	-	900	1000	-	-	
	60	20	0.36	0.48	1.6	1.5	1000	1100	1400	-	
			0.3	1	2.5	2	1000	1300	-	-	
			0.3	1	2.5	3	1100	1300	-	-	
			0.2	0.8	1.5	yes	2700	3000	4000	-	
P	30	8	0.23	0.6	1.1	2	-	2800	5300	-	
	50	20	0.2	1.1	2.1	1	5300	6000	-	-	

Small-signal automotive MOSFETs – Dual



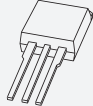


Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	20	8	0.8	0.5	0.95	2	-	380	620	1100	
			4	0.75	1.25	2	-	55	72	-	
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

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

types in **bold** represent new products

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	
PMGD175XNEA		PMDPB56XNEA
	PMDT670UPE	
PMGD290UCEA		

N-channel 25V-30V MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or }5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN1R1-30PL	30	1.3	1.6	120	118
	PSMN1R6-30PL	30	1.7	2.1	100	101
	PSMN1R8-30PL	30	1.8	2.3	100	83
	PSMN2R0-30PL	30	2.1	2.8	100	55
	PSMN2R7-30PL	30	2.7	3.6	100	32
	PSMN3R4-30PL	30	3.4	4.1	100	31
	PSMN4R3-30PL	30	4.3	6.2	100	19
	PSMN017-30PL	30	17	23	32	5.1
	PSMN022-30PL	30	22	34	30	4.4
D ² PAK (SOT404) 	PSMNR90-30BL	30	1	1.4	120	118
	PSMN1R5-30BLE	30	1.5	1.85	120	108
	PSMN1R8-30BL	30	1.8	2.1	100	83
	PSMN1R6-30BL	30	1.9	2.2	100	101
	PSMN2R0-30BL	30	2.1	2.9	100	55
	PSMN2R7-30BL	30	3	3.7	100	32
	PSMN3R4-30BL	30	3.3	3.8	100	31
	PSMN3R4-30BLE	30	3.4	5	120	37
	PSMN4R3-30BL	30	4.1	5.2	100	19
	PSMN017-30BL	30	17	23	32	5.1
	PSMN022-30BL	30	22	30	30	4.4
I ² PAK (SOT226) 	PSMN1R1-30EL	30	1.3	1.6	120	118
	PSMN017-30EL	30	17	23	32	5.1
SO8 (SOT96) 	PSMN006-20K	20	5	5	32	
	PHK31NQ03LT	30	4.4	5.6	30.4	33
	PSMN005-30K	30	5.5	8		34
	PHK18NQ03LT	30	8.9	13	20.3	10.6
	PHK12NQ03LT	30	11	14		
	PHKD13N03LT	30	20	26	10.4	
LFPAK56 (Power-SO8) 	PSMN0R7-25YLD	25	0.74	0.92	300	50.9
	PSMN0R9-25YLD	25	0.86	1.2	300	41.5
	PSMN0R9-25YLC	25	0.99	1.3	100	51
	PSMN1R0-25YLD	25	1.02	1.4	100	33.2
	PSMN1R1-25YLC	25	1.15	1.5	100	39
	PSMN1R2-25YLD	25	1.15	1.7	100	28
	PSMN1R2-25YL	25	1.2	1.9	100	50.6
	PSMN1R2-25YLC	25	1.3	1.7	100	31
	PSMN1R5-25YL	25	1.5	2.2	100	36
	PSMN1R7-25YLD	25	1.68	2.4	100	21.5
	PSMN2R0-25YLD	25	2	2.9	100	15.7
	PSMN2R2-25YLC	25	2.4	3.1	100	18

N-channel 25V-30V MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56 (Power-SO8)	PSMN2R9-25YLC	25	3.15	4.1	100	16
	PSMN4R0-25YLC	25	4.5	5.8	84	10.9
	PSMN5R4-25YLD	25	5.4	8.4	70	5.7
	PSMN6R0-25YLD	25	6.03	10	61	4.9
	PSMN6R0-25YLB	25	6.1	7.9	73	9
	PSMN6R5-25YLC	25	6.5	8.5	64	8.4
	PSMN0R9-30YLD	30	0.87	1.1	300	51
	PSMN1R0-30YLD	30	1.02	1.3	300	38.2
	PSMN1R0-30YLC	30	1.15	1.4	100	50
	PSMN1R2-30YLD	30	1.24	1.6	100	32
	PSMN1R2-30YLC	30	1.25	1.7	100	38
	PSMN1R3-30YL	30	1.3	2	100	46.6
	PSMN1R4-30YLD	30	1.42	1.9	100	27.6
	PSMN1R5-30YL	30	1.5	1.9	100	36.2
	PSMN1R5-30YLC	30	1.55	2.1	100	30
	PSMN1R7-30YL	30	1.7	2.1	100	36.2
	PSMN2R0-30YLD	30	2	2.5	100	21.8
	PSMN2R0-30YL	30	2	2.6	100	30
	PSMN2R0-30YLE	30	2	3.5	100	41
	PSMN2R2-30YLC	30	2.15	2.8	100	26
	PSMN2R4-30YLD	30	2.4	3.1	100	18
	PSMN2R5-30YL	30	2.4	3.2	100	27
	PSMN2R6-30YLC	30	2.8	3.7	100	18
	PSMN3R0-30YL	30	3	4	100	21
	PSMN3R0-30YLD	30	3	4	100	14.5
	PSMN3R5-30YL	30	3.5	4.6	100	19
	PSMN4R0-30YL	30	4	5.3	100	17.6
	PSMN4R0-30YLD	30	4	5.5	95	9.6
	PSMN4R1-30YLC	30	4.35	5.7	92	11
	PSMN5R0-30YL	30	5	6.7	91	14.1
	PSMN6R0-30YL	30	6	7.9	79	11
	PSMN6R0-30YLD	30	6	8.4	66	6.7
	PSMN6R1-30YLD	30	6.1	8.4	66	6.4
	PSMN6R0-30YLB	30	6.5	8.1	71	9
	PSMN7R0-30YL	30	7	9.1	76	10
	PSMN7R0-30YLC	30	7.1	8.9	61	7.9
	PSMN7R5-30YLD	30	7.5	10	51	5.8
	PSMN9R1-30YL	30	9.1	14	57	8.4
	PSMN9R5-30YLC	30	9.8	12	44	5
	PSMN013-30YLC	30	13	17	32	4
PSMN011-30YLC	30	11.6	15	37	4.9	
PSMN3R2-30YLC	30	3.5	4.6	100	14.2	
PSMN4R5-30YLC	30	4.8	6.1	84	9.6	







N-channel 25V-30V MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(total)}$ [typ] (nC)
LFPAK33 (SOT1210)	PSMN2R0-25MLD	25	2	3.1	70	15.9
	PSMN2R8-25MLC	25	2.8	3.8	70	16.3
	PSMN3R5-25MLD	25	3.51	5.4	70	8.7
	PSMN3R9-25MLC	25	4.15	5.6	70	9.7
	PSMN5R3-25MLD	25	5.3	8.4	70	5.9
	PSMN6R1-25MLD	25	6.13	10	60	4.9
	PSMN9R0-25MLC	25	8.65	11	55	5.4
	PSMN2R4-30MLD	30	2.4	3.2	70	16
	PSMN2R9-30MLC	30	2.95	3.8	70	16.7
	PSMN3R0-30MLC	30	3.15	4.1	70	16.1
	PSMN4R2-30MLD	30	4.3	5.7	70	9.2
	PSMN4R4-30MLC	30	4.65	6	70	10.6
	PSMN6R4-30MLD	30	6.4	8.3	66	6.5
	PSMN6R5-30MLD	30	6.5	8.6	65	6.4
	PSMN7R0-30MLC	30	7	9	67	8.2
	PSMN7R5-30MLD	30	7.6	10	57	5.8
	PSMN9R8-30MLC	30	9.8	12	50	5
	PSMN013-30MLC	30	13	17	39	3.7
	PSMN020-30MLC	30	18	27	31.8	4.6

N-channel 40V-60V MOSFETs

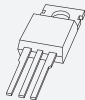
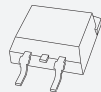
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(total)}$ [typ] (nC)
TO-220 (SOT78)	PSMN1R5-40PS	40	1.6		150	136
	PSMN1R9-40PL	40	1.7	1.9	150	230
	PSMN2R2-40PS	40	2.1		100	110
	PSMN2R1-40PL	40	2.2	2.6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

N-channel 40V-60V MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	PSMN1R1-40BS	40	1.3		120	136
	PSMN2R2-40BS	40	2.2		100	130
	PSMN2R8-40BS	40	2.9		100	71
	PSMN4R5-40BS	40	4.5		100	35
	PSMN8R0-40BS	40	7.6		77	21
	PSMN1R7-60BS	60	2		120	137
	PSMN3R0-60BS	60	3.2		100	130
	PSMN4R6-60BS	60	4.4		100	70.8
	PSMN7R6-60BS	60	7.8		92	38.7
	PSMN015-60BS	60	15		50	20.9
I ² PAK (SOT226) 	PSMN1R5-40ES	40	1.6		120	136
	PSMN2R0-60ES	60	2.2		120	137
	PSMN3R0-60ES	60	3		100	130
LFPAK56 (Power-SO8) 	PSMN1R0-40YLD	40	1.1	1.4	100	127
	PSMN1R4-40YLD	40	1.4	1.9	100	96
	PSMN1R6-40YLC	40	1.6	1.8	100	126
	PSMN1R8-40YLC	40	1.8	2.1	100	96
	PSMN2R6-40YS	40	2.8		100	63
	PSMN3R3-40YS	40	3.3		100	49
	PSMN4R0-40YS	40	4.2		100	38
	PSMN5R8-40YS	40	5.7		90	28.8
	PSMN8R3-40YS	40	8.6		70	20
	PSMN014-40YS	40	14		46	12
	PSMN4R0-60YS	60	4		100	56
	PSMN4R1-60YL	60	4.1	4.8	100	103
	PSMN5R2-60YL	60	5.2	6	100	78.4
	PSMN5R5-60YS	60	5.2		100	56
	PSMN5R6-60YL	60	5.6	7.2	100	66.8
	PSMN7R0-60YS	60	6.4		89	45
	PSMN7R5-60YL	60	7.5	8.7	86	60.6
	PSMN8R5-60YS	60	8		76	39
	PSMN012-60YS	60	11		59	28.4
	PSMN013-60YL	60	13	15	53	33.2
PSMN030-60YS	60	15		29	13	
PSMN017-60YS	60	16		44	20	
LFPAK33 (SOT1210) 	PSMN011-60ML	60	11	13	61	37.2
	PSMN011-60MS	60	11		61	23



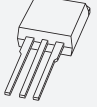
N-channel 75V-200V MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
	PSMN3R3-80PS	80	3.3		120	139
	PSMN3R5-80PS	80	3.5		120	139
	PSMN4R4-80PS	80	4.1		100	112
	PSMN4R3-80PS	80	4.3		120	111
	PSMN5R0-80PS	80	4.7		100	87
	PSMN6R5-80PS	80	6.9		100	71
	PSMN8R7-80PS	80	8.7		90	52
	PSMN012-80PS	80	11		74	36
	PSMN017-80PS	80	17		50	26
	PSMN3R3-100PSF	100	3.3			
	PSMN4R3-100PS	100	4.3		120	170
	PSMN4R5-100PSF	100	4.5			
	PSMN4R8-100PSE	100	4.8		120	196
	PSMN5R0-100PS	100	5		120	170
	PSMN5R6-100PS	100	5.6		100	141
	PSMN7R0-100PS	100	6.8		100	125
	PSMN7R0-100PSF	100	7			
	PSMN7R8-100PSE	100	7.8		100	128
	PSMN8R5-100PS	100	8.5		100	111
	PSMN8R5-100PSF	100	8.5			
	PSMN9R5-100PS	100	9.6		89	82
	PSMN013-100PS	100	13		68	59
	PSMN016-100PS	100	16		57	49
	PSMN018-100PSF	100	18			
	PSMN027-100PS	100	27		37	30
	PSMN034-100PS	100	35		32	23.8
	PSMN015-110P	110	15		75	90
	PHP27NQ11T	110	50		27.6	30
	PHP23NQ11T	110	70		23	22
	PHP18NQ11T	110	90		18	21
	PSMN6R3-120PS	120	6.7		70	207.1
	PSMN7R8-120PS	120	7.9		70	167
	PSMN030-150P	150	30		55.5	98
PSMN035-150P	150	35		50	79	
PHP30NQ15T	150	63		29	55	
PHP28NQ15T	150	65		28.5	24	
PSMN057-200P	200	57		39	96	
PSMN070-200P	200	70		35	77	
PHP33NQ20T	200	77		32.7	32.2	
PHP20NQ20T	200	130		20	65	
PHP9NQ20T	200	400		8.7	24	
	PSMN2R8-80BS	80	3		120	139
	PSMN3R3-80BS	80	3.5		120	111
	PSMN4R4-80BS	80	4.5		100	125
	PSMN5R0-80BS	80	5.1		100	101

N-channel 75V-200V MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	PSMN6R5-80BS	80	6.9		100	71
	PSMN8R7-80BS	80	8.7		90	52
	PSMN012-80BS	80	11		74	36
	PSMN017-80BS	80	17		50	26
	PSMN050-80BS	80	46		22	11
	PSMN3R3-100BSF	100	3.3			
	PSMN3R8-100BS	100	3.9		120	170
	PSMN4R5-100BSF	100	4.5			
	PSMN4R8-100BSE	100	4.8		120	196
	PSMN5R6-100BS	100	5.6		100	141
	PSMN7R0-100BS	100	6.8		100	125
	PSMN7R0-100BSF	100	7			
	PSMN7R6-100BSE	100	7.6		75	128
	PSMN8R5-100BSF	100	8.5			
	PSMN9R5-100BS	100	9.6		89	82
	PSMN013-100BS	100	14		68	59
	PSMN016-100BS	100	16		57	49
	PSMN018-100BSF	100	18			
	PSMN027-100BS	100	27		37	30
	PSMN034-100BS	100	35		32	23.8
	PSMN030-150B	150	30		55.5	98
PSMN035-150B	150	35		50	79	
PHB45NQ15T	150	42		45.1	32	
PSMN057-200B	200	57		39	96	
PSMN070-200B	200	70		35	77	
PHB33NQ20T	200	77		32.7	32.2	
PHB20NQ20T	200	130		20	65	
DPAK (SOT428) 	PSMN063-150D	150	63		29	55
	PSMN130-200D	200	130		20	65
	PHD9NQ20T	200	400		8.7	24
I ² PAK (SOT226) 	PSMN3R3-80ES	80	3.3		120	139
	PSMN3R5-80ES	80	3.5		120	139
	PSMN4R3-80ES	80	4.3		120	111
	PSMN3R3-100ESF	100	3.3			
	PSMN4R3-100ES	100	4.3		120	170
	PSMN4R5-100ESF	100	4.5			
	PSMN5R0-100ES	100	5		120	170
	PSMN7R0-100ES	100	6.8		100	125
	PSMN7R0-100ESF	100	7			
	PSMN8R5-100ES	100	8.5		100	111
	PSMN8R5-100ESF	100	8.5			
	PSMN013-100ES	100	14		68	59
	PSMN018-100ESF	100	18			
	PSMN6R3-120ES	120	6.7		70	207.1
PSMN7R8-120ES	120	7.9		70	167	

N-channel 75V-200V MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
SO8 (SOT96)	PSMN038-100K	100	38			43
	PHK5NQ15T	150	75		5	29
	PSMN085-150K	150	85			40
	PSMN165-200K	200	165			40
LFPAK56 (Power-SO8)	PSMN8R0-80YL	80	8	8.5	100	104
	PSMN8R2-80YS	80	8.5		82	55
	PSMN010-80YL	80	10	11	84	84.7
	PSMN011-80YS	80	11		67	45
	PSMN013-80YS	80	12.9		60	37
	PSMN014-80YL	80	14	15	62	56.9
	PSMN018-80YS	80	18		45	26
	PSMN025-80YL	80	25	27	37	34.3
	PSMN026-80YS	80	28		34	20
	PSMN041-80YL	80	41	45	25	21.9
	PSMN045-80YS	80	45		24	12.5
	PSMN5R6-100YSF	100	5.6		158	63
	PSMN6R9-100YSF	100	6.9		128	51
	PSMN8R7-100YSF	100	8.7		100	39
	PSMN012-100YL	100	12	12	85	118
	PSMN012-100YS	100	12		60	64
	PSMN013-100YSE	100	13		82	75
	PSMN015-100YL	100	15	15	69	86.3
	PSMN016-100YS	100	16		51	54
	PSMN019-100YL	100	19	19	56	72.4
	PSMN021-100YL	100	21	22	49	65.6
	PSMN020-100YS	100	21		43	41
	PSMN028-100YS	100	28		42	33
	PSMN038-100YL	100	38	38	30	39.2
	PSMN039-100YS	100	39		28.1	23
	PSMN069-100YS	100	72		17	14
PSMN059-150Y	150	59		43	27.9	
PSMN102-200Y	200	102		21.5	30.7	
LFPAK33 (SOT1210)	PSMN040-100MSE	100	37		30	30
	PSMN075-100MSE	100	71		18	16.4
SOT873	PML260SN	200	294		8.8	13.3
	PML340SN	220	386		7.3	13.2

P-channel MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
SO8 (SOT96-1)	PMK30EP	-30	19	30	-14.9	50
	PMK35EP	-30	19	35	-14.9	42
	PHP225	-30	250	400	-	10
	PMK50XP	-20	-	50	-7.9	10
	PHK04P02T	-16	-	120	-4.66	7.2

Dual MOSFETs

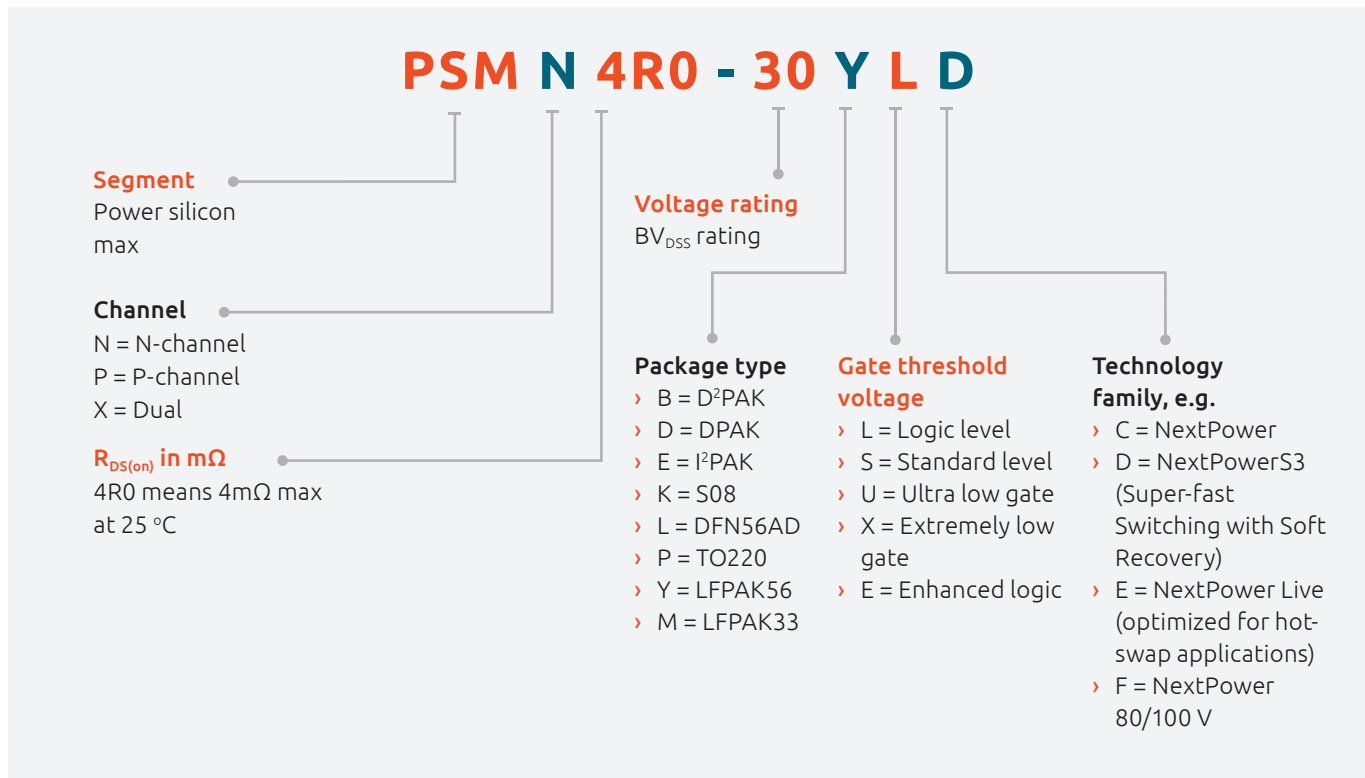
Types in **bold red** are in development

Package	Type number	Channel	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
DFN56AD (SOT1254)	PSMX3009-25LLD	N	25	2.6	3.5	50	12.6
				0.72	1	50	38.3
	PSMX3510-30LLD	N	30	3	4.5	50	13.7
				0.82	1.2	50	39.2
SO8 (SOT96)	PHKD3NQ10T	N	100	90		3	21
	PHKD6N02LT	N	20	20		10.9	
	PHN203	N	30	30	55	6.3	
	PHN210T	N	30	100	200	3.4	



Complementary MOSFETs

Package	Products	Channel	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
SO8 (SOT96)	PHC2300	N	300	6000	0.34	6.24
		P	-300	17000	-0.235	2.14
SO8 (SOT96)	PHC21025	N	30	100	3.5	10
		P	-30	250	-2.3	10



Power MOSFETs nomenclature



Small-signal MOSFETs in DFN1006 and DFN1006B packages




Package											DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)					
																	
Size (mm)											1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37					
Ptot (mW)											250	250					
Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _C typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =							
										10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V		
N-channel	20	8	1.9	0.45	0.95	5.3	16	1.6	2	-	120	160	210	270	-	PMZ130UNE	
			1.6	0.45	0.95	5.3	16	1.6	2	-	170	200	240	300	-		PMZB150UNE
			1	0.5	0.95	6	86	0.45	2	-	270	360	470	600	-	PMZ290UNE2	PMZB290UNE2
			0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210	PMZ600UNE	PMZB600UNE
	30	8	1.5	0.45	0.95	5	17	1.6	2	-	210	240	270	300	-	PMZ200UNE	PMZB200UNE
			1	0.45	0.95	4	12	0.8	2	-	390	460	30	610	-	PMZ390UNE	PMZB390UNE
			0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-	PMZ550UNE	PMZB550UNE
	60	20	0.45	1.1	2.1	5	12	0.5	2	1000	1300	-	-	-	-	2N700BKM	2N7002BKMB
			0.35	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-	NX7002BKM	NX7002BKMB
P-channel	20	8	1.4	0.45	0.95	4	26	1.3	1.8	-	330	420	520	-	-	PMZ350UPE	PMZB350UPE
			0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500	PMZ950UPE	PMZB950UPE
	30	8	1	0.45	0.95	2.9	22	1.45	2	-	430	470	750	950	-	PMZ320UPE	PMZB320UPE
			0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-	PMZ1200UPE	PMZB1200UPE
	50	20	0.23	1.1	2.1	13	48	0.26	1	4500	5700	-	-	-	-	BSS84AKM	BSS84AKMB

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



Package												DFN1010D-3 (SOT1215)	DFN1010B-6 (SOT1216)						
																			
Size (mm)												1.1 x 1.0 x 0.37	1.1 x 1.0 x 0.37						
P _{tot} (mW)												1000	350						
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =								
											10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V			
Single	N-channel	12	8	3.2	0.4	0.9	6	18	6.6	1	-	34	39	46	50	121	PMXB40UNE		
		20	8	3.2	0.5	0.9	6	17	5.7	1	-	42	48	56	64	-	PMXB43UNE		
		30	20	3.2	1	2	3	11	3.6	-	49	56	-	-	-	-	-	PMXB56EN	
				3.2	1	2.5	3	11	6	1	44	56	-	-	-	-	-	PMXB65ENE	
	80	20	1.1	1.3	2.7	2	9	3	2	345	390	-	-	-	-	-	PMXB360ENEA		
	P-channel	12	8	3.2	0.4	1	6.2	27	6.7	1.5	-	59	78	120	198	880	PMXB65UPE		
		20	8	2.9	0.4	1	6	29	6.8	1	-	69	86	130	205	950	PMXB75UPE		
				1.2	0.45	0.95	3	18	1.25	1.5	-	350	450	600	760	1200	PMXB350UPE		
30		20	2.4	1	2.5	4	16	6.2	1	100	125	-	-	-	-	-	PMXB120EPE		
Dual	N-ch	20	8	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMDXB600UNE	
		30	8	0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMDXB550UNE	
		60	20	0.26	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-	-		NX7002BKXB
	P-ch	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500			PMDXB950UPE
		30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-			PMDXB1200UPE
Complementary	N	20	8	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210			
	P	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500			PMCXB900UE
	N	30	8	0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-			PMCXB1000UE
	P	30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-			PMCXB1000UE

Small-signal low-leakage MOSFETs

types in **bold** represent new products



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

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

Package															DFN2020MD-6 (SOT1220)	DFN2020-6 (SOT1118)		
																		
Size (mm)															2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65		
P _{tot} (mW)															1250	1250		
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =							
											10 V	4.5 V	2.5 V	1.8 V				
Single	N-channel	20	8	11.3	0.4	1	9	26	8.8	2	-	14	17	21	PMPB12UNE			
			12	12.9	0.4	0.9	13	54	23	2.2	-	10	12	16	PMPB10XNE			
				5.9	0.75	1.25	16	49	31	2	-	14	20	-	PMPB20XNEA			
				10.4	0.4	0.9	9	31	13.4	-	-	18	21	23	PMPB15XN			
				10.1	0.4	0.9	9	31	11.6	2.1	-	19	23	31	PMPB23XNE			
		30	12	11.3	0.4	0.9	12	54	24	2.2	-	13	14	17	PMPB13XNE			
				5	0.4	0.9	8	33	12.4	2.1	-	28	32	37	PMPB29XNE			
			20	5.5	0.45	1.2	6	21	5.1	-	-	37	55	-	PMPB33XN			
				13	1	2	9	17	13.7	-	12	14	-	-	PMPB11EN			
				10.4	1	2	9	9	7.2	-	16.5	20.5	-	-	PMPB20EN			
	60	20	4	1.3	2.7	4.5	13.5	7.5	1	42	48	-	-	PMPB55ENEAE				
			3	1.3	2.7	4	10.5	6.2	2.7	72	85	-	-	PMPB85ENEAE				
		80	20	2.8	1.3	2.7	5	15	9.9	2.8	80	92	-	-	PMPB95ENEAE			
				1.9	1.3	2.7	3.5	9.5	4.8	2	175	195	-	-	PMPB215ENEAE			
	P-channel	12	12	11.8	0.47	0.9	18	85	67	-	-	15	17	21	PMPB15XP			
				20	12	10.3	0.47	0.9	16	43	28.8	-	-	19	21	27	PMPB19XP	
						10.3	0.47	0.9	13	92	30	2.4	-	19	22	28	PMPB20XPE	
					5	5	0.47	0.9	12	91	30	2.3	-	28	31	36	PMPB29XPE	
						7.9	0.47	0.9	12	62	15	-	-	30	35	45	PMPB33XP	
		30	12	5	0.47	0.9	15	28	14	-	-	47	54	74	PMPB47XP			
20				8.8	1	2.5	10	28	30	-	24	32	-	-	PMPB27EP			
			6.8	1	2.5	7.4	27	17	-	40	55	-	-	PMPB48EP				
Dual			N-ch	20	12	5.3	0.4	0.9	4	40	14.4	-	-	32	40	60		PMDPB30XN
	30	12				3.1	0.75	1.25	9	19	2.9	2	-	55	72	-	PMDPB56XNEA	
				3.1	0.5	1.5	6	18	1.65	1.8	-	95	130	-	PMDPB95XNE2			
	P-channel	20	8	4.5	0.45	0.95	7	41	6.3	2	-	58	74	97		PMDPB58UPE		
				3.7	0.45	0.95	6	47	5.4	2	-	82	107	142		PMDPB85UPE		
			12	4.5	0.47	0.9	4	135	16.5	-	-	55	75	110		PMDPB55XP		
				4.2	0.75	1.25	7	33	5	2	-	66	98			PMDPB70XPE		
		30	12	3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMDPB80XP		
				3.8	0.45	1	3	112	5.2	-	-	70	89	-		PMDPB70XP		
MOSFET-Schottky	P-channel	20	12	3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMFPB8032XP		
Pre-biased NPN	P	30	12	3.4	0.45	1	3	112	5.2	-	-	85	105	-		PMC85XP		
Complementary	N	20	12	5.3	0.4	0.9	4	40	14.4	-	-	26	33	50		PMCPB5530X		
	P	20	12	4.5	0.4	0.9	4	40	8.1	-	-	55	75	110				

Small-signal MOSFETs in WLCSP4 and WLCSP6 packages

types in **bold** represent new products

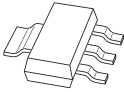





Package														WLCSP4	WLCSP6	
																
Size (mm)														0.78 x 0.78 x 0.35	1.48 x 0.98 x 0.35	
P _{tot} (mW)														1300	1300	
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th) min} (V)	V _{GS(th) max} (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
											4.5 V	2.5 V	1.8 V	1.5 V		
	N	12	8	6	0.4	0.9	6.3	30	6	2	36	46	60	86	PMCM4401VNE	
		20	8	4.3	0.4	0.9				2	42	47	67	82	PMCM4401UNE	
	P	12	8	4.9	0.4	0.9	4.8	25.1	6.8	2	55	77	110	-	PMCM4401VPE	
		20	8	4	0.4	0.9	4	31	5.9	2	75	95	130	-	PMCM4401UPE	
	3.6			0.4	0.9				2	65	85	120		PMCM4402UPE		
	N	12	8	9.6	0.4	0.9	10.8	97.5	16.1	2	15	18	22	30		PMCM6501VNE
		20	8	6.8	0.4	0.9				2	18	20	25	29		PMCM6501UNE
	P	12	8	8.2	0.4	0.9	8	72	19.6	2	19	25	37	-		PMCM6501VPE
		20	8	5.8	0.4	0.9				2	24	32	46	-		PMCM6501UPE
	Common-drain	N	12	8	4.9	0.4	0.9				2	32	46	64	-	
20			8	4.2	0.4	0.9				2	42	60	75	-		PMCM6501CUNE

Small-signal MOSFETs

Small-signal MOSFETs single (N-channel)

Package													
Size (mm)													
P _{tot} (mW)													
V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =				
									10 V	4.5 V	2.5 V	1.8 V	
20	8	4.7	0.45	1	8.2	39.5	6.2	2	-	24	29	40	
		1.9	0.4	1	8	31	2.2	2	-	63	77	114	
		2.2	0.4	1	6	21	2.6	2	-	64	78	110	
		1.9	0.45	0.95	5.3	16	1.6	2	-	120	155	195	
		1.6	0.45	0.95	5.3	16	1.6	2	-	155	190	235	
		1	0.5	0.95	6	86	0.45	2	-	270	360	470	
	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845		
	12	6.3	0.75	1.25	16	44	9.9	2	-	16	24	-	
		8.6	0.47	0.9	7	135	7.7	-	-	15	18	22	
		9.1	0.4	0.9	9	31	12	1	-	15	19	22	
5.4		0.4	0.9	7	35	6.2	-	-	24	30	40		
6	0.4	0.9	5.5	22	5.1	1	-	28	38	42			
30	8	1.5	0.45	0.95	5	17	1.6	2	-	210	240	270	
		1	0.45	0.95	4	12	0.8	2	-	390	460	530	
		0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	
		0.4	0.6	1.1	26	88	0.52	2	-	1000	1400	2000	
	12	7.2	0.4	0.9	8	33	12.4	2	-	19	22	17	
		5.7	0.4	0.9	9	34	7	-	-	33	42	54	
		4.4	0.4	0.9	9	34	7	-	-	36	43	56	
	20	0.9	0.5	1.5	8	11	0.74	2	-	234	324	-	
		7.6	1	2	9	9	7.2	-	17	21	-	-	
		5.5	1	2.5	8	33	12.6	2	17	22	-	-	
3.9		1	2.5	6.3	14.1	6	2	30	39	-	-		
3.1		1	2.5	18	78	6.5	-	28	37	-	-		
4.5		1	2.5	3	11	6	1	30	44	-	-		
5.1	1	2	3	11	3.6	-	35	43	-	-			
2.1	1	2.5	3	15	2.6	2	70	90	-	-			
0.18	0.8	1.5	10	51	0.34	-	2700	3000	4000	-			
40	20	2.7	1	2.5	6	12	4.1	1	64	79	-	-	
		2.5	1	2.5	14	14	2.4	1	95	120	-	-	
55	10	0.3	0.4	1.3	4	11	1	3	-	2300	2400	3100	
60	20	3.1	1.3	2.7	9	33	12.7	2	46	52	-	-	
		2.1	1.3	2.7	6.4	15.9	5.9	2	96	108	-	-	
		1.5	1.3	2.7	6.3	13	3.9	2	176	196	-	-	
		0.8	1.3	2.7	5.3	10.2	2.4	2	300	332	-	-	
		0.19	0.8	1.5	6	11	0.33	yes	2800	3500	4500	-	
		0.27	0.5	1.5	7.9	12.5	0.49	2	2100	2200	2600	-	
		0.1	0.6	1.4	2	5		2	2800	3800	-	-	
		0.19	1.1	2.1	12	34	0.33	yes	3000	3700	-	-	
0.27	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-			
100	20	1.5	1.3	2.7	4.8	9.3	4.5	1	285	300	-	-	
		1.1	1.3	2.7	5.7	10.2	2.9	1	527	555	-	-	

types in **bold** represent new products

SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	DFN1006 (SOT883)	DFN1006B (SOT883B)
					
6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
1700	600	250	200	250	250
	PMN28UNEA	PMV28UNEA			
			PMF63UNE		
		PMV65UNE			
				PMZ130UNE	
					PMZB150UNE
				PMZ290UNE2	PMZB290UNE2
				PMZ600UNE	PMZB600UNE
		PMV20XNEA			
		PMV16XN			
	PMN16XNE				
		PMV30UN2			
	PMN30UNE				
				PMZ200UNE	PMZB200UNE
				PMZ390UNE	PMZB390UNE
				PMZ550UNE	PMZB550UNE
		NX3008NBK	NX3008NBKW		
		PMV20XNE			
	PMN30UN				
		PMV40UN2			
		PMV20EN			
	PMN25ENEA	PMV25ENEA			
		PMV50ENEA			
		PMV37EN2			
	PMN40ENE	PMV42ENE			
		PMV45EN2			
		PMV90ENE			
		NX3020NAK	NX3020NAKW		
		PMV65ENEA			
		PMV130ENEA			
		BSH111BK			
	PMN55ENEA	PMV55ENEA			
	PMN120ENEA	PMV120ENEA			
	PMN230ENEA	PMV230ENEA			
		PMV450ENEA			
		NX138AK	NX138AKW		
		NX138BK	NX138BKW		
		BSN20BK			
		NX7002AK	NX7002AKW		
		NX7002BK	NX7002BKW	NX7002BKM	NX7002BKMB
PMT280ENEA		PMV280ENEA			
PMT560ENEA					

Small-signal MOSFETs

Small-signal MOSFETs single (P-channel)








Package													
Size (mm)													
P _{tot} (mW)													
V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =				
									10 V	4.5 V	2.5 V	1.8 V	
20	8	5.6	0.45	0.95	11	83	14.7	2	-	27	38	50	
		5.3	0.45	0.95	41	122	14.7	2	-	30	38	51	
		5.4	0.45	0.95	34	128	15.5	-	-	34	42	57	
		4	0.47	0.9	400	2180	10.5	3	-	50	57	70	
		2	0.5	1.1	7	50	6	-	-	100	155	210	
		1.2	0.45	0.95	33	52	3.3	-	-	170	210	280	
		2.3	0.45	0.95	5	43	3.7	-	-	120	150	200	
		1.4	0.45	0.95	9	35	1.3	1.8	-	330	420	520	
	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700		
	12	4.5	0.75	1.25	7.9	59	11	2	-	28	42	-	
		6.8	0.47	0.9	12	62	15	-	-	30	35	48	
		5.7	0.75	1.25	44	60	11.5	2	-	41	56	-	
		4.1/3.5	0.75	1.25	24	84	8.5	-	-	48	71	-	
		4.4	0.47	0.9	7	135	7.7	-	-	48	60	82	
		4.7	0.47	0.9	5.1	141	8.5	-	-	50	64	88	
		3.9	0.55	0.95	28	101	7.6	-	-	65	90	-	
		3.3	0.75	1.25	7	36	5	2	-	67	99	-	
		4.1	0.75	1.25	20	57	5.2	2	-	70	101	-	
		3.9	0.47	0.9	6	120	5	-	-	72	88	110	
		3.2	0.47	0.9	6	120	5	-	-	77	95	120	
2		0.65	1.15	48	64	4.8	-	-	90	125	-		
2.3	0.7	1.3	5.3	36	3.4	2	-	100	155	-			
1	0.65	1.15	26	44	2.6	-	-	175	240	-			
30	8	1	0.45	0.95	2.9	22	1.45	2	-	400	480	600	
		0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	
		0.23	0.6	1.1	49	103	0.55	2	-	2800	5300	-	
	20	5.3	1	3	6	36	12.8	2	35	49	-	-	
		4.2	1	3	6	36	12.8	2	35	49	-	-	
4.4	1	3	5	19	6.5	2	60	96	-	-			
40	20	1.8	1	2.5	10	40	4.7	1	180	220	-	-	
50	20	0.2	1.1	2.1	24	73	0.26	1	5300	6000	-	-	
70	20	2.4	1	3	6	42	10.6	2	130	150	-	-	

Small-signal MOSFET-Schottky combination

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








types in **bold** represent new products

SOT223	SOT457 (SC-74)	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
						
6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
1700	600	250	300	200	250	250
		PMV27UPE				
		PMV33UPE				
		PMV32UP				
		PMV50UPE				
		NX2301P				
		PMV160UP				
		B5H205G2				
					PMZ350UPE	PMZB350UPE
					PMZ950UPE	PMZB950UPE
	PMN30XPEA	PMV30XPEA				
	PMN30XP					
	PMN48XP	PMV48XP				
		PMV50XP				
	PMN52XP					
		PMV65XP				
		PMV65XPE				
	PMN70XPE					
	PMN70XP					
		PMV75UP				
			PMG85XP			
		PMV100XPEA				
				PMF170XP		
					PMZ320UPE	PMZB320UPE
					PMZ1200UPE	PMZB1200UPE
		NX3008PBK				
		PMV35EPE				
	PMN50EPEA					
	PMN70EPE					
		PMV250EPEA				
		B5S84AK		B5S84AKW	B5S84AKM	B5S84AKMB
PMT200EPEA						





Small-signal MOSFETs dual

Package											
Size (mm)											
P _{tot} (mW)											
Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protection (kV)		
N-channel	20	8	0.8	0.5	0.95	10	117	0.45	2		
			0.6	0.45	0.95	5.6	19	0.4	1		
	30	8	5.3	0.4	0.9	4	40	14.4	-		
			0.59	0.45	0.95	4	12	0.6	2		
		12	0.35	0.6	1.1	26	88	0.52	2		
			3.1	0.75	1.25	9	19	2.9	2		
		20	3.1	0.5	1.5	6	18	1.65	1.8		
			1	0.5	1.5	6.5	14	0.7	2		
	60	20	0.18	0.8	1.5	10	51	0.34	yes		
			0.18	0.8	1.5	6	11	0.33	yes		
			0.26	0.5	1.5	7.9	12.5	0.49	2		
			0.17	1.1	2.1	12	34	0.33	yes		
P-channel	20	8	0.55	0.5	1.3	48	152	0.76	2		
			4.5	0.45	0.95	7	41	6.3	2		
			0.5	0.45	0.95	2.3	13.5	1.19	1		
		12	3.7	0.45	0.95	6	47	5.4	2		
			4.5	0.47	0.9	4	135	16.5	-		
			4.2	0.75	1	7	33	5	2		
	30	8	3.7	0.4	1	6	120	5.7	-		
			0.41	0.45	0.95	3	14	0.7	2		
			0.2	0.6	1.1	49	103	0.55	2		
		12	3.8	0.45	1	3	112	5.2	-		
			50	0.16	1.1	2.1	24	73	0.26	1	

Small-signal MOSFETs complementary

Package	Type	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	
 SOT666 (1.6 x 1.2 x 0.55)	NX1029X	N	60	20	0.33	1.1	2.1	
		P	50	20	0.17	1.1	2.1	
	NX3008CBKV	N	30	8	0.4	0.6	1.1	
		P	30	8	0.22	0.6	1.1	
 PMDT290UCE	N	20	8	0.8	0.5	0.95		
	P	20	8	0.55	0.5	1.3		
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	NX3008CBKS	N	30	8	0.35	0.6	1.1	
		P	30	8	0.2	0.6	1.1	
 DFN1010B-6 (1.1 x 1.0 x 0.37)	PMCXB900UE	N	20	8	0.6	0.45	0.95	
		P	20	8	0.5	0.45	0.95	
	PMCXB1000UE	N	30	8	0.59	0.45	0.95	
		P	30	8	0.41	0.45	0.95	
 DFN2020-6 (2.0 x 2.0 x 0.65)	PMCPB5530X	N	20	12	5.3	0.4	0.9	
		P	20	12	4.5	0.47	0.9	

types in **bold** represent new products

					SOT363 (SC-88)	SOT666	DFN2020-6 (SOT1118)	DFN1010B-6 (SOT1216)		
										
					2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.65	1.0 x 1.0 x 0.37		
					300	300	1250	350		
R _{DS(on)} typ (mΩ) @ V _{GS} =										
					10 V	4.5 V	2.5 V	1.8 V		
					-	290	420	600		
					-	470	620	845		
					-	32	40	60		
					-	550	660	770		
					-	1000	1400	2000		
					-	55	72	-		
					-	95	130	-		
					-	170	240	-		
					2700	3000	4000	-		
					2800	3500	4500	-		
					2100	2200	2600	-		
					3000	3700	-	-		
					2200	2500	-	-		
					-	670	1200	1800		
					-	58	74	97		
					-	1020	1270	1700		
					-	82	107	142		
					-	55	75	110		
					-	66	98	-		
					-	80	95	120		
					-	1200	1700	2100		
					-	2800	5300	-		
					-	70	89	-		
					4500	5700	-	-		

types in **bold** represent new products

	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
					10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V
	11	19	0.5	2	1000	1300	-	-	-	-
	24	73	0.26	1	4500	5100	-	-	-	-
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	10	117	0.45	2	-	290	420	600	-	-
	48	152	0.76	2	-	670	1200	1800	-	-
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	5.6	19	0.4	1	-	470	620	845	1125	2210
	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500
	4	12	0.6	2	-	550	660	770	890	-
	3	14	0.7	2	-	1200	1700	2100	3000	-
	19	56	14.4	-	-	26	33	50	-	-
	18	56	16.5	-	-	55	75	110	-	-



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Mini 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)	SOT996-2 (GD)
74AHC1G17-Q100	Single buffer	2.0 - 5.5	± 8	3,1	-40~125	•						
74AHCT1G17-Q100	Single buffer; TTL-enabled	4.5 - 5.5	± 8	3,4	-40~125	•						
74LVC2G126-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2,4	-40~125					•	•	

Mini Digital Decoders Demultiplexers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)
74LVC1G19-Q100	1-to-2 demultiplexer	1.65 - 5.5	± 32	1,8	-40~125	•	

Mini 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)	SOT996-2 (GD)
74AUP1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	± 1.9	8,1	-40~125						•	
74LVC1G79-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2,2	-40~125	•	•					

Mini 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)	SOT996-2 (GD)
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					•	•	•
74LVC1G10-Q100	Single 2-input NAND gate	1.65 - 5.5	± 32	2,6	-40~125			•				
74LVC2G00-Q100	Dual 2-input NAND gate	1.65 - 5.5	± 32	2,2	-40~125						•	

Mini 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)	SOT996-2 (GD)
74AXP1T57-Q100	Dual-supply translating configurable multiple function gate	0.7 - 2.75	1.2 - 5.5	± 12	-40~125				•	
74AXP2T08-Q100	Dual-supply translating dual 2-input AND gate	0.7 - 2.75	1.2 - 5.5	± 12	-40~125			•		

Standard 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)
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	SP16T-Z	4.5 - 5.5	225	25	-40~125							•	•	•

Standard Bus switches

Type number	Description	Features				Package (suffix)								
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} (°C)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT519-1 (DS)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)
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								•	•

Standard Digital multiplexers

Type number	Description	Features				Package (suffix)			
		V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT338-1 (DB)	SOT403-1 (PW)	SOT763-1 (BQ)
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	•		•	

Standard Flip-flops

Type number	Description	Features				Package (suffix)													
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT337-1 (DB)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT162-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT339-1 (DB)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)	SOT815-1 (BQ)	
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	•													
74LVCM823A-Q100	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	5,4	-40~125														•

Standard Gates

Type number	Description	Features				Package (suffix)			
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT337-1 (DB)	SOT402-1 (PW)	SOT762-1 (BQ)
HEF4082B-Q100	Dual 4-input AND gate	4.5 - 15.5	± 2.4	25	-40~85	•			

Standard Level Shifters-Translators

Type number	Description	Features				Package (suffix)									
		V _{CC(A)} (V)	V _{CC(B)} (V)	I _O (mA)	T _{amb} (°C)	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)	
74AVC20T245-Q100	20-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125										•

Standard Shift Registers

Type number	Description	Features				Package (suffix)								
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT337-1 (DB)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT162-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT339-1 (DB)
74HC594-Q100	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	± 7.8	14	-40~125				•		•			

Standard 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)	SOT702-1 (EV)
74LVCM162245A-Q100	16-bit transceiver with source termination (3-state)	1.2 - 3.6	± 12	3,3	-40~125				•	

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (Typ)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74AHC04	Hex inverter	2.0 to 5.5	CMOS	±8	50 pF	3	60	-40 to +125
74AHCT04	Hex inverter; TTL-enabled	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74AHC125	Quad buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3	60	-40 to +125
74AHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74AHC126	Quad buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,3	60	-40 to +125
74AHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74AHC1G04	Single inverter	2.0 to 5.5	CMOS	±8	50 pF	3,1	60	-40 to +125
74AHCT14	Hex inverting Schmitt-trigger	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC1G04	Single inverter; TTL-enabled	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC1G06	Single inverter; open drain	2.0 to 5.5	CMOS	8	50 pF	2,7	60	-40 to +125
74AHCT1G06	Single inverter; open drain; TTL-enabled	4.5 to 5.5	TTL	8	50 pF	3	60	-40 to +125
74AHC1G07	Single buffer; open drain	2.0 to 5.5	CMOS	8	50 pF	2,5	60	-40 to +125
74AHCT1G07	Single buffer; open drain; TTL-enabled	4.5 to 5.5	TTL	8	50 pF	2,8	60	-40 to +125
74AHC1G125	Single buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125
74AHCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC1G126	Single buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125
74AHCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC1G17	Single buffer with Schmitt-trigger inputs	2.0 to 5.5	CMOS	±8	50 pF	3,2	60	-40 to +125
74AHCT1G17	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 to 5.5	TTL	±8	50 pF	4,1	60	-40 to +125
74AHC240	Octal inverter/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	2,8	60	-40 to +125
74AHCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74AHC244	Octal buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,5	60	-40 to +125
74AHCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,5	60	-40 to +125
74AHC2G125	Dual buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125
74AHCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC2G126	Dual buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125
74AHCT2G126	Dual buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC2G241	Dual buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125
74AHCT2G241	Dual buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
74AHC3G04	Triple inverter	2.0 to 5.5	CMOS	±8	50 pF	3,1	60	-40 to +125
74AHCT3G04	Triple inverter; TTL-enabled	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74AHC541	Octal buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,5	60	-40 to +125
74AHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,5	60	-40 to +125
74AHC1GU04	Single inverter; unbuffered	2.0 to 5.5	CMOS	±8	50 pF	2,6	60	-40 to +125
74AHC3GU04	Triple inverter; unbuffered	2.0 to 5.5	CMOS	±8	50 pF	2,5	60	-40 to +125
74AHCU04	Hex inverter; unbuffered	2.0 to 5.5	CMOS	±8	50 pF	2,4	60	-40 to +125
74ALVC16244	16-bit buffer/line driver (3-state)	1.2 to 3.6	LVTTTL	±24	50 pF	1,9	150	-40 to +85
74ALVCH16244	16-bit buffer/line driver with bus hold (3-state)	1.2 to 3.6	LVTTTL	±24	30 pF	1,9	150	-40 to +85

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (typ) (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74ALVC04	Hex inverter	1.65 to 3.6	LVTTTL	±24	30 pF	2	150	-40 to +85
74ALVC125	Quad buffer/line driver (3-state)	1.65 to 3.6	LVTTTL	±24	30 pF	1,8	145	-40 to +85
74ALVC244	Octal buffer/line driver (3-state)	1.65 to 3.6	LVTTTL	±24	30 pF	2,9	130	-40 to +85
74ALVC541	Octal buffer/line driver (3-state)	1.65 to 3.6	LVTTTL	±24	30 pF	2,3	130	-40 to +85
74ALVCH162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	LVTTTL	±12	30 pF	2,7	150	-40 to +85
74ALVCH162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	LVTTTL	±12	30 pF	2,9	150	-40 to +85
74ALVCH16825	18-bit buffer/line driver with bus hold (3-state)	2.3 to 3.6	LVTTTL	±24	30 pF	2	150	-40 to +85
74ALVCH16827	20-bit buffer/line driver with bus hold (3-state)	2.3 to 3.6	LVTTTL	±24	30 pF	2	150	-40 to +85
74ALVT162240	16-bit inverter/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	LVTTTL	±12	50 pF	2,6	75	-40 to +85
74ALVT162241	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	LVTTTL	±12	50 pF	2,2	75	-40 to +85
74ALVT162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	LVTTTL	±12	50 pF	2,2	75	-40 to +85
74ALVT16240	16-bit inverter/line driver with bus hold (3-state)	2.3 to 3.6	LVTTTL	-0,5	50 pF	1,7	200	-40 to +85
74ALVT16241	16-bit buffer/line driver with bus hold (3-state)	2.3 to 3.6	LVTTTL	-0,5	50 pF	1,3	200	-40 to +85
74ALVT16244	16-bit buffer/line driver with bus hold (3-state)	2.3 to 3.6	LVTTTL	-0,5	50 pF	1,5	200	-40 to +85
74ALVT162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	LVTTTL	±12	50 pF	2,2	75	-40 to +85
74ALVT16827	20-bit buffer/line driver with bus hold (3-state)	2.3 to 3.6	LVTTTL	-0,5	50 pF	1,3	200	-40 to +85
74AUP1G04	Single inverter	1.1 to 3.6	CMOS	±1.9	30 pF	4	70	-40 to +125
74AUP1G06	Single inverter; open drain	1.1 to 3.6	CMOS	1,9	30 pF	4,5	70	-40 to +125
74AUP1G07	Single buffer; open drain	1.1 to 3.6	CMOS	1,9	30 pF	4,4	70	-40 to +125
74AUP1G125	Single buffer/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,3	70	-40 to +125
74AUP1G126	Single buffer/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,3	70	-40 to +125
74AUP1G14	Single inverter; Schmitt trigger	1.1 to 3.6	CMOS	±1.9	30 pF	4,7	70	-40 to +125
74AUP1G16	Single Buffer	1.1 to 3.6	CMOS	±1.9	30pF	4,7	70	-40 to +125
74AUP1G240	Single inverter/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,2	70	-40 to +125
74AUP1G34	Single buffer	1.1 to 3.6	CMOS	±1.9	30 pF	3,9	70	-40 to +125
74AUP1GU04	Single inverter; unbuffered	1.1 to 3.6	CMOS	±1.9	30 pF	2,3	70	-40 to +125
74AUP2G04	Dual inverter	1.1 to 3.6	CMOS	±1.9	30 pF	4	70	-40 to +125
74AUP2G06	Dual inverter; open drain	1.1 to 3.6	CMOS	1,9	30 pF	4,5	70	-40 to +125
74AUP2G07	Dual buffer; open drain	1.1 to 3.6	CMOS	1,9	30 pF	4,4	70	-40 to +125
74AUP2G125	Dual buffer/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,3	70	-40 to +125
74AUP2G126	Dual buffer/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,3	70	-40 to +125
74AUP2G14	Dual inverter; Schmitt trigger	1.1 to 3.6	CMOS	±1.9	30 pF	4,7	70	-40 to +125
74AUP2G16	Dual Buffer	1.1 to 3.6	CMOS	±1.9	30pF	4,7	70	-40 to +125
74AUP2G240	Dual inverter/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,2	70	-40 to +125
74AUP2G241	Dual buffer/line driver (3-state)	1.1 to 3.6	CMOS	±1.9	30 pF	4,3	70	-40 to +125
74AUP2G34	Dual buffer	1.1 to 3.6	CMOS	±1.9	30 pF	3,9	70	-40 to +125
74AUP2GU04	Dual inverter; unbuffered	1.1 to 3.6	CMOS	±1.9	30 pF	2,3	70	-40 to +125
74AUP3G04	Triple inverter	1.1 to 3.6	CMOS	±1.9	30 pF	4	70	-40 to +125
74AUP3G14	Triple inverter; Schmitt trigger	1.1 to 3.6	CMOS	±1.9	30pF	4,7	70	-40 to +125

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (Typ)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74AUP3G16	Triple Buffer	1.1 to 3.6	CMOS	±1.9	30pF	4	70	-40 to +125
74AVC16244	16-bit buffer/line driver (3-state)	0.8 to 3.6	CMOS/LVTTL	±12	30 pF	2	200	-40 to +85
74AVCH16244	16-bit buffer/line driver with bus hold (3-state)	0.8 to 3.6	CMOS/LVTTL	±12	30 pF	2	200	-40 to +85
74AXP1G06	Single inverter; open drain	0.7 to 2.75	CMOS	4,5	5pF	3,5	70	-40 to +85
74AXP1G125	Single buffer/line driver (3-state)	0.7 to 2.75	CMOS	±4.5	5pF	2,7	70	-40 to +85
74HC04	Hex inverter	2.0 to 6.0	CMOS	±5.2	50 pF	7	36	-40 to +125
74HCT04	Hex inverter; TTL-enabled	4.5 to 5.5	TTL	±4.0	50 pF	8	36	-40 to +125
74HC125	Quad buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT125	Quad buffer/line driver (3-state)	4.5 to 5.5	TTL	±6	50 pF	12	36	-40 to +125
74HC126	Quad buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT126	Quad buffer/line driver (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC1G04	Single inverter	2.0 to 6.0	CMOS	±2.6	50 pF	7	36	-40 to +125
74HCT1G04	Single inverter; TTL-enabled	4.5 to 5.5	TTL	±2.0	50 pF	8	36	-40 to +125
74HC1G125	Single buffer/line driver (3-state)	2.0 to 6.0	CMOS	±2.6	50 pF	9	36	-40 to +125
74HCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±2.0	50 pF	10	36	-40 to +125
74HC1G126	Single buffer/line driver (3-state)	2.0 to 6.0	CMOS	±2.6	50 pF	9	36	-40 to +125
74HCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±2.0	50 pF	10	36	-40 to +125
74HC240	Octal inverter/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	9	36	-40 to +125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	9	36	-40 to +125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	9	36	-40 to +125
74HC241	Octal buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	7	36	-40 to +125
74HCT241	Octal buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC244	Octal buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC2G04	Dual inverter	2.0 to 6.0	CMOS	±5.2	50 pF	8	36	-40 to +125
74HCT2G04	Dual inverter; TTL-enabled	4.5 to 5.5	TTL	±4.0	50 pF	10	36	-40 to +125
74HC2G125	Dual buffer/line driver (3-state)	2.0 to 6.0	CMOS	±5.2	50 pF	10	36	-40 to +125
74HC2G16	Dual buffer gate	2.0 to 6.0	CMOS	±5.2	50pF	10	36	-40 to +125
74HCT2G16	Dual buffer gate; TTL enabled	4.5 to 5.5	TTL	±4.0	50pF	12	36	-40 to +125
74HCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±4.0	50 pF	12	36	-40 to +125
74HC2G126	Dual buffer/line driver (3-state)	2.0 to 6.0	CMOS	±5.2	50 pF	10	36	-40 to +125
74HC2G34	Dual buffer	2.0 to 6.0	CMOS	±5.2	50 pF	9	36	-40 to +125
74HCT2G34	Dual buffer; TTL-enabled	4.5 to 5.5	TTL	±4	50 pF	10	32	-40 to +125
74HC365	Hex buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT365	Hex buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC366	Hex inverter/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	10	36	-40 to +125
74HCT366	Hex inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC367	Hex buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	8	36	-40 to +125

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (Typ)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74HCT367	Hex buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC368	Hex inverter/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT368	Hex inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC3G04	Triple inverter	2.0 to 6.0	CMOS	±5.2	50 pF	8	36	-40 to +125
74HCT3G04	Triple inverter; TTL-enabled	4.5 to 5.5	TTL	±4.0	50 pF	10	36	-40 to +125
74HC3G06	Triple inverter; open drain	2.0 to 6.0	CMOS	5,2	50 pF	9	36	-40 to +125
74HCT3G06	Triple inverter; open drain; TTL-enabled	4.5 to 5.5	TTL	4	50 pF	9	36	-40 to +125
74HC3G07	Triple buffer; open drain	2.0 to 6.0	CMOS	5,2	50 pF	9	36	-40 to +125
74HCT3G07	Triple buffer; open drain; TTL-enabled	4.5 to 5.5	TTL	4	50 pF	9	36	-40 to +125
74HC3G34	Triple buffer	2.0 to 6.0	CMOS	±5.2	50 pF	9	36	-40 to +125
74HCT3G34	Triple buffer; TTL-enabled	4.5 to 5.5	TTL	±4.0	50 pF	10	36	-40 to +125
74HC540	Octal inverter/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	9	36	-40 to +125
74HCT540	Octal inverter/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	11	36	-40 to +125
74HC541	Octal buffer/line driver (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	10	36	-40 to +125
74HCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	12	36	-40 to +125
74HC05	Hex inverter; open drain	2.0 to 6.0	CMOS	5,2	50 pF	11	36	-40 to +125
74HC1GU04	Single inverter; unbuffered	2.0 to 6.0	CMOS	±2.6	50 pF	5	36	-40 to +125
74HC2GU04	Single inverter; unbuffered	2.0 to 6.0	CMOS	±2.6	50 pF	5	36	-40 to +125
74HC3GU04	Triple inverter; unbuffered	2.0 to 6.0	CMOS	±5.2	50 pF	6	36	-40 to +125
74HC3GU04	Triple inverter; unbuffered	2.0 to 6.0	CMOS	±5.2	50 pF	6	36	-40 to +125
74HCU04	Hex inverter; unbuffered	2.0 to 6.0	CMOS	±5.2	50 pF	5	36	-40 to +125
74LV04	Hex inverter	1.0 to 5.5	CMOS	±12	50 pF	6	30	-40 to +125
74LV125	Quad buffer/line driver (3-state)	1.0 to 5.5	CMOS	±16	50 pF	9	30	-40 to +125
74LV241	Octal buffer/line driver (3-state)	1.0 to 5.5	CMOS	±8	50 pF	8	30	-40 to +125
74LV244	Octal buffer/line driver (3-state)	1.0 to 5.5	CMOS	±16	50 pF	8	30	-40 to +125
74LV365	Hex buffer/line driver (3-state)	1.0 to 3.6	CMOS	±8	50 pF	9	30	-40 to +125
74LV367	Hex buffer/line driver (3-state)	1.0 to 3.6	CMOS	±8	50 pF	8	30	-40 to +125
74LV540	Octal buffer/line driver (3-state)	1.0 to 3.6	CMOS	±8	50 pF	10	30	-40 to +125
74LV541	Octal buffer/line driver (3-state)	1.0 to 3.6	CMOS	±8	50 pF	10	30	-40 to +125
74LVC162244	16-bit buffer/line driver with 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,9	175	-40 to +125
74LVCH162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	50 pF	2,9	175	-40 to +125
74LVC16244	16-bit buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	3	175	-40 to +125
74LVCH16244	16-bit buffer/line driver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	3	175	-40 to +125
74LVC244	Octal buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,8	175	-40 to +125
74LVCH244	Octal buffer/line driver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,8	175	-40 to +125
74LVC04	Hex inverter	1.65 to 5.5	CMOS/LVTTL	±24	50 pF	2	175	-40 to +125
74LVC06	Hex inverter; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,2	175	-40 to +125
74LVC07	Hex buffer; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,2	175	-40 to +125
74LV540	Octal buffer/line driver (3-state)	1.65 to 5.5	CMOS/LVTTL	32	50pF	2,2	175	-40 to +125

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (typ) (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74LVC125	Quad buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,4	175	-40 to +125
74LVC126	Quad buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,4	175	-40 to +125
74LVC16240	16-bit inverter/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,7	175	-40 to +125
74LVC16241	16-bit buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,9	175	-40 to +125
74LVC1G04	Single inverter	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2	175	-40 to +125
74LVC1G06	Single inverter; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,3	175	-40 to +125
74LVC1G07	Single buffer; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,2	175	-40 to +125
74LVC1G16	Single buffer	1.65 to 5.5	CMOS/LVTTL	±24	50pF	2	175	-40 to +125
74LVC1G125	Single buffer/line driver; TTL-enabled (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,1	175	-40 to +125
74LVC1G126	Single buffer/line driver; TTL-enabled (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2	175	-40 to +125
74LVC1G34	Single buffer	1.65 to 5.5	CMOS/LVTTL	±24	50 pF	2	175	-40 to +125
74LVC1GU04	Single inverter; unbuffered	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	1,6	175	-40 to +125
74LVC2244	Octal buffer/line driver with 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	50 pF	3,1	175	-40 to +125
74LVC240	Octal inverter/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	3,5	175	-40 to +125
74LVC241	Octal buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	3,2	175	-40 to +125
74LVC2G04	Dual inverter	1.65 to 5.5	CMOS/LVTTL	±24	50 pF	2,7	175	-40 to +125
74LVC2G06	Dual inverter; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,3	175	-40 to +125
74LVC2G07	Dual buffer; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,6	175	-40 to +125
74LVC2G16	Dual buffer	1.65 to 5.5	CMOS/LVTTL	±24	50pF	2	175	-40 to +125
74LVC2G125	Dual buffer/line driver; TTL-enabled (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,3	175	-40 to +125
74LVC2G126	Dual buffer/line driver; TTL-enabled (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,4	175	-40 to +125
74LVC2G240	Dual inverter/line driver (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,5	175	-40 to +125
74LVC2G241	Dual buffer/line driver (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,6	175	-40 to +125
74LVC2G34	Dual buffer	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,2	175	-40 to +125
74LVC2GU04	Dual inverter; unbuffered	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,3	175	-40 to +125
74LVC3G04	Triple inverter	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,7	175	-40 to +125
74LVC3G06	Triple inverter; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2	175	-40 to +125
74LVC3G07	Triple buffer; open drain	1.65 to 5.5	CMOS/LVTTL	32	50 pF	2,1	175	-40 to +125
74LVC3G16	Triple buffer	1.65 to 5.5	CMOS/LVTTL	±24	50pF	2	175	-40 to +125
74LVC3G34	Triple buffer	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,2	175	-40 to +125
74LVC3GU04	Triple inverter; unbuffered	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,3	175	-40 to +125
74LVC541	Octal buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	3,3	175	-40 to +125
74LVC827	10-bit buffer/line driver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	4	175	-40 to +125
74LVCH16541	16-bit buffer/line driver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,7	175	-40 to +125
74LVCH322244	32-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	50 pF	2	175	-40 to +125
74LVCH32244	32-bit buffer/line driver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	3	175	-40 to +125
74LVCU04	Hex inverter; unbuffered	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2	175	-40 to +125
74LVT125	Quad buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,9	150	-40 to +85
74LVTH125	Quad buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,9	150	-40 to +85

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (Typ)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74LVT16244	16-bit buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	1,8	150	-40 to +85
74LVTH16244	16-bit buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	1,8	150	-40 to +85
74LVT244	Octal buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,6	150	-40 to +85
74LVTH244	Octal buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,6	150	-40 to +85
74LVT244	Octal buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2	150	-40 to +85
74LVTH244	Octal buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2	150	-40 to +85
74LVT04	Hex inverter	2.7 to 3.6	TTL	-0,625	50 pF	2,6	150	-40 to +85
74LVT126	Quad buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,4	150	-40 to +85
74LVT162240	16-bit inverter/line driver with bus hold and 30 Ω termination (3-state)	2.7 to 3.6	TTL	±12	50 pF	2,6	150	-40 to +85
74LVT162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	50 pF	2,8	150	-40 to +85
74LVT16240	16-bit inverter/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2	150	-40 to +85
74LVT2241	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	50 pF	3,3	150	-40 to +85
74LVT2244	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	50 pF	2,9	150	-40 to +85
74LVT240	Octal inverter/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,5	150	-40 to +85
74LVT241	Octal buffer/line driver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	2,8	150	-40 to +85
74LVTN16244	16-bit buffer/line driver (3-state)	2.7 to 3.6	TTL	-0,5	50 pF	1,8	150	-40 to +85
74LVU04	Hex inverter; unbuffered	1.0 to 5.5	CMOS	-1	50 pF	6	30	-40 to +125
74VHC125	Quad buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3	60	-40 to +125
74VHCT125	Quad buffer/line driver (3-state)	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74VHC126	Quad buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,3	60	-40 to +125
74VHCT126	Quad buffer/line driver (3-state)	4.5 to 5.5	TTL	±8	50 pF	3	60	-40 to +125
74VHC244	Octal inverter/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,5	60	-40 to +125
74VHCT244	Octal inverter/line driver (3-state)	4.5 to 5.5	TTL	±8	50 pF	5	60	-40 to +125
74VHC541	Octal buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,5	60	-40 to +125
74VHCT541	Octal buffer/line driver (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,5	60	-40 to +125
HEF40098	Hex inverter	3.0 to 15.0	CMOS	-0,5	50 pF	25	10	-40 to +125
HEF40240	Octal inverter/line driver (3-state)	3.0 to 15.0	CMOS	-1,111111111	50 pF	30	10	-40 to +125
HEF40244	Octal buffer/line driver (3-state)	3.0 to 15.0	CMOS	-1,377777778	50 pF	30	10	-40 to +125
HEF4049	Hex inverter/line driver	3.0 to 15.0	CMOS	-0,15	50 pF	20	10	-40 to +125
HEF4050	Hex buffer/line driver	3.0 to 15.0	CMOS	-0,15	50 pF	40	10	-40 to +125
HEF4069	Hex inverter; unbuffered	3.0 to 15.0	CMOS	±3.4	50 pF	15	10	-40 to +125
XC7SET04	Single inverter; TTL-enabled	4.5 to 5.5	TTL	±8	50 pF	3,5	60	-40 to +125
XC7SET125	Single buffer/line driver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,4	60	-40 to +125
XC7SH04	Single inverter	2.0 to 5.5	CMOS	±8	50 pF	3,5	60	-40 to +125
XC7SH125	Single buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125
XC7SHU04	Single inverter; unbuffered	2.0 to 5.5	CMOS	±8	50 pF	3,5	60	-40 to +125
XC7WH126	Dual buffer/line driver (3-state)	2.0 to 5.5	CMOS	±8	50 pF	3,4	60	-40 to +125

Transceivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _{amb} (°C)
74AHC245	Octal transceiver (3-state)	2.0 to 5.5	CMOS	±8	3,5	8	60	50 pF
74AHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	5	8	60	50 pF
74ALVC16245	16-bit transceiver (3-state)	1.65 to 3.6	TTL	±24	1,9	16	150	50 pF
74ALVCH16245	16-bit transceiver with bus hold (3-state)	1.65 to 3.6	TTL	±24	1,9	16	150	50 pF
74ALVC245	Octal transceiver (3-state)	1.65 to 3.6	TTL	±24	2,3	8	130	50 pF
74ALVCH162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.65 to 3.6	TTL	±12	2,4	16	150	50 pF
74ALVCH162601	18-bit universal bus transceiver with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.65 to 3.6	TTL	±12	3,1	18	150	50 pF
74ALVCH16500	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 to 3.6	TTL	±24	2,9	18	150	50 pF
74ALVCH16501	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 to 3.6	TTL	±24	2,8	18	150	50 pF
74ALVCH16543	16-bit registered transceiver with bus hold (3-state)	1.65 to 3.6	TTL	±24	3,8	16	150	50 pF
74ALVCH16600	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 to 3.6	TTL	±24	2,8	18	150	50 pF
74ALVCH16601	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 to 3.6	TTL	±24	2,8	18	150	50 pF
74ALVCH16646	16-bit registered transceiver with bus hold (3-state)	1.65 to 3.6	TTL	±24	2,6	16	150	50 pF
74ALVCH16952	16-bit registered transceiver with bus hold (3-state)	1.65 to 3.6	TTL	±24	3,2	16	150	50 pF
74ALVT162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	TTL	±12	2,3	16	75	50 pF
74ALVT16245	16-bit transceiver with bus hold (3-state)	2.3 to 3.6	TTL	-0,5	1,5	16	200	50 pF
74ALVT16501	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	2.3 to 3.6	TTL	-0,5	1,8	18	150	50 pF
74ALVT16543	16-bit registered transceiver with bus hold (3-state)	2.3 to 3.6	TTL	-0,5	1,8	16	200	50 pF
74ALVT16601	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	2.3 to 3.6	TTL	-0,5	1,9	18	200	50 pF
74ALVT16652	16-bit registered transceiver with bus hold (3-state)	2.3 to 3.6	TTL	-0,5	2,4	16	150	50 pF
74AVC16245	16-bit transceiver (3-state)	1.2 to 3.6	CMOS	±12	2	16	200	30 pF
74AVCH16245	16-bit transceiver with bus hold (3-state)	1.2 to 3.6	CMOS	±12	2	16	200	30 pF
74HC245	Octal transceiver (3-state)	2.0 to 6.0	CMOS	±7.8	7	8	36	50 pF
74HCT245	Octal transceiver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	10	8	36	50 pF
74HC640	Octal transceiver; inverting (3-state)	2.0 to 6.0	CMOS	±7.8	9	8	36	50 pF
74HCT640	Octal transceiver; inverting; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	9	8	36	50 pF
74HC652	Octal registered transceiver (3-state)	2.0 to 6.0	CMOS	±7.8	13	8	36	50 pF
74HCT652	Octal registered transceiver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	13	8	36	50 pF
74LV245	Octal transceiver (3-state)	1.0 to 5.5	TTL	±16	7	8	30	50 pF
74LVC162245	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	3,3	16	175	50 pF
74LVCH162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	3,3	16	175	50 pF
74LVC16245	16-bit transceiver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3	16	175	50 pF
74LVCH16245	16-bit transceiver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3	16	175	50 pF
74LVC245	Octal transceiver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	2,9	8	175	50 pF
74LVCH245	Octal transceiver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	2,9	8	175	50 pF
74LVC2245	Octal transceiver with 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	3,3	8	175	50 pF
74LVC2952	Octal registered transceiver with 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	4,3	8	175	50 pF
74LVC32245	32-bit transceiver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	2,2	32	175	50 pF

Transceivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _{amb} (°C)
74LVC543	Octal registered transceiver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3,3	8	175	50 pF
74LVC544	Octal registered transceiver; inverting (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	4	8	175	50 pF
74LVC623	Octal transceiver with dual enable (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3,3	8	175	50 pF
74LVC646	Octal registered transceiver (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3,9	8	175	50 pF
74LVCH322245	32-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS/LVTTL	±12	3,3	32	175	50 pF
74LVCH32245	32-bit transceiver with bus hold (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3	32	175	50 pF
74LVT16245	16-bit transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	1,9	16	150	50 pF
74LVTH16245	16-bit transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	1,9	16	150	50 pF
74LVT2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	3,2	8	150	50 pF
74LVTH2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	3,2	8	150	50 pF
74LVT162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	2,5	16	150	50 pF
74LVT16500	18-bit universal bus transceiver with bus hold; negative-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	1,9	18	150	50 pF
74LVT16501	18-bit universal bus transceiver with bus hold; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	1,9	18	150	50 pF
74LVT16543	16-bit registered transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	2,2	16	150	50 pF
74LVT16646	16-bit registered transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	1,9	16	150	50 pF
74LVT16652	16-bit registered transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	1,9	16	150	50 pF
74LVT245	Octal transceiver (3-state)	2.7 to 3.6	TTL	-0,5	2,4	8	150	50 pF
74LVT2952	Octal registered transceiver with 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	-0,5	3,8	8	150	50 pF
74LVT543	Octal registered transceiver (3-state)	2.7 to 3.6	TTL	-0,5	3	8	150	50 pF
74LVT543	Octal registered transceiver (3-state)	2.7 to 3.6	TTL	-0,5	3	8	150	50 pF
74LVT640	Octal transceiver with bus hold; inverting (3-state)	2.7 to 3.6	TTL	-0,5	2,4	8	150	50 pF
74LVT646	Octal registered transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	3,8	8	150	50 pF
74LVT652	Octal registered transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	3,7	8	150	50 pF
74LVTH322245	32-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	2,5	32	150	50 pF
74LVTH32245	32-bit transceiver with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	1,9	32	150	50 pF
74LVTN16245	16-bit transceiver (3-state)	2.7 to 3.6	TTL	-0,5	1,9	16	150	50 pF
74VHC245	Octal transceiver (3-state)	2.0 to 5.5	CMOS	±8	3,5	8	60	50 pF
74VHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	5	8	60	50 pF

Schmitt triggers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load CL (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC132	Quad 2-input NAND gate Schmitt trigger	2.0 to 5.5	CMOS	±8	3,3	50 pF	60	4	-40 to +125
74AHCT132	Quad 2-input NAND gate Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	3,5	50 pF	60	4	-40 to +125
74AHC14	Hex inverter Schmitt trigger	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	6	-40 to +125
74AHCT14	Hex inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4	50 pF	60	6	-40 to +125
74AHC1G14	Single inverter Schmitt trigger	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125
74AHCT1G14	Single inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4,1	50 pF	60	1	-40 to +125
74AHC3G14	Triple inverter Schmitt trigger	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	3	-40 to +125
74AHCT3G14	Triple inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4,1	50 pF	60	3	-40 to +125
74ALVC14	Hex inverter Schmitt trigger	1.65 to 3.6	TTL	±24	2,4	50 pF	150	6	-40 to +85
74AUP1G17	Single buffer Schmitt trigger	1.1 to 3.6	CMOS	±1.9	7,8	30 pF	70	1	-40 to +125
74AUP2G132	dual 2-input NAND gate Schmitt trigger	1.1 to 3.6	CMOS	±1.9	10	30 pF	70	2	-40 to +125
74AUP2G14	dual inverter Schmitt trigger	1.1 to 3.6	CMOS	±1.9	4,7	30 pF	70	2	-40 to +125
74AUP2G17	dual buffer Schmitt trigger	1.1 to 3.6	CMOS	±1.9	7,8	30 pF	70	2	-40 to +125
74AUP3G14	Triple inverter Schmitt trigger	1.1 to 3.6	CMOS	±1.9	2,4	30pF	70	3	-40 to +125
74AUP3G17	Triple Schmitt trigger	1.1 to 3.6	CMOS	±1.9	2,4	30pF	70	3	-40 to +125
74HC132	Quad 2-input NAND gate Schmitt trigger	2.0 to 6.0	CMOS	±5.2	11	50 pF	36	4	-40 to +125
74HCT132	Quad 2-input NAND gate Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±4	17	50 pF	36	4	-40 to +125
74HC14	Hex inverter Schmitt trigger	2.0 to 6.0	CMOS	±5.2	12	50 pF	36	6	-40 to +125
74HCT14	Hex inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±4	17	50 pF	36	6	-40 to +125
74HC1G14	Single inverter Schmitt trigger	2.0 to 6.0	CMOS	±2.6	10	50 pF	36	1	-40 to +125
74HCT1G14	Single inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±2.0	15	50 pF	36	1	-40 to +125
74HC2G14	Dual inverter Schmitt trigger	2.0 to 6.0	CMOS	±5.2	16	50 pF	36	2	-40 to +125
74HCT2G14	Dual inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±4.0	21	50 pF	36	2	-40 to +125
74HC2G17	Dual buffer Schmitt trigger	2.0 to 6.0	CMOS	±5.2	12	50 pF	36	2	-40 to +125
74HCT2G17	Dual buffer Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±4.0	21	50 pF	36	2	-40 to +125
74HC3G14	Triple inverter Schmitt trigger	2.0 to 6.0	CMOS	±5.2	16	50 pF	36	3	-40 to +125
74HCT3G14	Triple inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±4.0	21	50 pF	36	3	-40 to +125
74HC7540	Octal inverter/line driver Schmitt trigger (3-state)	2.0 to 6.0	CMOS	±7.8	11	50 pF	36	8	-40 to +125
74HCT7540	Octal inverter/line driver Schmitt trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	16	50 pF	36	8	-40 to +125
74HC7541	Octal buffer/line driver Schmitt trigger (3-state)	2.0 to 6.0	CMOS	±7.8	11	50 pF	36	8	-40 to +125
74HCT7541	Octal buffer/line driver Schmitt trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	16	50 pF	36	8	-40 to +125
74HC9114	9-bit inverter Schmitt trigger; open drain (3-state)	2.0 to 6.0	CMOS	5,2	12	50 pF	36	9	-40 to +125
74HCT9114	9-bit inverter Schmitt trigger; open drain; TTL-enabled (3-state)	4.5 to 5.5	TTL	4	13	50 pF	36	9	-40 to +125
74HC9115	9-bit buffer Schmitt trigger; open drain (3-state)	2.0 to 6.0	CMOS	5,2	12	50 pF	36	9	-40 to +125
74HCT9115	9-bit buffer Schmitt trigger; open drain; TTL-enabled (3-state)	4.5 to 5.5	TTL	4	13	50 pF	36	9	-40 to +125
74HC7014	Hex buffer precision Schmitt trigger	2.0 to 6.0	CMOS	±5.2	27	50 pF	36	6	-40 to +125
74LV132	Quad 2-input NAND gate Schmitt trigger	1.0 to 5.5	TTL	±12	10	50 pF	30	4	-40 to +125

Schmitt triggers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load CL (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74LV14	Hex inverter Schmitt trigger	1.0 to 5.5	TTL	±12	13	50 pF	30	6	-40 to +125
74LVC132	Quad 2-input NAND gate Schmitt trigger	1.2 to 3.6	CMOS/LVTTL	±24	3,4	50 pF	175	4	-40 to +125
74LVC14	Hex inverter Schmitt trigger	1.2 to 3.6	CMOS/LVTTL	±24	3,2	50 pF	175	6	-40 to +125
74LVC1G14	Single inverter Schmitt trigger	1.65 to 5.5	CMOS/LVTTL	±32	3	50 pF	175	1	-40 to +125
74LVC1G17	Single buffer Schmitt trigger	1.65 to 5.5	CMOS/LVTTL	±32	3	50 pF	175	1	-40 to +125
74LVC2G14	Dual inverter Schmitt trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,9	50 pF	175	2	-40 to +125
74LVC2G17	Dual buffer Schmitt trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,6	50 pF	175	2	-40 to +125
74LVC3G14	Triple inverter Schmitt trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,2	50 pF	175	3	-40 to +125
74LVC3G17	Triple buffer Schmitt trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,6	50 pF	175	3	-40 to +125
74LVT14	Hex inverter Schmitt trigger	2.7 to 3.6	TTL	-0,5	3,8	50 pF	150	6	-40 to +125
74VHCT14	Hex inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4,1	50 pF	60	6	-40 to +125
HEF40106	Hex inverter Schmitt trigger	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	6	-40 to +85
HEF4093	Quad 2-input NAND gate Schmitt trigger	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	4	-40 to +125
XC7SET14	Single inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4,1	50 pF	60	1	-40 to +125
XC7SH14	Single inverter Schmitt trigger	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125
XC7WH14	Triple inverter Schmitt trigger	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	3	-40 to +125
XC7WT14	Triple inverter Schmitt trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4,1	50 pF	60	3	-40 to +125

Counters/frequency dividers

Type number	Description	V _{CC} (V)	Output drive capability (mA)	Logic switching levels	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
74AHC1G4210	10-stage divider and oscillator	2.0 to 5.5	±5.2	CMOS	7	50pF	125	-40 to +125
74AHC1G4212	12-stage divider and oscillator	2.0 to 5.5	±5.2	CMOS	7	50pF	125	-40 to +125
74AHC1G4214	14-stage divider and oscillator	2.0 to 5.5	±5.2	CMOS	7	50pF	125	-40 to +125
74HC160	Presetable synchronous BCD decade counter; asynchronous reset	2.0 to 6.0	±5.2	CMOS	18	50 pF	55	-40 to +125
74HCT160	Presetable synchronous BCD decade counter; asynchronous reset; TTL-enabled	4.5 to 5.5	±4.0	TTL	21	50 pF	28	-40 to +125
74HC161	Presetable synchronous 4-bit binary counter; asynchronous reset	2.0 to 6.0	±5.2	CMOS	19	50 pF	48	-40 to +125
74HCT161	Presetable synchronous 4-bit binary counter; asynchronous reset; TTL-enabled	4.5 to 5.5	±4.0	TTL	20	50 pF	41	-40 to +125
74HC163	Presetable synchronous 4-bit binary counter; synchronous reset	2.0 to 6.0	±5.2	CMOS	17	50 pF	50	-40 to +125
74HCT163	Presetable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 to 5.5	±4.0	TTL	20	50 pF	50	-40 to +125
74HC191	Presetable synchronous 4-bit binary up/down counter	2.0 to 6.0	±5.2	CMOS	22	50 pF	36	-40 to +125
74HCT191	Presetable synchronous 4-bit binary up/down counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	22	50 pF	39	-40 to +125
74HC193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks	2.0 to 6.0	±5.2	CMOS	20	50 pF	49	-40 to +125
74HCT193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks; TTL-enabled	4.5 to 5.5	±4.0	TTL	20	50 pF	43	-40 to +125
74HC390	Dual decade ripple counter	2.0 to 6.0	±5.2	CMOS	14	50 pF	60	-40 to +125
74HCT390	Dual decade ripple counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	18	50 pF	55	-40 to +125
74HC393	Dual 4-bit binary ripple counter	2.0 to 6.0	±5.2	CMOS	12	50 pF	107	-40 to +125
74HCT393	Dual 4-bit binary ripple counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	20	50 pF	53	-40 to +125
74HC4017	Johnson decade counter with 10 decoded outputs	2.0 to 6.0	±5.2	CMOS	18	50 pF	77	-40 to +125
74HCT4017	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 to 5.5	±4.0	TTL	21	50 pF	67	-40 to +125
74HC4020	14-stage binary ripple counter	2.0 to 6.0	±5.2	CMOS	11	50 pF	52	-40 to +125
74HCT4020	14-stage binary ripple counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	15	50 pF	52	-40 to +125
74HC4040	12-stage binary ripple counter	2.0 to 6.0	±5.2	CMOS	14	50 pF	90	-40 to +125
74HCT4040	12-stage binary ripple counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	16	50 pF	79	-40 to +125
74HC4059	Programmable divide-by-n counter	2.0 to 6.0	±5.2	CMOS	17	50 pF	43	-40 to +125
74HCT4059	Programmable divide-by-n counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	20	50 pF	40	-40 to +125
74HC4060	14-stage binary ripple counter with oscillator	2.0 to 6.0	±5.2	CMOS	31	50 pF	95	-40 to +125
74HCT4060	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 to 5.5	±4.0	TTL	31	50 pF	88	-40 to +125
74HC4520	Dual 4-bit synchronous binary counter	2.0 to 6.0	±5.2	CMOS	24	50 pF	64	-40 to +125
74HCT4520	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	24	50 pF	64	-40 to +125
74HC5555	Programmable delay timer with oscillator	2.0 to 6.0	-0,8	CMOS	89	50 pF	24	-40 to +125
74HCT5555	Programmable delay timer with oscillator; TTL-enabled	4.5 to 5.5	±20	TTL	75	50 pF	24	-40 to +125
74HC6323	Programmable ripple counter with oscillator (3-state)	2.0 to 6.0	±7.8	CMOS	17	50 pF	100	-40 to +125
74HCT6323	Programmable ripple counter with oscillator (3-state); TTL-enabled	4.5 to 5.5	±4.0	TTL	17	50 pF	85	-40 to +125
74HC93	4-bit binary ripple counter	2.0 to 6.0	±5.2	CMOS	12	50 pF	100	-40 to +125
74HCT93	4-bit binary ripple counter; TTL-enabled	4.5 to 5.5	±4.0	TTL	15	50 pF	77	-40 to +125
74HC40103	8-bit synchronous binary down counter	2.0 to 6.0	±5.2	CMOS	15	50 pF	14	-40 to +125
74HC4024	7-stage binary ripple counter	2.0 to 6.0	±5.2	CMOS	14	50 pF	90	-40 to +125

Counters/frequency dividers

Type number	Description	V _{CC} (V)	Output drive capability (mA)	Logic switching levels	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
74HC590	8-bit binary counter with output register (3-state)	2.0 to 6.0	±5.2	CMOS	19	50 pF	61	-40 to +125
74LV393	Dual 4-bit binary ripple counter	1.0 to 3.6	±6	TTL	12	50 pF	90	-40 to +125
74LV4020	14-stage binary ripple counter	1.0 to 5.5	±6	TTL	16	50 pF	100	-40 to +125
74LV4060	14-stage binary ripple counter with oscillator	1.0 to 5.5	±6	TTL	29	50 pF	100	-40 to +125
74LVC161	Presetable synchronous 4-bit binary counter; asynchronous reset	1.2 to 3.6	±24	CMOS/LVTTL	4,9	50 pF	200	-40 to +125
74LVC163	Presetable synchronous 4-bit binary counter; synchronous reset	1.2 to 3.6	±24	CMOS/LVTTL	4,9	50 pF	200	-40 to +125
HEF4017	Johnson decade counter with 10 decoded outputs	4.5 to 15	±2.4	CMOS	40	50 pF	30	-40 to +85
HEF40193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks	4.5 to 15.5	±2.4	CMOS	60	50 pF	18	-40 to +85
HEF4020	14-stage binary ripple counter	4.5 to 15.5	±2.4	CMOS	35	50 pF	35	-40 to +85
HEF4024	7-stage binary ripple counter	4.5 to 15.5	±2.4	CMOS	30	50 pF	35	-40 to +85
HEF4040	12-stage binary ripple counter	4.5 to 15.5	±2.4	CMOS	35	50 pF	50	-40 to +85
HEF4059	Programmable divide-by-n counter	4.5 to 15.5	-0,35	CMOS	40	50 pF	20	-40 to +85
HEF4060	14-stage binary ripple counter with oscillator	4.5 to 15.5	±2.4	CMOS	50	50 pF	30	-40 to +85
HEF4516	Presetable synchronous 4-bit binary up/down counter	4.5 to 15.5	±2.4	CMOS	45	50 pF	18	-40 to +85
HEF4518	Dual BCD counter	4.5 to 15	±2.4	CMOS	40	50 pF	40	-40 to +85
HEF4520	Dual 4-bit synchronous binary counter	4.5 to 15.5	±2.4	CMOS	15	50 pF	40	-40 to +85
HEF4521	24-stage frequency divider and oscillator	4.5-15.5 V	±2.4	CMOS	220	50 pF	35	-40 to +85
HEF4526	Programmable 4-bit binary down counter	4.5 to 15.5	±2.4	CMOS	50	50 pF	32	-40 to +85
HEF4541	Programmable timer	4.5 to 15.5	- 4/ + 2.7	CMOS	38	50 pF	150	-40 to +85

FIFO registers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
74HC40105	4-bit x 16-word FIFO register	2.0 to 6.0	CMOS	Low	15	50 pF	30	-40 to +125
74HCT40105	4-bit x 16-word FIFO register; TTL-enabled	4.5 to 5.5	TTL	±4 mA	18	50 pF	28	-40 to +125
74HC7030	9-bit x 64-word FIFO register (3-state)	2.0 to 6.0	CMOS	±5.2 mA	36	50 pF	33	-40 to +125
74HCT7030	9-bit x 64-word FIFO register; TTL-enabled (3-state)	4.5 to 5.5	TTL	±4 mA	26	50 pF	29	-40 to +125
74HC7403	4-bit x 16-word FIFO register (3-state)	2.0 to 6.0	CMOS	±5.2 mA	15	50 pF	30	-40 to +125
74HCT7403	4-bit x 16-word FIFO register; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8 mA	17	50 pF	30	-40 to +125

Flip-flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
74AHC1G79	Single D-type flip-flop; positive-edge trigger	2.0 to 5.5	CMOS	±8	3,5	50 pF	90	-40 to +125
74AHCT1G79	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±8	3,5	50 pF	90	-40 to +125
74AHC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 to 5.5	CMOS	±8	4,2	50 pF	165	-40 to +125
74AHCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4	50 pF	120	-40 to +125
74AHC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 to 5.5	CMOS	±8	4,4	50 pF	185	-40 to +125
74AHCT374	Octal D-type flip-flop; positive-edge trigger (3-state)	4.5 to 5.5	TTL	±8	4,3	50 pF	140	-40 to +125
74AHC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 to 5.5	CMOS	±8	3,9	50 pF	175	-40 to +125
74AHCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±8	4	50 pF	140	-40 to +125
74AHC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 to 5.5	CMOS	±8	4,4	50 pF	130	-40 to +125
74AHCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	4,4	50 pF	130	-40 to +125
74AHC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 to 5.5	CMOS	±8	3,7	50 pF	170	-40 to +125
74AHCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±8	3,3	50 pF	160	-40 to +125
74ALVC374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 to 3.6	TTL	±24	2,5	50 pF	300	-40 to +85
74ALVC574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 to 3.6	TTL	±24	2,5	50 pF	300	-40 to +85
74ALVC74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.65 to 3.6	TTL	±24	2,3	50 pF	425	-40 to +85
74ALVCH16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 to 3.6	TTL	±24	2,3	50 pF	350	-40 to +85
74ALVCH16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 to 3.6	TTL	±24	2,5	50 pF	350	-40 to +85
74ALVCH16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 to 3.6	TTL	±24	2,1	50 pF	350	-40 to +85
74ALVT162821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 to 3.6	TTL	±12	3,2	50 pF	150	-40 to +85
74ALVT162823	18-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 to 3.6	TTL	±12	3	50 pF	150	-40 to +85
74ALVT16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.3 to 3.6	TTL	-0,5	2,3	50 pF	250	-40 to +85
74ALVT16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 to 3.6	TTL	-0,5	1,8	50 pF	150	-40 to +85
74ALVT16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.3 to 3.6	TTL	-0,5	1,9	50 pF	250	-40 to +85
74AUP1G175	Single D flip-flop with reset; positive-edge trigger	1.1 to 3.6	CMOS	±1.9	7,4	30 pF	70	-40 to +125
74AUP1G374	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 to 3.6	CMOS	±1.9	7,9	30 pF	400	-40 to +125
74AUP1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 to 3.6	CMOS	±1.9	9,2	30 pF	400	-40 to +125
74AUP1G79	Single D-type flip-flop; positive-edge trigger	1.1 to 3.6	CMOS	±1.9	9,1	30 pF	400	-40 to +125

Flip-flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ) (pF)	f _{max} (MHz)	T _{amb} (°C)
74AUP1G80	Single D-type flip-flop; positive-edge trigger	1.1 to 3.6	CMOS	±1.9	9,1	30 pF	400	-40 to +125
74AUP2G79	Dual D-type flip-flop; positive-edge trigger	1.1 to 3.6	CMOS	±1.9	8,5	30 pF	400	-40 to +125
74AUP2G80	Dual D-type flip-flop; positive-edge trigger	1.1 to 3.6	CMOS	±1.9	9,1	30 pF	400	-40 to +125
74AVC16374	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 to 3.6	CMOS	±12	1,5	30 pF	350	-40 to +85
74HC107	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 to 6.0	CMOS	±5.2	16	50 pF	78	-40 to +125
74HCT107	Dual JK-type flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	16	50 pF	73	-40 to +125
74HC109	Dual JK-type flip-flop with set and reset; positive-edge trigger	2.0 to 6.0	CMOS	±5.2	15	50 pF	75	-40 to +125
74HCT109	Dual JK-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	17	50 pF	61	-40 to +125
74HC112	Dual JK-type flip-flop with set and reset; negative-edge trigger	2.0 to 6.0	CMOS	±5.2	15	50 pF	66	-40 to +125
74HCT112	Dual JK-type flip-flop with set and reset; negative-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	19	50 pF	70	-40 to +125
74HC173	Quad D-type flip-flop; positive-edge trigger (3-state)	2.0 to 6.0	CMOS	±7.8	17	50 pF	88	-40 to +125
74HCT173	Quad D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	17	50 pF	88	-40 to +125
74HC174	Hex D-type flip-flop with reset; positive-edge trigger	2.0 to 6.0	CMOS	±5.2	17	50 pF	99	-40 to +125
74HCT174	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	18	50 pF	69	-40 to +125
74HC175	Quad D-type flip-flop with reset; positive-edge trigger	2.0 to 6.0	CMOS	±5.2	17	50 pF	83	-40 to +125
74HCT175	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	16	50 pF	54	-40 to +125
74HC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 to 6.0	CMOS	±5.2	15	50 pF	122	-40 to +125
74HCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	15	50 pF	36	-40 to +125
74HC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 to 6.0	CMOS	±7.8	14	50 pF	83	-40 to +125
74HCT374	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	13	50 pF	48	-40 to +125
74HC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 to 6.0	CMOS	±7.8	13	50 pF	83	-40 to +125
74HCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±6	14	50 pF	53	-40 to +125
74HC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 to 6.0	CMOS	±7.8	14	50 pF	133	-40 to +125
74HCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	15	50 pF	76	-40 to +125
74HC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 to 6.0	CMOS	±5.2	14	50 pF	82	-40 to +125
74HCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 to 5.5	TTL	±4	15	50 pF	59	-40 to +125
74HC73	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 to 6.0	CMOS	±5.2	16	50 pF	77	-40 to +125
74HCT534	Octal D-type flip-flop; inverting; positive-edge trigger; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	13	50 pF	40	-40 to +125
74HCT7273	Octal D-type flip-flop with reset; positive edge-trigger; open drain outputs; TTL-enabled	4.5 to 5.5	TTL	4	16	50 pF	56	-40 to +125
74LV174	Hex D-type flip-flop with reset; positive-edge trigger	1.0 to 5.5	TTL	±12	16	50 pF	77	-40 to +125
74LV273	Octal D-type flip-flop with reset; positive-edge trigger	1.0 to 5.5	TTL	±12	12	50 pF	110	-40 to +125
74LV374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.0 to 5.5	TTL	±16	14	50 pF	77	-40 to +125
74LV377	Octal D-type flip-flop with data enable; positive-edge trigger	1.0 to 3.6	TTL	±6	13	50 pF	77	-40 to +125
74LV574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.0 to 5.5	TTL	±16	13	50 pF	77	-40 to +125
74LV74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 to 5.5	TTL	±12	11	50 pF	75	-40 to +125
74LVC16374	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/ LVTTTL	±24	3,8	50 pF	150	-40 to +125
74LVCH16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/ LVTTTL	±24	3,8	50 pF	150	-40 to +125

Flip-flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
74LVC109	Dual JK-type flip-flop with set and reset; positive-edge trigger	1.2 to 3.6	CMOS/LVTTL	±24	4	50 pF	330	-40 to +125
74LVC1G175	Single D flip-flop with reset; positive-edge trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,1	50 pF	300	-40 to +125
74LVC1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,5	50 pF	280	-40 to +125
74LVC1G79	Single D-type flip-flop; positive-edge trigger	1.65 to 5.5	CMOS/LVTTL	±32	2,2	50 pF	450	-40 to +125
74LVC1G80	Single D-type flip-flop; positive-edge trigger	1.65 to 5.5	CMOS/LVTTL	±32	2,4	50 pF	450	-40 to +125
74LVC273	Octal D-type flip-flop with reset; positive-edge trigger	1.2 to 3.6	CMOS/LVTTL	±24	6	50 pF	230	-40 to +125
74LVC2G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 to 5.5	CMOS/LVTTL	±32	3,5	50 pF	280	-40 to +125
74LVC374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	2,7	50 pF	100	-40 to +125
74LVC377	Octal D-type flip-flop with data enable; positive-edge trigger	1.2 to 3.6	CMOS/LVTTL	±24	6	50 pF	230	-40 to +125
74LVC574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3,2	50 pF	150	-40 to +125
74LVC74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 to 3.6	CMOS/LVTTL	±24	2,5	50 pF	250	-40 to +125
74LVC821	10-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	5,4	50 pF	150	-40 to +125
74LVC823	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	5,4	50 pF	150	-40 to +125
74LVCH162374	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3,8	50 pF	150	-40 to +125
74LVCH32374	32-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	3,8	50 pF	150	-40 to +125
74LVT16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	3	50 pF	150	-40 to +85
74LVTH16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	3	50 pF	150	-40 to +85
74LVT574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	4,3	50 pF	150	-40 to +85
74LVTH57	Octal D-type flip-flop; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	4,3	50 pF	150	-40 to +85
74LVTH574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	4,3	50 pF	150	-40 to +85
74LVT162374	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	2.7 to 3.6	TTL	±12	3	50 pF	150	-40 to +85
74LVT273	Octal D-type flip-flop with reset; positive-edge trigger	2.7 to 3.6	TTL	-0,5	3,5	50 pF	150	-40 to +85
74LVT32374	32-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	3	50 pF	150	-40 to +85
74LVT373	Octal D-type transparent latch (3-state)	2.7 to 3.6	TTL	-0,5	3	50 pF		-40 to +85
74LVT374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	3,5	50 pF	200	-40 to +85
74LVT534	Octal D-type flip-flop; inverting; positive-edge trigger (3-state)	2.7 to 3.6	TTL	-0,5	3,5	50 pF	150	-40 to +85
74LVT74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.7 to 3.6	TTL	-0,625	3,6	50 pF	345	-40 to +85
HEF4013	Dual D-type flip-flop with set and reset; positive-edge trigger	4.5 to 15.5	CMOS	±2.4	30	50 pF	40	-40 to +85
HEF40174	Hex D-type flip-flop with reset; positive-edge trigger	4.5 to 15.5	CMOS	±2.4	20	50 pF	45	-40 to +85
HEF40175	Quad D-type flip-flop with reset; positive-edge trigger	4.5 to 15.5	CMOS	±2.4	25	50 pF	45	-40 to +85
HEF4027	Dual JK-type flip-flop	4.5 to 15.5	CMOS	±2.4	30	50 pF	30	-40 to +85
HEF40374	Octal D-type flip-flop; positive-edge trigger (3-state)	4.5 to 15.5	CMOS	-50/62	40	50 pF	17	-40 to +85

Latches/registered drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	Number of bits	T _{amb} (°C)
74AHC259	8-bit addressable latch	2.0 to 5.5	CMOS	±8	4,1	50 pF	8	-40 to +125
74AHCT259	8-bit addressable latch; TTL-enabled	4.5 to 5.5	TTL	±8	4,1	50 pF	8	-40 to +125
74AHC373	Octal D-type transparent latch (3-state)	2.0 to 5.5	CMOS	±8	4,3	50 pF	8	-40 to +125
74AHCT373	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	4,3	50 pF	8	-40 to +125
74AHC573	Octal D-type transparent latch (3-state)	2.0 to 5.5	CMOS	±8	4,2	50 pF	8	-40 to +125
74AHCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	3,9	50 pF	8	-40 to +125
74ALVC162334	16-bit registered driver with 30 Ω termination resistors (3-state)	1.65 to 3.6	LVTTTL	±24	6	50 pF	16	-40 to +85
74ALVC162834	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 to 3.6	LVTTTL	±24	6	50 pF	18	-40 to +85
74ALVC162835	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 to 3.6	LVTTTL	±24	6	50 pF	18	-40 to +85
74ALVC162836	20-bit registered driver with 30 Ω termination resistors (3-state)	1.65 to 3.6	LVTTTL	±24	6	50 pF	20	-40 to +85
74ALVC16834	18-bit registered driver (3-state)	1.65 to 3.6	LVTTTL	±24	4	50 pF	18	-40 to +85
74ALVC16835	18-bit registered driver (3-state)	1.65 to 3.6	LVTTTL	±24	4	50 pF	18	-40 to +85
74ALVC16836	20-bit registered driver (3-state)	1.65 to 3.6	LVTTTL	±24	4	50 pF	20	-40 to +85
74ALVC373	Octal D-type transparent latch (3-state)	1.65 to 3.6	LVTTTL	±24	2,2	50 pF	8	-40 to +85
74ALVC573	Octal D-type transparent latch (3-state)	1.65 to 3.6	LVTTTL	±24	2,2	50 pF	8	-40 to +85
74ALVCH16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 to 3.6	LVTTTL	±24	2,1	50 pF	16	-40 to +85
74ALVCH16832	7-bit to 28-bit address register/driver (3-state)	2.3 to 3.6	LVTTTL	±24	4	50 pF	7	-40 to +85
74ALVCH16841	20-bit D-type transparent latch with bus hold (3-state)	2.3 to 3.6	LVTTTL	±24	2,4	50 pF	20	-40 to +85
74ALVCH16843	18-bit D-type transparent latch with bus hold (3-state)	2.3 to 3.6	LVTTTL	±24	2,1	50 pF	18	-40 to +85
74ALVCH32973	16-bit transceiver and transparent D-type latch with 8 independent buffers	1.8 to 3.6	LVTTTL	±24	2,5	50 pF	16	-40 to +85
74ALVT16260	12-bit to 24-bit multiplexed D-type latch with bus hold (3-state)	2.3 to 3.6	TTL	-0,5	2,8	50 pF	12	-40 to +85
74ALVT16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 to 3.6	TTL	-0,5	1,8	50 pF	16	-40 to +85
74AUP1G373	Single D-type transparent latch (3-state)	1.1 to 3.6	CMOS	1.9 / -1.9	8,5	30 pF	1	-40 to +125
74AVC16334	16-bit registered driver (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	16	-40 to +85
74AVC16373	16-bit D-type transparent latch (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	16	-40 to +85
74AVC16834	18-bit registered driver (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	18	-40 to +85
74AVC16835	18-bit registered driver (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	18	-40 to +85
74AVC16836	20-bit registered driver (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	20	-40 to +85
74AVCM162834	18-bit registered driver with 30 Ω termination resistors (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	18	-40 to +85
74AVCM162835	18-bit registered driver with 15 Ω termination resistors (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	18	-40 to +85
74AVCM162836	20-bit registered driver with 15 Ω termination resistors (3-state)	1.2 to 3.6	CMOS	±12	2	30 pF	20	-40 to +85
74HC259	8-bit addressable latch	2.0 to 6.0	CMOS	±5.2	18	50 pF	8	-40 to +125
74HCT259	8-bit addressable latch; TTL-enabled	4.5 to 5.5	TTL	±4	20	50 pF	8	-40 to +125
74HC373	Octal D-type transparent latch (3-state)	2.0 to 6.0	CMOS	±7.8	12	50 pF	8	-40 to +125
74HCT373	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	14	50 pF	8	-40 to +125
74HCT563	Octal D-type transparent latch; inverting; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	16	50 pF	8	-40 to +125
74HC573	Octal D-type transparent latch (3-state)	2.0 to 6.0	CMOS	±7.8	14	50 pF	8	-40 to +125

Latches/registered drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	Number of bits	T _{amb} (°C)
74HCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	17	50 pF	8	-40 to +125
74HC670	4-bit x 4-word register (3-state)	2.0 to 6.0	CMOS	±7.8	17	50 pF	4	-40 to +125
74HCT670	4-bit x 4-word register; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	23	50 pF	4	-40 to +125
74HC75	Quad bistable transparent latch	2.0 to 6.0	CMOS	±5.2	11	50 pF	4	-40 to +125
74HC75	Quad bistable transparent latch	2.0 to 6.0	CMOS	±5.2	11	50 pF	4	-40 to +125
74LV259	8-bit addressable latch	1.0 to 3.6	CMOS	±6	17	50 pF	8	-40 to +125
74LV373	Octal D-type transparent latch (3-state)	1.0 to 5.5	CMOS	±16	10	50 pF	8	-40 to +125
74LV573	Octal D-type transparent latch (3-state)	1.0 to 5.5	CMOS	±16	12	50 pF	8	-40 to +125
74LVC162373	16-bit D-type transparent latch with 30 Ω termination resistors (3-state)	1.2 to 3.6	TTL	±12	3,2	50 pF	16	-40 to +125
74LVCH162373	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	1.2 to 3.6	TTL	±24	3,2	50 pF	16	-40 to +125
74LVC16373	16-bit D-type transparent latch (3-state)	1.2 to 3.6	TTL	±24	3	50 pF	16	-40 to +125
74LVCH16373	16-bit D-type transparent latch with bus hold (3-state)	1.2 to 3.6	TTL	±24	3	50 pF	16	-40 to +125
74LVC373	Octal D-type transparent latch (3-state)	1.2 to 3.6	TTL	±24	3	50 pF	8	-40 to +125
74LVC573	Octal D-type transparent latch (3-state)	1.2 to 3.6	TTL	±24	3,4	50 pF	8	-40 to +125
74LVC841	10-bit D-type transparent latch (3-state)	1.2 to 3.6	TTL	±24	4,5	50 pF	10	-40 to +125
74LVCH32373	32-bit D-type transparent latch (3-state)	1.2 to 3.6	TTL	±24	3	50 pF	32	-40 to +125
74LVT162373	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	2.7 to 3.6	TTL	±12	2,5	50 pF	16	-40 to +85
74LVT16373	16-bit D-type transparent latch with bus hold (3-state)	2.7 to 3.6	TTL	-0,5	1,9	50 pF	16	-40 to +85
74LVT573	Octal D-type transparent latch (3-state)	2.7 to 3.6	TTL	-0,5	2,7	50 pF	8	-40 to +85
HEF40373	Octal D-type transparent latch (3-state)	4.5 to 15.5	CMOS	-50 / 62	40	50 pF	8	-40 to +85
HEF4043	Quad R/S latch with set and reset (3-state)	4.5 to 15	CMOS	±2.4	25	50 pF	4	-40 to +85
HEF4044	Quad R/S latch with set and reset (3-state)	4.5 to 15	CMOS	±2.4	30	50 pF	4	-40 to +85

AND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (TYP)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC08	Quad 2-input AND gate	2.0 to 5.5	CMOS	±8	3,5	50 pF	60	4	-40 to +125
74AHC1G08	Single 2-input AND gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125
74AHC1G09	Single 2-input AND gate; open drain	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125
74AHC2G08	Dual 2-input AND gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	2	-40 to +125
74AHCT08	Quad 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±8	5	50 pF	60	4	-40 to +125
74AHCT1G08	Single 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,6	50 pF	60	1	-40 to +125
74AHCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,6	50 pF	60	2	-40 to +125
74ALVC08	Quad 2-input AND gate	1.65 to 3.6	TTL	±24	2	50 pF	145	4	-40 to +85
74AUP1G08	Single 2-input AND gate	1.1 to 3.6	CMOS	±1.9	8,2	30 pF	70	1	-40 to +125
74AUP1G09	Single 2-input AND gate; open drain	1.1 to 3.6	CMOS	1,9	8,5	30 pF	70	1	-40 to +125
74AUP1G11	Single 3-input AND gate	1.1 to 3.6	CMOS	±1.9	6,9	30 pF	70	1	-40 to +125
74AUP2G08	Dual 2-input AND gate	1.1 to 3.6	CMOS	±1.9	8,2	30 pF	70	2	-40 to +125
74AXP1G08	Single 2-input AND gate	0.7 to 2.75	CMOS	±4.5	2,6	5pF	70	1	-40 to +85
74HC08	Quad 2-input AND gate	2.0 to 6.0	CMOS	±5.2	7	50 pF	36	4	-40 to +125
74HC11	Triple 3-input AND gate	2.0 to 6.0	CMOS	±5.2	10	50 pF	36	3	-40 to +125
74HC1G08	Single 2-input AND gate	2.0 to 6.0	CMOS	±5.2	7	50 pF	36	1	-40 to +125
74HC21	Dual 4-input AND gate	2.0 to 6.0	CMOS	±5.2	10	50 pF	36	2	-40 to +125
74HC2G08	Dual 2-input AND gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	2	-40 to +125
74HCT08	Quad 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±4	11	50 pF	36	4	-40 to +125
74HCT11	Triple 3-input AND gate	4.5 to 5.5	TTL	±4	11	50 pF	36	3	-40 to +125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±2	11	50 pF	36	1	-40 to +125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±2	11	50 pF	36	1	-40 to +125
74HCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 to 5.5	TTL	±4	14	50 pF	36	2	-40 to +125
74LV08	Quad 2-input AND gate	1.0 to 5.5	TTL	±12	7	50 pF	30	4	-40 to +125
74LVC08	Quad 2-input AND gate	1.2 to 3.6	TTL	±24	2,1	50 pF	150	4	-40 to +125
74LVC11	Triple 3-input AND gate	1.2 to 3.6	TTL	±24	3,7	50 pF	150	3	-40 to +125
74LVC1G08	Single 2-input AND gate	1.65 to 5.5	CMOS / LVTTTL	±24	2,1	50 pF	150	1	-40 to +125
74LVC1G11	Single 3-input AND gate	1.65 to 5.5	CMOS / LVTTTL	±24	2,6	50 pF	150	1	-40 to +125
74LVC2G08	Dual 2-input AND gate	1.65 to 5.5	CMOS / LVTTTL	±24	2,1	50 pF	150	2	-40 to +125
74LVT08	Quad 2-input AND gate	2.7 to 3.6	TTL	-0,5	3,4	50 pF	150	4	-40 to +85
74VHC08	Quad 2-input AND gate	2.0 to 5.5	CMOS	±8	3,5	50 pF	60	4	-40 to +125
74VHCT08	Quad 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±8	5	50 pF	60	4	-40 to +125
HEF4073	Triple 3-input AND gate	4.5 to 15.5	CMOS	±2.4	20	50 pF	10	3	-40 to +85
HEF4081	Quad 2-input AND gate	4.5 to 15.5	CMOS	±2.4	20	50 pF	10	4	-40 to +85
HEF4082	Dual 4-input AND gate	4.5 to 15.5	CMOS	±2.4	25	50 pF	10	2	-40 to +85
XC7SET08	Single 2-input AND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,6	50 pF	60	1	-40 to +125
XC7SH08	Single 2-input AND gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125

Combination Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G0832	Single 3-input AND-OR gate	1.1 to 3.6	CMOS	±1.9	6,7	30 pF	70	1	-40 to +125
74AUP1G3208	Single 3-input OR-AND gate	1.1 to 3.6	CMOS	±1.9	7,4	30 pF	70	1	-40 to +125
74AUP1G885	Dual function gate	1.1 to 3.6	CMOS	±1.9	7,6	30 pF	70	1	-40 to +125
74AUP1Z04	Crystal driver with enable and internal resistor	1.1 to 3.6	CMOS	±1.9	5,6	30 pF	70	1	-40 to +125
74AUP1Z125	Crystal driver with enable and internal resistor (3-state)	1.1 to 3.6	CMOS	±1.9	4,7	30 pF	70	1	-40 to +125
74AUP2G0604	Inverter with open drain and inverter	1.1 to 3.6	CMOS	±1.9	4	30 pF	70	2	-40 to +125
74AUP2G3404	Buffer and inverter	1.1 to 3.6	CMOS	±1.9	4	30 pF	70	2	-40 to +125
74AUP2G3407	Buffer and buffer with open drain	1.1 to 3.6	CMOS	±1.9	4,1	30 pF	70	2	-40 to +125
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 to 3.6	CMOS	±1.9	3,8	30 pF	70	2	-40 to +125
74AUP3G0434	Dual inverter and single buffer	1.1 to 3.6	CMOS	±1.9	4	30 pF	70	3	-40 to +125
74AUP3G3404	Dual buffer and single inverter	1.1 to 3.6	CMOS	±1.9	4	30 pF	70	3	-40 to +125
74HC58	Dual AND-OR gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	2	-40 to +125
74LVC1GX04	Crystal driver	1.65 to 5.5	CMOS / LVTTTL	±24	2,8	50 pF	150	1	-40 to +125
HEF4000	Dual 3-input NOR gate	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	2	-40 to +85
HEF4007	Dual complementary pair and inverter	4.5 to 15.5	CMOS	±3.4	15	50 pF	10	2	-40 to +85

Configurable Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G57	Configurable gate; Schmitt trigger	1.1 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP1G58	Configurable gate; Schmitt trigger	1.1 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP1G97	Configurable gate; Schmitt trigger	1.1 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP1G98	Configurable gate; Schmitt trigger	1.1 to 3.6	CMOS	1.9 / -1.9	8,9	30 pF	70	1	-40 to +125
74AUP1G3208	Configurable multiple function gate	0.8 to 3.6	CMOS	4 / -4	6,6	30 pF	70	1	-40 to +125
74AUP1T57	Configurable gate with voltage-level translation	2.3 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP1T58	Configurable gate with voltage-level translation	2.3 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP1T97	Configurable gate with voltage-level translation	2.3 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP1T98	Configurable gate with voltage-level translation	2.3 to 3.6	CMOS	1.9 / -1.9	8,7	30 pF	70	1	-40 to +125
74AUP2G57	Configurable multiple function gate	0.8 to 3.6	CMOS	4 / -4	6,6	30pF	70	1	-40 to +125
74AUP2G58	Configurable multiple function gate	0.8 to 3.6	CMOS	4 / -4	6,6	30pF	70	1	-40 to +125
74AUP2G97	Configurable multiple function gate	0.8 to 3.6	CMOS	4 / -4	6,6	30pF	70	1	-40 to +125
74AUP2G98	Configurable multiple function gate	0.8 to 3.6	CMOS	4 / -4	6,6	30pF	70	1	-40 to +125
74AXP1G57	Configurable gate; Schmitt trigger	0.7 to 2.75	CMOS	4.5 / -4.5	4,6	5pF	70	1	-40 to +85
74AXP1G58	Configurable gate; Schmitt trigger	0.7 to 2.75	CMOS	4.5 / -4.5	4,5	5pF	70	1	-40 to +85
74AXP1G97	Configurable gate; Schmitt trigger	0.7 to 2.75	CMOS	4.5 / -4.5	4,5	5pF	70	1	-40 to +85
74AXP1G98	Configurable gate; Schmitt trigger	0.7 to 2.75	CMOS	4.5 / -4.5	4,5	5pF	70	1	-40 to +85
74LVC1G57	Configurable gate; Schmitt trigger	1.65 to 5.5	TTL	±32	6,3	50 pF	150	1	-40 to +125
74LVC1G58	Configurable gate; Schmitt trigger	1.65 to 5.5	TTL	±32	6,3	50 pF	150	1	-40 to +125
74LVC1G97	Configurable gate; Schmitt trigger	1.65 to 5.5	TTL	±32	6,3	50 pF	150	1	-40 to +125
74LVC1G98	Configurable gate; Schmitt trigger	1.65 to 5.5	TTL	±32	6,3	50 pF	150	1	-40 to +125
74LVC1G99	Configurable gate; Schmitt trigger	1.65 to 5.5	TTL	±32	8,4	50 pF	150	1	-40 to +125

EXCLUSIVE-NOR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
74HC7266	Quad 2-input EXCLUSIVE-NOR gate	2.0 to 6.0	CMOS	±5.2	11	50 pF	36	-40 to +125
HEF4077	Quad 2-input EXCLUSIVE-NOR gate	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	-40 to +85

EXCLUSIVE-OR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC1G86	2-input EXCLUSIVE-OR gate	2.0 to 5.5	CMOS	±8	3,4	50 pF	60	1	-40 to +125
74AHCT1G86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,5	50 pF	60	1	-40 to +125
74AHC86	Quad 2-input EXCLUSIVE-OR gate	2.0 to 5.5	CMOS	±8	3,4	50 pF	60	4	-40 to +125
74AHCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,4	50 pF	60	4	-40 to +125
74AUP1G386	Single 3-input EXCLUSIVE-OR gate	1.1 to 3.6	CMOS	1.9/-1.9	8,6	30 pF	70	1	-40 to +125
74AUP2G86	Dual 2-input EXCLUSIVE-OR gate	1.1 to 3.6	CMOS	1.9/-1.9	9	30 pF	70	2	-40 to +125
74HC1G86	Single 2-input EXCLUSIVE-OR gate	2.0 to 6.0	CMOS	±2.6	9	50 pF	36	1	-40 to +125
74HCT1G86	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 to 5.5	TTL	±2.0	10	50 pF	36	1	-40 to +125
74HC2G86	Dual 2-input EXCLUSIVE-OR gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	2	-40 to +125
74HCT2G86	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 to 5.5	TTL	±4.0	11	50 pF	36	2	-40 to +125
74HC86	Quad 2-input EXCLUSIVE-OR gate	2.0 to 6.0	CMOS	±5.2	11	50 pF	36	4	-40 to +125
74HCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 to 5.5	TTL	±4	14	50 pF	36	4	-40 to +125
74LV86	Quad 2-input EXCLUSIVE-OR gate	1.0 to 5.5	TTL	±12	11	50 pF	30	4	-40 to +125
74LVC1G386	Single 3-input EXCLUSIVE-OR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	4,5	50 pF	150	1	-40 to +125
74LVC1G86	Single 2-input EXCLUSIVE-OR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,4	50 pF	150	1	-40 to +125
74LVC2G86	Dual 2-input EXCLUSIVE-OR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,3	50 pF	150	2	-40 to +125
74LVC86	Quad 2-input EXCLUSIVE-OR gate	1.2 to 3.6	CMOS/ LVTTTL	±24	3	50 pF	150	4	-40 to +125
HEF4030	Quad 2-input EXCLUSIVE-OR gate	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	4	-40 to +85
HEF4070	Quad 2-input EXCLUSIVE-OR gate	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	4	-40 to +85
XC7SET86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,5	50 pF	60	1	-40 to +125
XC7SH86	2-input EXCLUSIVE-OR gate	2.0 to 5.5	CMOS	±8	3,4	50 pF	60	1	-40 to +125

NAND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC00	Quad 2-input NAND gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	4	-40 to +125
74AHCT00	Quad 2-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,3	50 pF	60	4	-40 to +125
74AHC1G00	Single 2-input NAND gate	2.0 to 5.5	CMOS	±8	3,5	50 pF	60	1	-40 to +125
74AHCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,6	50 pF	60	1	-40 to +125
74AHC2G00	Dual 2-input NAND gate	2.0 to 5.5	CMOS	±8	3,5	50 pF	60	2	-40 to +125
74AHCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,6	50 pF	60	2	-40 to +125

NAND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC30	8-input NAND gate	2.0 to 5.5	CMOS	±8	3,6	50 pF	60	1	-40 to +125
74AHC30	8-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,3	50 pF	60	1	-40 to +125
74ALVC00	Quad 2-input NAND gate	1.65-3.6	TTL	±24	2,1	50 pF	145	4	-40 to +85
74AUP1G00	Single 2-input NAND gate	1.1 to 3.6	CMOS	1.9/-1.9	8,3	30 pF	70	1	-40 to +125
74AUP1G132	Single 2-input NAND gate Schmitt trigger	1.1 to 3.6	CMOS	1.9/-1.9	10	30 pF	70	1	-40 to +125
74AUP1G38	Single 2-input NAND gate; open drain	1.1 to 3.6	CMOS	1,9	8,5	30 pF	70	1	-40 to +125
74AUP2G00	Dual 2-input NAND gate	1.1 to 3.6	CMOS	1.9/-1.9	8,3	30 pF	70	2	-40 to +125
74AUP2G38	Dual 2-input NAND gate; open drain	1.1 to 3.6	CMOS	1,9	8,5	30 pF	70	2	-40 to +125
74HC00	Quad 2-input NAND gate	2.0 to 6.0	CMOS	±5.2	7	50 pF	36	4	-40 to +125
74HC00	Quad 2-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±4	10	50 pF	36	4	-40 to +125
74HC03	Quad 2-input NAND gate; open drain	2.0 to 6.0	CMOS	5,2	8	50 pF	36	4	-40 to +125
74HC03	Quad 2-input NAND gate; open drain; TTL-enabled	4.5 to 5.5	TTL	±4	10	50 pF	36	4	-40 to +125
74HC10	Triple 3-input NAND gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	3	-40 to +125
74HC10	Triple 3-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±4	11	50 pF	36	3	-40 to +125
74HC1G00	Single 2-input NAND gate	2.0 to 6.0	CMOS	±2.6	7	50 pF	36	1	-40 to +125
74HC1G00	Single 2-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±2	10	50 pF	36	1	-40 to +125
74HC20	Dual 4-input NAND gate	2.0 to 6.0	CMOS	±5.2	8	50 pF	36	2	-40 to +125
74HC20	Dual 4-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±4	13	50 pF	36	2	-40 to +125
74HC2G00	Dual 2-input NAND gate	2.0 to 6.0	CMOS	±5.6	9	50 pF	36	2	-40 to +125
74HC2G00	Dual 2-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±4	12	50 pF	36	2	-40 to +125
74HC30	8-input NAND gate	2.0 to 6.0	CMOS	±5.2	12	50 pF	36	1	-40 to +125
74HC30	8-input NAND gate; TTL-enabled	4.5 to 5.5	TTL	±4	12	50 pF	36	1	-40 to +125
74LV00	Quad 2-input NAND gate	1.0 to 5.5	TTL	±12	7	50 pF	30	4	-40 to +125
74LV03	Quad 2-input NAND gate; open drain	1.0 to 5.5	TTL	±12	8	50 pF	30	4	-40 to +125
74LVC00	Quad 2-input NAND gate	1.2 to 3.6	CMOS/ LVTTTL	±24	2,1	50 pF	150	4	-40 to +125
74LVC10	Triple 3-input NAND gate	1.2 to 3.6	CMOS/ LVTTTL	±24	3,9	50 pF	150	3	-40 to +125
74LVC1G00	Single 2-input NAND gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,2	50 pF	175	1	-40 to +125
74LVC1G10	Single 3-input NAND gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,6	50 pF	175	1	-40 to +125
74LVC1G38	Single 2-input NAND gate; open drain	1.65 to 5.5	CMOS/ LVTTTL	32	2,3	50 pF	175	1	-40 to +125
74LVC2G00	Dual 2-input NAND gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,2	50 pF	175	2	-40 to +125
74LVC2G38	Dual 2-input NAND gate; open drain	1.65 to 5.5	CMOS/ LVTTTL	32	2,1	50 pF	175	2	-40 to +125
74LVC30	8-input NAND gate	1.65 to 5.6	CMOS/ LVTTTL	24	3,6	50 pF	175	1	-40 to +125
74LVC38	Quad 2-input NAND gate; open drain	1.2 to 3.6	CMOS/ LVTTTL	24	2,2	50 pF	175	4	-40 to +125
74LVT00	Quad 2-input NAND gate	2.7 to 3.6	TTL	-0,5	2,7	50 pF	150	4	-40 to +85
74LVT10	Triple 3-input NAND gate	2.7 to 3.6	TTL	-0,5	3,8	50 pF	150	3	-40 to +85
HEF4011	Quad 2-input NAND gate	4.5 to 15.5	CMOS	±2.4	20	50 pF	10	4	-40 to +85
HEF4023	Triple 3-input NAND gate	4.5 to 15.5	CMOS	±2.4	25	50 pF	10	3	-40 to +85
HEF4068	8-input NAND gate	4.5 to 15.5	CMOS	±2.4	30	50 pF	10	1	-40 to +85

NOR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,8	50 pF	60	4	-40 to +125
74AHC1G02	Single 2-input NOR gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125
74AHCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,5	50 pF	60	1	-40 to +125
74ALVC02	Quad 2-input NOR gate	1.65 to 3.6	TTL	±24	2,2	50 pF	150	4	-40 to +85
74AUP1G02	Single 2-input NOR gate	1.1 to 3.6	CMOS	1.9/-1.9	8,3	30 pF	70	1	-40 to +125
74AUP2G02	Dual 2-input NOR gate	1.1 to 3.6	CMOS	1.9/-1.9	8,3	30 pF	70	2	-40 to +125
74HC02	Quad 2-input NOR gate	2.0 to 6.0	CMOS	±5.2	7	50 pF	36	4	-40 to +125
74HCT02	Quad 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±4	9	50 pF	36	4	-40 to +125
74HC1G02	Single 2-input NOR gate	2.0 to 6.0	CMOS	±2.6	7	50 pF	36	1	-40 to +125
74HCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±2.0	9	50 pF	36	1	-40 to +125
74HC27	Triple 3-input NOR gate	2.0 to 6.0	CMOS	±5.2	8	50 pF	36	3	-40 to +125
74HCT27	Triple 3-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±4	10	50 pF	36	3	-40 to +125
74HC2G02	Dual 2-input NOR gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	2	-40 to +125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±4	12	50 pF	36	2	-40 to +125
74HC4002	Dual 4-input NOR gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	2	-40 to +125
74HCT4002	Dual 4-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±4	11	50 pF	36	2	-40 to +125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±4	12	50 pF	36	2	-40 to +125
74LV02	Quad 2-input NOR gate	1.0 to 5.5	TTL	±12	6	50 pF	30	4	-40 to +125
74LV27	Triple 3-input NOR gate	1.0 to 5.5	TTL	±12	8	50 pF	30	3	-40 to +125
74LVC02	Quad 2-input NOR gate	1.2 to 3.6	TTL	±24	2,1	50 pF	150	4	-40 to +125
74LVC1G02	Single 2-input NOR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,1	50 pF	150	1	-40 to +125
74LVC1G27	Single 3-input NOR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,6	50 pF	150	1	-40 to +125
74LVC27	Triple 3-input NOR gate	1.2 to 3.6	TTL	±24	3,4	50 pF	150	3	-40 to +125
74LVC2G02	Dual 2-input NOR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,4	50 pF	150	2	-40 to +125
74LVT02	Quad 2-input NOR gate	2.7 to 3.6	TTL	-0,5	2,8	50 pF		4	-40 to +85
74VHC02	Quad 2-input NOR gate	2.0 to 5.5	CMOS	±8	2,9	50 pF	60	4	-40 to +125
74VHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,8	50 pF	60	4	-40 to +125
HEF4001	Quad 2-input NOR gate	4.5 to 15.5	CMOS	±2.4	20	50 pF	10	4	-40 to +85
HEF4002	Dual 4-input NOR gate	4.5 to 15.5	CMOS	±2.4	20	50 pF	10	4	-40 to +85
HEF4025	Triple 3-input NOR gate	4.5 to 15.5	CMOS	±2.4	40	50 pF	10	3	-40 to +85
XC7SET02	Single 2-input NOR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,5	50 pF	60	1	-40 to +125
XC7SH02	Single 2-input NOR gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	-40 to +125

OR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ)	f _{max} (MHz)	Number of bits	Power dissipation considerations	T _{amb} (°C)
74AHC1G32	Single 2-input OR gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	<i>low</i>	-40 to +125
74AHT1G32	Single 2-input OR gate	4.5 to 5.5	TTL	±8	3,3	50 pF	60	1	<i>low</i>	-40 to +125
74AHC2G32	Dual 2-input OR gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	2	<i>low</i>	-40 to +125
74AHT2G32	Dual 2-input OR gate	4.5 to 5.5	TTL	±8	3,3	50 pF	60	2	<i>low</i>	-40 to +125
74AHC32	Quad 2-input OR gate	2.0 to 5.5	CMOS	±8	3,5	50 pF	60	4	<i>low</i>	-40 to +125
74AHT32	Quad 2-input OR gate; TTL-enabled	4.5 to 5.5	TTL	±8	5	50 pF	60	4	<i>low</i>	-40 to +125
74ALVC32	Quad 2-input OR gate	1.65 to 3.6	TTL	±24	2	50 pF	150	4	<i>low</i>	-40 to +125
74AUP1G32	Single 2-input OR gate	1.1 to 3.6	CMOS	1.9/-1.9	7,9	30 pF	70	1	<i>ultra low</i>	-40 to +125
74AUP1G332	Single 3-input OR gate	1.1 to 3.6	CMOS	1.9/-1.9	6,8	30 pF	70	1	<i>ultra low</i>	-40 to +125
74AUP2G32	Dual 2-input OR gate	1.1 to 3.6	CMOS	1.9/-1.9	7,9	30 pF	70	2	<i>ultra low</i>	-40 to +125
74HC1G32	Single 2-input OR gate	2.0 to 6.0	CMOS	±2.6	8	50 pF	36	1	<i>low</i>	-40 to +125
74HCT1G32	Single 2-input OR gate; TTL-enabled	4.5 to 5.5	TTL	±2.0	10	50 pF	36	1	<i>low</i>	-40 to +125
74HC2G32	Dual 2-input OR gate	2.0 to 6.0	CMOS	±5.2	9	50 pF	36	2	<i>low</i>	-40 to +125
74HCT2G32	Dual 2-input OR gate; TTL-enabled	4.5 to 5.5	TTL	±4.0	13	50 pF	36	2	<i>low</i>	-40 to +125
74HC32	Quad 2-input OR gate	2.0 to 6.0	CMOS	±5.2	6	50 pF	36	4	<i>low</i>	-40 to +125
74HCT32	Quad 2-input OR gate	4.5 to 5.5	TTL	±4.0	9	50 pF	36	4	<i>low</i>	-40 to +125
74HC4075	Triple 3-input OR gate	2.0 to 6.0	CMOS	±5.2	8	50 pF	36	3	<i>low</i>	-40 to +125
74HCT4075	Triple 3-input OR gate; TTL-enabled	4.5 to 5.5	TTL	±4	10	50 pF	36	3	<i>low</i>	-40 to +125
74LV32	Quad 2-input OR gate	1.0 to 5.5	TTL	±12	6	50 pF	30	4	<i>low</i>	-40 to +125
74LVC1G32	Single 2-input OR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,1	50 pF	150	1	<i>low</i>	-40 to +125
74LVC1G332	Single 3-input OR gate	1.65 to 5.5	CMOS/ LVTTTL	±32		50 pF	150	1	<i>low</i>	-40 to +125
74LVC2G32	Dual 2-input OR gate	1.65 to 5.5	CMOS/ LVTTTL	±32	2,2	50 pF	150	2	<i>low</i>	-40 to +125
74LVC32	Quad 2-input OR gate	1.2 to 3.6	CMOS/ LVTTTL	±24	2,1	50 pF	150	4	<i>low</i>	-40 to +125
74LVC332	Triple 3-input OR gate	1.2 to 3.6	CMOS/ LVTTTL	±24	2,4	50 pF	150	3	<i>low</i>	-40 to +125
74LVT32	Quad 2-input OR gate	2.7 to 3.6	TTL	-0,625	3,2	50 pF		4	<i>medium</i>	-40 to +125
74VHC32	Quad 2-input OR gate	2.0 to 5.5	CMOS	±8	3,5	50 pF	60	4	<i>low</i>	-40 to +125
74VHCT32	Quad 2-input OR gate; TTL-enabled	4.5 to 5.5	TTL	±8	5	50 pF	60	4	<i>low</i>	-40 to +125
HEF4071	Quad 2-input OR gate	4.5 to 15.5	CMOS	±2.4	20	50 pF	10	4	<i>low</i>	-40 to +125
HEF4072	Dual 4-input OR gate	4.5 to 15.5	CMOS	±2.4	25	50 pF	10	2	<i>low</i>	-40 to +85
HEF4075	Triple 3-input OR gate	4.5 to 15.5	CMOS	±2.4	25	50 pF	10	3	<i>low</i>	-40 to +85
XC7SET32	Single 2-input OR gate; TTL-enabled	4.5 to 5.5	TTL	±8	3,3	50 pF	60	1	<i>low</i>	-40 to +125
XC7SH32	Single 2-input OR gate	2.0 to 5.5	CMOS	±8	3,2	50 pF	60	1	<i>low</i>	-40 to +125

Level shifters/translators

Type number	Description	V _{CC} (V)	V _{CC(B)} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	Number of bits	T _{amb} (°C)
74ALVC164245	16-bit dual-supply voltage-translating transceiver (3-state)	1.5 to 5.5	1.5 to 3.6	CMOS/LVTTL	±24	2,9	50	16	-40 to +85
74AUP1T34	Single dual-supply translating buffer	1.1 to 3.6	1.1 to 3.6	CMOS	±1.9	15,2	30	1	-40 to +125
74AUP1T45	Single dual-supply voltage-translating transceiver (3-state)	1.1 to 3.6	1.1 to 3.6	CMOS	±1.9	15,6	30	1	-40 to +125
74AVC16T245	16-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	16	-40 to +125
74AVC1T45	Single dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	1	-40 to +125
74AVC1T1022	1-to-4 fan out buffer	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30pF	1	-40 to +125
74AVC20T245	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	3,5	30	20	-40 to +125
74AVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	2	-40 to +125
74AVC2T245	2-bit dual-supply voltage-translating transceiver	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	2	-40 to +125
74AVC32T245	32-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	32	-40 to +125
74AVC4T245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	4	-40 to +125
74AVC4TD245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	4	-40 to +125
74AVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	8	-40 to +125
74AVCH16T245	16-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	16	-40 to +125
74AVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	1	-40 to +125
74AVCH20T245	20-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	3,5	30	20	-40 to +125
74AVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	2	-40 to +125
74AVCH4T245	4-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 to 3.6	0.8 to 3.6	CMOS/LVTTL	±12	2,1	30	4	-40 to +125
74HC4049	Hex inverter with 15 V-tolerant inputs	2.0 to 6.0	N/A	CMOS	±5.2	8	50	6	-40 to +125
74HC4050	Hex buffer with 15 V-tolerant inputs	2.0 to 6.0	N/A	CMOS	±5.2	7	50	6	-40 to +125
74LVC1T45	Single dual-supply voltage-translating transceiver (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	2,5	50	1	-40 to +125
74LVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	2,5	50	1	-40 to +125
74LVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	2,5	50	2	-40 to +125
74LVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	2,5	50	2	-40 to +125
74LVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	3,5	50	8	-40 to +125
74LVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	3,5	50	8	-40 to +125
74LVC4245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 to 5.5	1.2 to 5.5	CMOS/LVTTL	±24	3,5	50	8	-40 to +125
HEF4104	Quad low-to-high voltage translator (3-state)	3.0 to 15.0	3.0 to 15.0	CMOS	±2.4	3,4	50	16	-40 to +85
74AXP1T14	Dual-supply schmitt-trigger inverter	0.7 to 2.75	1.2 to 5.5	CMOS	±12	3,4	50	1	-40 to +125
74AXP1T32	Dual-supply 2-input or gate	0.7 to 2.75	1.2 to 5.5	CMOS	±12	3,4	50	1	-40 to +125
74AXP1T34	Single dual-supply voltage-translating buffer	0.7 to 2.75	1.2 to 5.5	CMOS	±12	3,4	50	1	-40 to +125
74AXP1T57	Schmitt-trigger inputs, Dual supply configurable multiple function gate	0.7 to 2.75	1.2 to 5.5	CMOS	±12	4,8	50	1	-40 to +85
74AXP1T125	Dual-supply buffer/line driver (3-state)	0.7 to 2.75	1.2 to 5.5	CMOS	±12	4,8	50	1	-40 to +125
74AXP2T08	Dual-supply 2-input AND gate	0.7 to 2.75	1.2 to 5.5	CMOS	±12	4,8	50	1	-40 to +125
74AXP2T3407	Dual-supply single buffer and single buffer with open drain	0.7 to 2.75	1.2 to 5.5	CMOS	±12	4,8	50	1	-40 to +125

Digital comparators

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	Number of bits	T _{amb} (°C)
74HC688	8-bit magnitude comparator	2.0 to 6.0	CMOS	±5.2	17	50 pF	8	-40 to +125
74HCT688	8-bit magnitude comparator; TTL-enabled	4.5 to 5.5	TTL	±4.0	17	50 pF	8	-40 to +125
74HC85	4-bit magnitude comparator	2.0 to 6.0	CMOS	±5.2	23	50 pF	4	-40 to +125
74HCT85	4-bit magnitude comparator; TTL-enabled	4.5 to 5.5	TTL	±4.0	26	50 pF	4	-40 to +125
HEF4585	4-bit magnitude comparator	4.5 to 15.5	CMOS	±2.4	65	50 pF	4	-40 to +85

Multivibrators

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	T _{amb} (°C)
74AHC123	Dual retriggerable monostable multivibrator with reset	2.0 to 5.5	CMOS	±8	5,1	50 pF	-40 to +125
74AHCT123	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 to 5.5	TTL	±8	5	50 pF	-40 to +125
74HC123	Dual retriggerable monostable multivibrator with reset	2.0 to 6.0	CMOS	±7.8	9	50 pF	-40 to +125
74HCT123	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 to 5.5	TTL	±4	26	50 pF	-40 to +125
74HC221	dual non-retriggerable monostable multivibrator with reset	2.0 to 6.0	CMOS	±5.2	29	50 pF	-40 to +125
74HCT221	dual non-retriggerable monostable multivibrator with reset; TTL-enabled	4.5 to 5.5	TTL	±4	32	50 pF	-40 to +125
74HC423	Dual retriggerable monostable multivibrator with reset	2.0 to 6.0	CMOS	±5.2	23	50 pF	-40 to +125
74HCT423	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 to 5.5	TTL	±4	26	50 pF	-40 to +125
74HC4538	Dual retriggerable precision monostable multivibrator	2.0 to 6.0	CMOS	±5.2	27	50 pF	-40 to +125
74HCT4538	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 to 5.5	TTL	±4	30	50 pF	-40 to +125
74LV123	Dual retriggerable monostable multivibrator with reset	1.0 to 5.5	TTL	±12	20	50 pF	-40 to +125
74LVC1G123	Single retriggerable monostable multivibrator	1.65 to 5.5	CMOS/LVTTL	±32	3,5	50 pF	-40 to +125
HEF4047	Monostable/astable multivibrator	4.5 to 15.5	CMOS	±2.4	50	50 pF	-40 to +85
HEF4528	Dual retriggerable monostable multivibrator with reset	4.5 to 15.5	CMOS	±2.4	40	50 pF	-40 to +85

Parity generators-checkers

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

Phase-locked loops

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	T _{amb} (°C)
74HC4046	Phase-locked loop with VCO	3.0 to 6.0	CMOS	±5.2	18	50 pF	21
74HCT4046	Phase-locked loop with VCO; TTL-enabled	4.5 to 5.5	TTL	±4	23	50 pF	19
74HC7046	Phase-locked loop with lock detector	3.0 to 6.0	CMOS	±5.2	17	50 pF	19
74HCT7046	Phase-locked loop with lock detector; TTL-enabled	4.5 to 5.5	TTL	±4	21	50 pF	19
74HCT9046	Phase-locked loop with bandgap controlled VCO; TTL-enabled	4.5 to 5.5	TTL	±4	23	50 pF	19
HEF4046	Phase-locked loop with VCO	4.5 to 15.5	CMOS	±2.4		50 pF	2,7

Printer interfaces

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	T _{amb} (°C)
PDI1284P11	Parallel interface transceiver/buffer	3.0 to 3.6	LVTTTL	- 14 / 14	13,9	50 pF	0 to +70

CBT Bus switches

Type number	Description	V _{CC} (V)	V _{PAS} (V)	Logic switching levels	R _{ON} (Ω)	f(-3dB) (MHz)	Number of bits	t _{pd} (ns)	T _{amb} (°C)
74CBTLV16211	24-bit bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	10	0,2	-40 to +125
74CBTLV1G125	Single bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	1	0,2	-40 to +125
74CBTLV3125	Quad bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	4	0,2	-40 to +125
74CBTLV3126	Quad bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	4	0,2	-40 to +125
74CBTLV3244	Octal bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	8	0,2	-40 to +125
74CBTLV3245	Octal bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	8	0,2	-40 to +125
74CBTLV3253	Dual 4:1 mux/demux	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	2	0,2	-40 to +125
74CBTLV3257	Quad 2:1 mux/demux	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	4	0,2	-40 to +125
74CBTLV3306	2-bit bus switch	2.3 to 3.6	3,3	CMOS/LVTTTL	7	400	2	0,2	-40 to +125
74CBTLV3384	10-bit bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	10	0,2	-40 to +125
74CBTLV3861	10-bit bus switch	2.3 to 3.6	3,3	CMOS / LVTTTL	7	400	10	0,2	-40 to +125
74CBTLVD3244	Octal bus switch level translator	3.0 to 3.6	1,8	CMOS / LVTTTL	7	400	8	0,2	-40 to +125
74CBTLVD3245	Octal bus switch level translator	3.0 to 3.6	1,8	CMOS / LVTTTL	7	400	8	0,2	-40 to +125
74CBTLVD3384	10-bit bus switch level translator	3.0 to 3.6	1,8	CMOS / LVTTTL	7	400	10	0,2	-40 to +125
74CBTLVD3861	10-bit bus switch level translator	3.0 to 3.6	1,8	CMOS / LVTTTL	7	400	10	0,2	-40 to +125
CBT16210	20-bit bus switch	4.5 to 5.5	3,9	TTL	7	300	20	0,25	-40 to +85
CBT16211	24-bit bus switch	4.5 to 5.5	3,9	TTL	7	300	24	0,25	-40 to +85
CBT16212	24-bit bus exchange switch	4.5 to 5.5	3,9	TTL	7	300	24	0,25	-40 to +85
CBT16292	12-bit 2:1 mux/demux	4.5 to 5.5	3,9	TTL	8	300	12	0,4	-40 to +85
CBT3125	Quad bus switch	4.5 to 5.5	3,9	TTL	7	300	4	0,25	-40 to +85
CBT3126	Quad bus switch	4.5 to 5.5	3,9	TTL	7	300	4	0,25	-40 to +85
CBT3244	Octal bus switch	4.5 to 5.5	3,9	TTL	7	300	8	0,25	-40 to +85
CBT3245	Octal bus switch	4.5 to 5.5	3,9	TTL	7	300	8	0,25	-40 to +85
CBT3251	8:1 mux/demux	4.5 to 5.5	3,9	TTL	7	300	8	0,25	-40 to +85
CBT3253	Dual 4:1 mux/demux	4.5 to 5.5	3,9	TTL	7	300	2	0,25	-40 to +85
CBT3257	Quad 2:1 mux/demux	4.5 to 5.5	3,9	TTL	7	300	4	0,25	-40 to +85
CBT3306	Dual bus switch	4.5 to 5.5	3,9	TTL	7	300	2	0,25	-40 to +85
CBT3384	10-bit bus switch	4.5 to 5.5	3,9	TTL	7	300	10	0,25	-40 to +85
CBT3861	10-bit bus switch	4.5 to 5.5	3,9	TTL	7	300	10	0,25	-40 to +85
CBTD16210	20-bit bus switch level translator	4.5 to 5.5	3,3	TTL	7	300	20	0,25	-40 to +85
CBTD16211	24-bit bus switch level translator	4.5 to 5.5	3,3	TTL	7	300	24	0,25	-40 to +85
CBTD3306	Dual bus switch level translator	4.5 to 5.5	3,3	TTL	7	300	2	0,25	-40 to +85
CBTD3384	10-bit bus switch level translator	4.5 to 5.5	3,3	TTL	7	300	10	0,25	-40 to +85
CBTD3861	10-bit bus switch level translator	4.5 to 5.5	3,3	TTL	7	300	10	0,25	-40 to +85

Decoders demultiplexers

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	T _{amb} (°C)
74AHC138	3-to-8 line decoder/demultiplexer; inverting	2.0 to 5.5	CMOS	±8	4,4	50 pF	-40 to +125
74AHCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 to 5.5	TTL	±8	4,4	50 pF	-40 to +125
74AHC139	Dual 2-to-4 line decoder/demultiplexer	2.0 to 5.5	CMOS	±8	3,9	50 pF	-40 to +125
74AHCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 to 5.5	TTL	±8	3,6	50 pF	-40 to +125
74AUP1G18	1-to-2 demultiplexer (3-state)	1.1 to 3.6	CMOS	1.9/-1.9	3,2	30 pF	-40 to +125
74AUP1G19	1-to-2 decoder/demultiplexer	1.1 to 3.6	CMOS	1.9/-1.9	3	30 pF	-40 to +125
74HC138	3-to-8 line decoder/demultiplexer; inverting	2.0 to 6.0	CMOS	±5.2	12	50 pF	-40 to +125
74HCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 to 5.5	TTL	±4	19	50 pF	-40 to +125
74HC139	Dual 2-to-4 line decoder/demultiplexer	2.0 to 6.0	CMOS	±5.2	14	50 pF	-40 to +125
74HCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 to 5.5	TTL	±4	16	50 pF	-40 to +125
74HC154	4-to-16 line decoder/demultiplexer	2.0 to 6.0	CMOS	±5.2	11	50 pF	-40 to +125
74HCT154	4-to-16 line decoder/demultiplexer; TTL-enabled	4.5 to 5.5	TTL	±4	13	50 pF	-40 to +125
74HC238	3-to-8 decoder/demultiplexer	2.0 to 6.0	CMOS	±5.2	14	50 pF	-40 to +125
74HCT238	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 to 5.5	TTL	±4	18	50 pF	-40 to +125
74HC42	BCD to decimal decoder (1-of-10)	2.0 to 6.0	CMOS	±5.2	17	50 pF	-40 to +125
74HCT42	BCD to decimal decoder (1-of-10); TTL-enabled	4.5 to 5.5	TTL	±4	20	50 pF	-40 to +125
74HC4511	BCD to 7-segment latch/decoder/driver with lamp test input	2.0 to 6.0	CMOS	-10	28	50 pF	-40 to +125
74HCT4511	BCD to 7-segment latch/decoder/driver with lamp test input; TTL-enabled	4.5 to 5.5	TTL	-10	28	50 pF	-40 to +125
74HC4514	4-to-16 decoder/demultiplexer with address latches	2.0 to 6.0	CMOS	±5.2	27	50 pF	-40 to +125
74HCT4514	4-to-16 decoder/demultiplexer with address latches; TTL-enabled	4.5 to 5.5	TTL	±4	30	50 pF	-40 to +125
74HC4515	4-to-16 decoder/demultiplexer with address latches; inverting	2.0 to 6.0	CMOS	±5.2	29	50 pF	-40 to +125
74HCT4515	4-to-16 decoder/demultiplexer with address latches; inverting; TTL-enabled	4.5 to 5.5	TTL	±4	30	50 pF	-40 to +125
74HC137	3-to-8 line decoder/demultiplexer with address latches; inverting	2.0 to 6.0	CMOS	±5.2	18	50 pF	-40 to +125
74HC237	3-to-8 decoder/demultiplexer with address latches	2.0 to 6.0	CMOS	±5.2	18	50 pF	-40 to +125
74LV138	3-to-8 line decoder/demultiplexer; inverting	1.0 to 5.5	TTL	±12	12	50 pF	-40 to +125
74LVC138	3-to-8 line decoder/demultiplexer; inverting	1.2 to 3.6	CMOS/LVTTL	±24	2,7	50 pF	-40 to +125
74LV139	Dual 2-to-4 line decoder/demultiplexer	1.0 to 5.5	TTL	±12	11	50 pF	-40 to +125
74LVC139	Dual 2-to-4 line decoder/demultiplexer	1.2 to 3.6	CMOS/LVTTL	±24	2,5	50 pF	-40 to +125
74LVC1G18	1-to-2 demultiplexer (3-state)	1.65 to 5.5	CMOS/LVTTL	±32	2,3	50 pF	-40 to +125
HEF4028	1-of-10 decoder	4.5 to 15	CMOS	±2.4	30	50 pF	-40 to +85
HEF4511	BCD to 7-segment latch/decoder/driver with lamp test input	4.5 to 15	CMOS	-25/2.4	40	50 pF	-40 to +85
HEF4514	4-to-16 decoder/demultiplexer with address latches	4.5 to 15	CMOS	±2.4	65	50 pF	-40 to +85
HEF4543	BCD to 7-segment latch/decoder/driver with phase input	4.5 to 15	CMOS	±2.4	55	50 pF	-40 to +85
HEF4555	Dual 1-to-4 line decoder/demultiplexer	4.5 to 15	CMOS	±2.4	30	50 pF	-40 to +85

Digital multiplexers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (Typ)	t _{pd} (ns)	T _{amb} (°C)
74AHC157	Quad 2-input multiplexer	2.0 to 5.5	CMOS	±8	50 pF	3,2	
74AHCT157	Quad 2-input multiplexer; TTL-enabled	4.5 to 5.5	TTL	±8	50 pF	3,2	-40 to +125
74AHC257	Quad 2-input multiplexer (3-state)	2.0 to 5.5	CMOS	±8	50 pF	2,9	-40 to +125
74AHCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 to 5.5	TTL	±8	50 pF	3,7	-40 to +125
74AUP1G157	Single 2-input multiplexer	1.1 to 3.6	CMOS	1.9/-1.9	30 pF	3,2	-40 to +125
74AUP1G158	Single 2-input multiplexer; inverting	1.1 to 3.6	CMOS	1.9/-1.9	30 pF	3,2	-40 to +125
74AUP2G157	Single 2-input multiplexer	1.1 to 3.6	CMOS	1.9/-1.9	30 pF	3,4	-40 to +125
74HC151	8-input multiplexer	2.0 to 6.0	CMOS	±5.2	50 pF	17	-40 to +125
74HCT151	8-input multiplexer; TTL-enabled	4.5 to 5.5	TTL	±4	50 pF	19	-40 to +125
74HC153	Dual 4-input multiplexer	2.0 to 6.0	CMOS	±5.2	50 pF	17	-40 to +125
74HCT153	Dual 4-input multiplexer; TTL-enabled	4.5 to 5.5	TTL	±4	50 pF	19	-40 to +125
74HC157	Quad 2-input multiplexer	2.0 to 6.0	CMOS	±5.2	50 pF	11	-40 to +125
74HCT157	Quad 2-input multiplexer; TTL-enabled	4.5 to 5.5	TTL	±4	50 pF	13	-40 to +125
74HC251	8-input multiplexer (3-state)	2.0 to 6.0	CMOS	±5.2	50 pF	18	-40 to +125
74HCT251	8-input multiplexer; TTL-enabled (3-state)	4.5 to 5.5	TTL	±4	50 pF	22	-40 to +125
74HC253	Dual 4-input multiplexer (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	17	-40 to +125
74HCT253	Dual 4-input multiplexer; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	17	-40 to +125
74HC257	Quad 2-input multiplexer (3-state)	2.0 to 6.0	CMOS	±7.8	50 pF	11	-40 to +125
74HCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 to 5.5	TTL	±6	50 pF	13	-40 to +125
74HC158	Quad 2-input multiplexer; inverting	2.0 to 6.0	CMOS	±5.2	50 pF	12	-40 to +125
74LV153	Dual 4-input multiplexer	1.0 to 3.6	TTL	±6	50 pF	14	-40 to +125
74LV251	8-input multiplexer (3-state)	1.0 to 3.6	TTL	±6	50 pF	17	-40 to +125
74LVC157	Quad 2-input multiplexer	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,5	-40 to +125
74LVC1G157	Single 2-input multiplexer	1.65 to 5.5	CMOS/LVTTL	±32	50 pF	2,2	-40 to +125
74LVC257	Quad 2-input multiplexer (3-state)	1.2 to 3.6	CMOS/LVTTL	±24	50 pF	2,4	-40 to +125

Digital switches

Type number	Description	V _{CC} (V)	Logic switching levels	R _{ON} (Ω)	R _{ON} (FLAT) (Ω)	f(-3dB) (MHz)	T _{HD} (%)	X _{talk} (dB)	T _{amb} (°C)
74AHC1G66	Single-pole, single-throw analog switch	2.0 to 5.5	CMOS	40	14	280	0,015		-40 to +125
74AHT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	40	14	280	0,015		-40 to +125
74HC1G66	Single-pole, single-throw analog switch	2.0 to 9.0	CMOS	105	23	200	0,02		-40 to +125
74HCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	118	23	180	0,04		-40 to +125
74HC2G66	Dual single-pole, single-throw analog switch	2.0 to 9.0	CMOS	105	23	200	0,02	-60	-40 to +125
74HCT2G66	Dual single-pole, single-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	118	23	180	0,04	-60	-40 to +125
74HC4016	Quad single-pole, single-throw analog switch	2.0 to 10.0	CMOS	300	80	160	0,4	-60	-40 to +125
74HCT4016	Quad single-pole, single-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	400	50	150	0,8	-60	-40 to +125
74HC4051	Single-pole, octal-throw analog switch	2.0 to 10.0	CMOS	200	20	180	0,02		-40 to +125
74HCT4051	Single-pole, octal-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	225	20	170	0,04		-40 to +125
74HC4052	Dual single-pole, quad-throw analog switch	2.0 to 10.0	CMOS	200	20	180	0,02	-60	-40 to +125
74HCT4052	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	225	20	170	0,04	-60	-40 to +125
74HC4053	Triple single-pole, double-throw analog switch	2.0 to 10.0	CMOS	200	20	170	0,02		-40 to +125
74HCT4053	Triple single-pole, double-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	225	20	160	0,04		-40 to +125
74HC4066	Quad single-pole, single-throw analog switch	2.0 to 10.0	CMOS	105	23	200	0,02	-60	-40 to +125
74HCT4066	Quad single-pole, single-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	118	23	180	0,04	-60	-40 to +125
74HC4067	Single-pole, 16-throw analog switch	2.0 to 10.0	CMOS	200	25	100	0,02		-40 to +125
74HCT4067	Single-pole, 16-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	225	25	90	0,04		-40 to +125
74HC4316	Quad single-pole, single-throw analog switch with translation	2.0 to 10.0	CMOS	300	80	160	0,4	-60	-40 to +125
74HCT4316	Quad single-pole, single-throw analog switch with translation; TTL-enabled	4.5 to 5.5	TTL	400	50	150	0,8	-60	-40 to +125
74HC4351	Single-pole, octal-throw analog switch with latch	2.0 to 10.0	CMOS	200	20	180	0,02		-40 to +125
74HCT4351	Single-pole, octal-throw analog switch with latch; TTL-enabled	4.5 to 5.5	TTL	225	20	170	0,04		-40 to +125
74HC4353	Triple single-pole, double-throw analog switch with latch	4.5 to 5.5	TTL	225	20	160	0,04	-60	-40 to +125
74HCT4353	Triple single-pole, double-throw analog switch with latch; TTL-enabled	4.5 to 5.5	TTL	225	20	160	0,04	-60	-40 to +125
74HC4851	Single-pole, octal-throw analog switch	2.0 to 10.0	CMOS	220					-40 to +125
74HCT4851	Single-pole, octal-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	240					-40 to +125
74HC4852	Dual single-pole, quad-throw analog switch; TTL-enabled	2.0 to 10.0	CMOS	220					-40 to +125
74HCT4852	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 to 5.5	TTL	240					-40 to +125
74LV4051	Single-pole, octal-throw analog switch	1.0 to 6.0	TTL	135	35	200	0,4	-60	-40 to +125
74LV4052	Dual single-pole, quad-throw analog switch	1.0 to 6.0	TTL	125	15	180	0,4	-60	-40 to +125
74LV4053	Triple single-pole, double-throw analog switch	1.0 to 6.0	TTL	150	30	180	0,4	-60	-40 to +125
74LV4066	Quad single-pole, single-throw analog switch	1.0 to 6.0	TTL	50	3	180	0,02	-60	-40 to +125
74LVC1G3157	Single-pole, double-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	300	0,078		-40 to +125
74LVC1G384	Single-pole, single-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	440	0,001		-40 to +125
74LVC1G53	Single-pole, double-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	300	0,078		-40 to +125
74LVC1G66	Single-pole, single-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	440	0,001		-40 to +125
74LVC2G53	Single-pole, double-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	300	0,078		-40 to +125
74LVC2G66	Dual single-pole, single-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	440	0,005		-40 to +125
74LVC2G3157	Double-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	440	0,005		-40 to +125
74LVC4066	Quad single-pole, single-throw analog switch	1.65 to 5.5	CMOS/ LVTTTL	15	1,5	440	0,005		-40 to +125
74LVCV2G66	Dual single-pole, single-throw analog switch; overvoltage tolerant	2.3 to 5.5	CMOS/ LVTTTL	15	3	210	0,01		-40 to +125
HEF4016	Quad single-pole, single-throw analog switch	4.5 to 15.5	CMOS	350	65	90	0,04	-50	-40 to +85
HEF4051	Single-pole, octal-throw analog switch	4.5 to 15.5	CMOS	175	30	70	0,04	-50	-40 to +85
HEF4052	Dual single-pole, quad-throw analog switch	4.5 to 15.5	CMOS	175	30	70	0,04	-50	-40 to +85
HEF4053	Triple single-pole, double-throw analog switch	4.5 to 15.5	CMOS	175	30	70	0,04	-50	-40 to +85
HEC4066	Quad single-pole, single-throw analog switch	4.5 to 15.5	CMOS	175	20	90	0,04	-50	-40 to +85
HEF4067	Single-pole, 16-throw analog switch	4.5 to 15.5	CMOS	175	20	13	0,04	-50	-40 to +85

Standard logic functions

74 XXX XXX XXX

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

Mini logic functions























74 XXX XG XT XXX XXX

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



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Package details and packing methods SMD – Part 2

Package details					Packing methods																							
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																					
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000						
3	SOT89 (SC-62)	4.5 x 2.5 x 1.5	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																						
					8 mm pitch, 12 mm tape and reel	180 x 12																						
					8 mm pitch, 12 mm tape and reel	180 x 12																						
	CFP15 (SOT1289)	5.8 x 4.3 x 0.78	2.13		8 mm pitch, 12 mm tape and reel	330 x 12																						
	DPAK (SOT428)	6.6 x 6.1 x 2.3	4.57		8 mm pitch, 16 mm tape and reel	330 x 16																						
	D2PAK (SOT404)	10 x 9.6 x 4.3	5.08		16 mm pitch, 24 mm tape and reel	330 x 24																						
4	SOT143B	2.9 x 1.3 x 1.0	1.9		4 mm pitch, 8 mm tape and reel	180 x 8																						
					4 mm pitch, 8 mm tape and reel	286 x 8																						
	LFAK56 (SOT669)	4.9 x 4.45 x 1.0	1.27		8 mm pitch, 12 mm tape and reel	180 x 12																						
	SOT223 (SC-73)	6.5 x 3.5 x 1.65	2.3		8 mm pitch, 12 mm tape and reel	180 x 12																						
8 mm pitch, 12 mm tape and reel					330 x 12																							
5	X2SON5 (SOT1226)	0.8 x 0.8 x 0.35	0.48		2mm pitch, 8mm tape and reel	180 x 8																						
	SOT665	1.6 x 1.2 x 0.55	0.5		2 mm pitch, 8 mm tape and reel	180 x 8																						
					4 mm pitch, 8 mm tape and reel	180 x 8																						
	SOT353 (SC-88 A)	2.0 x 1.25 x 0.95	0.65		4 mm pitch, 8 mm tape and reel	180 x 8																						
					4 mm pitch, 8 mm tape and reel	286 x 8																						
					4 mm pitch, 8 mm tape and reel	180 x 8																						
4 mm pitch, 8 mm tape and reel					286 x 8																							
TSOP5 (SOT753)	2.9 x 1.5 x 1.1	0.95		4mm pitch, 8mm tape and reel	180 x 8																							
6	X2SON6 (SOT1255)	0.8 x 1 x 0.35	0.48		2mm pitch, 8mm tape and reel	180 x 8																						
	XSON6 (SOT1115)	0.9 x 1 x 0.35	0.3		4mm pitch, 8mm tape and reel	180 x 8																						
	XSON6 (SOT1202)	1 x 1 x 0.35	0.35		4mm pitch, 8mm tape and reel	180 x 8																						
	DFN1010-6 (SOT891)	1.0 x 1.0 x 0.48	0.35		4 mm pitch, 8 mm tape and reel	180 x 8																						
	XSON6 (SOT886)	1 x 1.45 x 0.5	0.5		4mm pitch, 8mm tape and reel	180 x 8																						
	DFN1010B-6 (SOT1216)	1.1 x 1.0 x 0.37	0.35		4 mm pitch, 8 mm tape and reel	180 x 8																						
	DFN1412-6 (SOT1268)	1.4 x 1.2 x 0.5	0.5		4 mm pitch, 8 mm tape and reel	180 x 8																						
	DFN1412-6 (SOT1268)	1.4 x 1.2 x 0.5	0.5		4 mm pitch, 8 mm tape and reel	180x8																						
	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48	0.5		4 mm pitch, 8 mm tape and reel	180 x 8																						
					4 mm pitch, 8 mm tape and reel	180 x 8																						
	SOT666	1.6 x 1.2 x 0.55	0.5		2 mm pitch, 8 mm tape and reel	180 x 8																						
					4 mm pitch, 8 mm tape and reel	180 x 8																						
	DFN1616-6 (SOT 1189)	1.6 x 1.6 x 0.48	0.5		4 mm pitch, 8 mm tape and reel	180 x 8																						
	SOT363 (SC-88)	2.0 x 1.25 x 0.95	0.65		4 mm pitch, 8 mm tape and reel	180 x 8																						
4 mm pitch, 8 mm tape and reel					286 x 8																							
4 mm pitch, 8 mm tape and reel					180 x 8																							
4 mm pitch, 8 mm tape and reel					286 x 8																							
















Package details and packing methods SMD – Part 3

Package details					Packing methods																														
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																												
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000													
6	DFN2020-6 (SOT 1118)	2.0 x 2.0 x 0.62	0.65		4 mm pitch, 8 mm tape and reel	180 x 8														-115															
	DFN2020D-6 (SOT1118D)	2.0 x 2.0 x 0.62	0.65		4 mm pitch, 8 mm tape and reel	180 x 8															-184														
	DFN2020MD-6 (SOT1220)	2.0 x 2.0 x 0.62	0.65		4 mm pitch, 8 mm tape and reel	180 x 8																													
	SOT457 (SC-74)	2.9 x 1.5 x 1.0	0.95		4 mm pitch, 8 mm tape and reel	180 x 8																													
					4 mm pitch, 8 mm tape and reel	286 x 8																													
					4 mm pitch, 8 mm tape and reel	180 x 8																													
					4 mm pitch, 8 mm tape and reel	286 x 8																													
7	DFN2111-7 (SOT1358)	2.1 x 1.1 x 0.5	1.3		4 mm pitch, 8 mm tape and reel	180 x 9																													
	D2PAK-7 (SOT428)	10 x 15.3 x 4.3	-		16 mm pitch, 24 mm tape and reel	330 x 24		118																											
8	XSON8 (SOT1116)	1.2 x 1 x 0.35	0.55		4mm pitch, 8mm tape and reel	180 x 8																													
	XSON8 (SOT1089)	1.35 x 1 x 0.5	0.55		4mm pitch, 8mm tape and reel	180 x 8																													
	X2SON8 (SOT1233)	1.45 x 1.05 x 0.4	0.35		2mm pitch, 8mm tape and reel	180 x 8																													
	XSON8 (SOT1203)	1.5 x 1.05 x 0.5	0.35		4mm pitch, 8mm tape and reel	180 x 8																													
	XQFN8 (SOT902-2)	1.6 x 1.6 x 0.5	0.5		4mm pitch, 8mm tape and reel	180 x 8																													
	DFN1714-8 (SOT1166)	1.7 x 1.35 x 0.52	0.4		4 mm pitch, 8 mm tape and reel	180 x 8																													
						4 mm pitch, 8 mm tape and reel	180 x 8																												
	DFN1714U-8 (SOT983)	1.7 x 1.35 x 0.48	0.4		4 mm pitch, 8 mm tape and reel	180 x 8																													
	XSON8 (SOT833-1)	1.95 x 1.05 x 0.5	0.5		4mm pitch, 8mm tape and reel	180 x 8																													
	VSSOP8 (SOT765-1)	2 x 2.3 x 0.85	0.5		4mm pitch, 8mm tape and reel	180 x 8																													
	XSON8 (SOT996-2)	2 x 3 x 0.5	0.5		4mm pitch, 8mm tape and reel	180 x 8																													
	TSSOP8 (SOT505-2)	3 x 3 x 0.95	0.65		4mm pitch, 12mm tape and reel	180 x 12																													
	LFPAK33 (SOT1210)	3.3 x 3.3 x 0.85	-		8 mm pitch, 12 mm tape and reel	180 x 12																													
SOT96 (S08)	4.9 x 3.9 x 1.75	1.27		8 mm pitch, 12 mm tape and reel	180 x 12																														
				8 mm pitch, 12 mm tape and reel	330 x 12																														
				8 mm pitch, 12 mm tape and reel	331 x 12																														
LFPAK56D (SOT1205)	4.9 x 4.45 x 1.0	1.27		8 mm pitch, 12 mm tape and reel	180 x 12																														
10	XQFN10 (SOT1337-1)	1.4 x 1.8 x 0.5	0.4																																
	XQFN10 (SOT1049-3)	1.55 x 2 x 0.5	0.5		4mm pitch, 8mm tape and reel	180 x 8																													
	XSON10 (SOT1081-2)	1.7 x 1 x 0.4	0.35																																
	DFN2510-10 (SOT1165)	2.5 x 1.0 x 0.48	0.5		4 mm pitch, 8 mm tape and reel	180 x 8																													
	DFN2510A-10 (SOT1176)	2.5 x 1.0 x 0.48	0.5		4 mm pitch, 8 mm tape and reel	180 x 8																													
HVSON10 (SOT650)	3 x 3 x 0.85	0.5		8mm pitch, 12mm tape and reel	330 x 12																														
12	DFN2514-12 (SOT1167)	2.5 x 1.35 x 0.53	0.4		4 mm pitch, 8 mm tape and reel	180 x 8																													
	DFN2521-12 (SOT 1156)	2.5 x 2.1 x 0.48	0.4		4 mm pitch, 8 mm tape and reel	180 x 8																													
12	XQFN12 (SOT1174-1)	1.7 x 2 x 0.5	0.4		4mm pitch, 8mm tape and reel	180 x 8																													






Package details and packing methods SMD – Part 4

Package details					Packing methods																		
Pins/ Terminals	Package	Package size (l x w x h) (mm)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
							500	800	1000	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	9000	10000	
14	TSSOP14 (SOT402-1)	5 x 4.4 x 0.95	0.65		8mm pitch, 12mm tape and reel	330 x 12															-623		
	SO14 (SOT108-1)	8.65 x 3.9 x 1.45	1.27		8mm pitch, 16mm tape and reel	330 x 16																-431	
16	XQFN16 (SOT1161-1)	1.8 x 2.6 x 0.5	0.4		4mm pitch, 8mm tape and reel	180 x 8																	-115
	DFN3312-16 (SOT 1159)	3.3 x 1.2 x 0.48	0.4		4 mm pitch, 12 mm tape and reel	180 x 12																	-132
	DFN3314-16 (SOT1168)	3.3 x 1.35 x 0.53	0.4		4 mm pitch, 8 mm tape and reel	180 x 8																	-132
	TSSOP16 (SOT403-1)	5 x 4.4 x 0.95	0.65		8mm pitch, 12mm tape and reel	330 x 12																	-623
	SSOP16 (SOT338-1)	6.2 x 5.3 x 1.8	0.65		12mm pitch, 16mm tape and reel	330 x 16																	
20	DHVQFN20 (SOT764-1)	4.5 x 2.5 x 1	0.5		4mm pitch, 12mm tape and reel	180 x 12																	-115
	DHXQFN20 (SOT1045-2)	4.6 x 2.6 x 0.5	0.5		4mm pitch, 12mm tape and reel	180x12																	-115
	SSOP20 (SOT339-1)	7.2 x 5.3 x 1.8	0.65		12mm pitch, 16mm tape and reel	330 x 16																	-118
	SSOP20 (SOT724)	8.7 x 3.9 x 1.73	0.635		12mm pitch, 16mm tape and reel	330 x 16																	-118
	SO20 (SOT163-1)	12.8 x 7.5 x 2.45	1.27		12mm pitch, 24mm tape and reel	330 x 24																	
24	DHVQFN24 (SOT815-1)	5.5 x 3.5 x 0.85	0.5		8mm pitch, 12mm tape and reel	330 x 12																	-118
	TSSOP24 (SOT355-1)	7.8 x 4.4 x 0.95	0.65		8mm pitch, 16mm tape and reel	330 x 16																	-128
	SSOP24 (SOT340-1)	8.2 x 5.3 x 1.8	0.65		12mm pitch, 16mm tape and reel	330 x 16																	-118
	SSOP24 (SOT556-1)	8.7 x 3.9 x 1.47	0.635		12mm pitch, 16mm tape and reel	330 x 16																	-118
	SO24 (SOT137-1)	15.3 x 7.5 x 2.45	1.27		12mm pitch, 24mm tape and reel	330 x 24																	-118
32	DFN5050-32 (SOT617)	5.0 x 5.0 x 1.0	0.5		8 mm pitch, 12 mm tape and reel	330 x 12																	-118
					8 mm pitch, 12 mm tape and reel	330 x 12																	

Package details and packing methods WLCSP

Basic Type	Length x width x height	# of balls	Pitch	Package	Package name
IP4369CX4	0.76 x 0.76 x 0.5	4	0.4		WLCSP4
PMCM440VNE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM4401VNE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM440VPE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM4401VPE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PCMF1USB3S	1.17 x 0.77 x 0.57	5	0.4		WLCSP5
PESD1USB3S	1.17 x 0.77 x 0.57	5	0.4		WLCSP5
PCMF2USB3S	1.17 x 1.57 x 0.57	10	0.4		WLCSP10
PESD2USB3S	1.17 x 1.57 x 0.57	10	0.4		WLCSP10
PCMF3USB3S	1.17 x 2.37 x 0.57	15	0.4		WLCSP15
PESD3USB3S	1.17 x 2.37 x 0.57	15	0.4		WLCSP15
IP3319CX6	1.34 x 0.95 x 0.57	6	0.4		WLCSP6
PMCM650VNE	1.48 x 0.98 x 0.35	6	0.5		WLCSP6
PMCM650VPE	1.48 x 0.98 x 0.35	6	0.5		WLCSP6
IP4340CX15	1.56 x 1.56 x 0.47	15	0.4		WLCSP15

Packing details glass diodes, single ended and through hole packages

Pins/leads	Package	Packing method and tape/reel/tube dimensions	Package	Ordering code (12 NC ending)	Packing quantity
2	SOD27	26 mm tape ammo pack, axial		-143	5000 pcs
		52 mm tape ammo pack, axial		-133	10000 pcs
		52 mm reel pack, axial		-113	10000 pcs
	SOD66	52 mm tape ammo pack, axial		-133	10000 pcs
		52 mm reel pack, axial		-113	10000 pcs
	SOD68	26 mm tape ammo pack, axial		-143	5000 pcs
52 mm reel pack, axial		-113		10000 pcs	
52 mm tape ammo pack, axial		-133		10000 pcs	
3	SOT78 (TO-220)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	20 tubes x 50 pcs
	I2PAK (SOT226)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	20 tubes x 50 pcs
5	SOT263B-1	Rail packing		-127	20 tubes x 50 pcs

Package cross reference list – Part 1

Type	Competitor	Nexperia	Pins/ Leads
μQFN-10L	ST	DFN2510A-10 (SOT1176)	10
μQFN-2L	ST	DFN1006-2 (SOD882)	2
6 Lead DFN	ON Semi	DFN2020-6 (SOT1118)	6
CL2	Toshiba	DSN0402-2 (SOD992)	2
CLP0603	Vishay	DSN0603-2 (SOD962)	2
CMAK/ CMPAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CMPAK/ CMAK	Renesas	SOT323	3
CP4	Toshiba	SOT143B	4
CPT3	Rohm	DPAK (SOT428)	3
CS6	Toshiba	DFN1010-6 (SOT891)	6
CST3	Toshiba	DFN1006-3 (SOT883)	3
CST3	Toshiba	DFN1006B-3 (SOT883B)	3
CTS2 (FSC)	Toshiba	DFN1006-2 (SOD882)	2
CTS2 (FSC)	Toshiba	DFN1006D-2 (SOD882D)	2
D2PAK	ON Semi	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK-3	OnSemi	D2PAK (SOT404)	3
D2PAK-7	ST	D2PAK-7 (SOT427)	7
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK7P	Infineon	D2PAK-7 (SOT427)	7
DFN-5	OnSemi	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
DFN2	ST	DSN0603-2 (SOD962)	2
DPAK	ON Semi	DPAK (SOT428)	3
DPAK	Toshiba	DPAK (SOT428)	3
DPAK	OnSemi	DPAK (SOT428)	3
DPAK	Infineon	DPAK (SOT428)	3
DPAK	ST	DPAK (SOT428)	3
DPAK(S)	Renesas	DPAK (SOT428)	3
DSN2, 0.4 x 0.2	ON Semi	DSN0402-2 (SOD992)	2
DSN2, 0.6 x 0.3	ON Semi	DSN0603-2 (SOD962)	2
DSN2, 1.0 x 0.6	ON Semi	DSN1006-2 (SOD993)	2
DSN2, 1.0 x 0.6	ON Semi	DFN1006D-2 (SOD882D)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
EMD2	Rohm	SOD523	2
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
EMD5/EMT5	Rohm	SOT665	5
EMD6/EMT6/WEMT6	Rohm	SOT666	6
EMT3	Rohm	DFN1006-3 (SOT883)	3

Types with * show footprint compatibility only

Type	Competitor	Nexperia	Pins/ Leads
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
EMT5*	Rohm	SOT666	6
EMT5/EMD5	Rohm	SOT665	5
EMT6	Rohm	SOT666	6
EMT6/EMD6/WEMT6	Rohm	SOT666	6
ES6	Toshiba	SOT666	6
ES6 ESV	Toshiba	SOT666	6
ESC/TESC	Toshiba	SOD523	2
ESM	Toshiba	DFN1006-3 (SOT883)	3
ESV	Toshiba	SOT665	5
ESV	Toshiba	SOT666	6
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
GMD2	Rohm	DSN0603-2 (SOD962)	2
H2PAK-2	ST	D2PAK (SOT404)	3
H2PAK-6	ST	D2PAK-7 (SOT427)	7
HSMT8	Rohm	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
LLP75-7L	Vishay	DFN1616-6 (SOT1189)	6
LPDS/LPTS	Rohm	D2PAK (SOT404)	3
LPTS	Rohm	D2PAK (SOT404)	3
LPTS/LPDS	Rohm	D2PAK (SOT404)	3
M-Flat	Toshiba	SOD128	2
Micro 3	Int. Rectifier	SOT23	3
Micro 6	Int. Rectifier	SOT457	6
Micro FOOT 0.8 x 0.8*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
Micro FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6

Package cross reference list – Part 2

Type	Competitor	Nexperia	Pins/Leads
MicroFET	Fairchild	DFN2020MD-6 (SOT1220)	6
MicroFET 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
MiniMelf	Diodes Inc.	SOD80C	2
MiniMelf	ST	SOD80C	2
MiniMelf	Vishay	SOD80C	2
MP-25(K)	Renesas	TO-220 (SOT78)	3
MP-25SK	Renesas	I2PAK (SOT226)	3
MP-25ZT	Renesas	D2PAK-7 (SOT427)	7
MP-25ZT	Renesas	D2PAK (SOT404)	3
MP-3Z	Renesas	DPAK (SOT428)	3
MP6	Renesas	DSN0603-2 (SOD962)	2
MPAK	Renesas	SOT23	3
MPAK	Renesas	SOT23	3
MPAK-4R	Renesas	SOT143B	4
MPT3	Rohm	SOT89	3
PG-TD SON-8	Infineon	LFPAK (SOT669)	5
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO220-3	Infineon	TO-220 (SOT78)	3
PG-TO252-3	Infineon	DPAK (SOT428)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TO263-7	Infineon	D2PAK-7 (SOT427)	7
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power FLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
Power FLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8
Power FLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDi5	Diodes Inc.	CFP15 (SOT1289)	3
PowerFLAT (6 x 5)	ST	LFPAK (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	LFPAK (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8

Types with * show footprint compatibility only

Type	Competitor	Nexperia	Pins/Leads
PW-Mini	Toshiba	SOT89	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
S08	Vishay	SOT96	8
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC-74 TSOP-6	ON Semi	SOT457	6
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC-88	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC-89	Semtech	SOT666	6
SC2	Toshiba	DSN0603-2 (SOD962)	2
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-3	AOS	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	Vishay	SOT363	6
SC70-6	AOS	SOT363	6
SC70-6	Fairchild	SOT363	6
SC70-6L	Semtech	SOT363	6
SC74 TSOP6	Infineon	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC88/SC 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
SLP0402P2X3	Semtech	DSN0402-2 (SOD992)	2
SLP1006P2	Semtech	DFN1006-2 (SOD882)	2
SLP1006P2T	Semtech	DFN1006D-2 (SOD882D)	2
SLP1006P3	Semtech	DFN1006-3 (SOT883)	3
SLP1006P3T	Semtech	DFN1006B-3 (SOT883B)	3
SLP1510N6	Semtech	DFN1410-6 (SOT886)	6
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1610P4	Semtech	DFN2510A-10 (SOT1176)	10
SLP1616P6	Semtech	DFN1616-6 (SOT1189)	6
SLP1713P8	Semtech	DFN1714-8 (SOT1166)	8

Package cross reference list – Part 3

Type	Competitor	Nexperia	Pins/ Leads
SLP1713P8	Semtech	DFN1714U-8 (SOT983)	8
SLP2513P12	Semtech	DFN2514-12 (SOT1167)	12
SLP3313P16	Semtech	DFN3314-16 (SOT1168)	16
SM6 VS-6	Toshiba	SOT457	6
SMA flat	ST	SOD128	2
SMD TO-263	Renesas	D2PAK (SOT404)	3
SMD0402	Rohm	DSN0402-2 (SOD992)	2
SMD6/SMT6	Rohm	SOT457	6
SMD6/SMZ6	Rohm	SOT457	6
SMFPAK-6	Renesas	SOT666	6
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC TO-277A	Vishay	CFP15 (SOT1289)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPAK (SOT669)	5
SO-8FL Dual	OnSemi	LFPAK56D (SOT1205)	8
SO-8FL Dual	OnSemi	LFPAK56 (SOT669)	4
SOD-123	ST	SOD123F	2
SOD-123-FL	ON Semi	SOD123F	2
SOD-123-FL	ON Semi	SOD123W	2
SOD-323	ON Semi	SOD323	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ST	SOD323	2
SOD-523	ON Semi	SOD523	2
SOD-523	ST	SOD523	2
SOD323	Infineon	SOD323	2
SOD323	Vishay	SOD323	2
SOD323	Semtech	SOD323	2
SOD523	Diodes Inc.	SOD523	2
SOD523	Vishay	SOD523	2
SOD523	Semtech	SOD523	2
SOD882	ST	DFN1006-2 (SOD882)	2
SOD882T	ST	DFN1006D-2 (SOD882D)	2
SOD923-2*	ON Semi	DFN1006-2 (SOD882)	2
SOIC-8 NB	ON Semi	SOT96	8
SON 2x2	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SON 3x3*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SOP-8	Renesas	SOT96	8
SOP/DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP8	Rohm	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT-143	Diodes Inc.	SOT143B	4
SOT-223	ON Semi	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	OnSemi	SOT223	3
SOT-223	Infineon	SOT223	3

Types with * show footprint compatibility only

Type	Competitor	Nexperia	Pins/ Leads
SOT-223	ST	SOT223	3
SOT-23	ON Semi	SOT23	3
SOT-23	Diodes Inc.	SOT23	3
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	SOT323	3
SOT-363	Diodes Inc.	SOT363	6
SOT-553	ON Semi	SOT665	5
SOT-563	ON Semi	SOT666	6
SOT-89	ON Semi	SOT89	3
SOT063*	ON Semi	DFN101 OB-6 (SOT1216)	6
SOT223	Vishay	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	Fairchild	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Diodes Inc.	SOT223	4
SOT223	Diodes Inc.	SOT223	3
SOT23	Infineon	SOT23	3
SOT23	ST	SOT23	3
SOT23	Vishay	SOT23	3
SOT23	Semtech	SOT23	3
SOT23	Diodes Inc.	SOT23	3
SOT23	AOS	SOT23	3
SOT23	ON Semi	SOT23	3
SOT23-3	Diodes Inc.	SOT23	3
SOT23-3	AOS	SOT23	3
SOT23-3	ON Semi	SOT23	3
SOT23-5	AOS	SOT457	6
SOT23-5	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	ST	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6L	Semtech	SOT457	6
SOT23F	Toshiba	SOT23	3
SOT23F	Diodes Inc.	SOT23	3
SOT26	Diodes Inc.	SOT457	6
SOT323	Infineon	SOT323	3
SOT323	Diodes Inc.	SOT323	3
SOT323	Fairchild	SOT323	3
SOT353	Diodes Inc.	SOT353	5
SOT353	Vishay	SOT353	5
SOT353	Diodes Inc.	SOT363	6
SOT363	Infineon	SOT363	6
SOT363	Diodes Inc.	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3
SOTS23F	Fairchild	DFN1006-3 (SOT883)	3
SOTS563	Diodes Inc.	SOT666	6
SOTS563-6	ON Semi	SOT666	6
SOTS563F	Fairchild	SOT666	6
SOT666	Infineon	SOT666	6

Package cross reference list – Part 4

Type	Competitor	Nexperia	Pins/Leads
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Infineon	SOT89	3
SOT89	Diodes Inc.	SOT89	3
SOT89-3L	Diodes Inc.	SOT89	3
SOT963	ON Semi	DFN1010-6 (SOT891)	6
SOT963*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
SRP-F	Renesas	SOD123W	2
SS CSP2	Toshiba	DFN1006-3 (SOT883)	3
SSD3/SST3	Rohm	SOT23	3
SSM	Toshiba	DFN1006-3 (SOT883)	3
SSOT3	Fairchild	SOT23	3
SSOT6	Fairchild	SOT457	6
SSOT6 FLMP	Fairchild	SOT457	6
SST3	Rohm	SOT23	3
SST3/SSD3	Rohm	SOT23	3
ST01005	STM	DSN0402-2 (SOD992)	2
Stmite flat	ST	SOD123W	2
T0263	Diodes Inc.	D2PAK(SOT404)	3
T0263-3	Infineon	D2PAK (SOT404)	3
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
Thin PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO-220	ST	TO-220 (SOT78)	3
TO-220	Vishay	TO-220 (SOT78)	3
TO-220	Toshiba	TO-220 (SOT78)	3
TO-220-3	OnSemi	TO-220 (SOT78)	3
TO-220-3L	OnSemi	TO-220 (SOT78)	3
TO-220AB	Vishay	TO-220 (SOT78)	3
TO-220F-3FS	OnSemi	TO-220 (SOT78)	3
TO-220FM	Rohm	TO-220 (SOT78)	3
TO-220S	Renesas	D2PAK (SOT404)	3
TO-220SM	Toshiba	D2PAK (SOT404)	3
TO-252	Renesas	DPAK (SOT428)	3
TO-252	Vishay	DPAK (SOT428)	3
TO-252 (MP-3ZK)	Renesas	DPAK (SOT428)	3
TO-252 reverse, TO-252	Vishay	DPAK (SOT428)	3
TO-252-3/-3-23	Infineon	DPAK (SOT428)	3
TO-252, TO-252 reverse	Vishay	DPAK (SOT428)	3
TO-262	Renesas	I2PAK (SOT226)	3
TO-262	Vishay	I2PAK (SOT226)	3
TO-262-2L	OnSemi	I2PAK (SOT226)	3
TO-262-3L	OnSemi	I2PAK (SOT226)	3
TO-263	Renesas	D2PAK-7 (SOT427)	7
TO-263	Renesas	D2PAK (SOT404)	3
TO-263	Vishay	D2PAK (SOT404)	3
TO-263 3-lead	Vishay	D2PAK (SOT404)	3
TO-263-2L	OnSemi	D2PAK (SOT404)	3

Type	Competitor	Nexperia	Pins/Leads
TO-263-7L	Vishay	D2PAK-7 (SOT427)	7
TO-263AB	Vishay	D2PAK (SOT404)	3
TO220	Infineon	TO-220 (SOT78)	3
TO220-3	Diodes Inc.	TO-220 (SOT78)	3
TO252	Diodes Inc.	DPAK (SOT428)	3
TO262	Infineon	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	3
TP-FA	OnSemi	DPAK (SOT428)	3
TSLP-2-1	Infineon	DFN1006-2 (SOD882)	2
TSLP-2-7/-17	Infineon	DFN1006D-2 (SOD882D)	2
TSLP-3-1, -15	Infineon	DFN1006B-3 (SOT883B)	3
TSLP-3-4	Infineon	DFN1006-3 (SOT883)	3
TSLP-9-1	Infineon	DFN2510A-10 (SOT 1176)	10
TSMT5*	Rohm	SOT457	6
TSMT6	Rohm	SOT457	6
TSNP-2-2	Infineon	DFN1608D-2 (SOD 1608)	2
TSON Advance	Toshiba	LFPAK33 (SOT1210)	8
TSOP-6	Renesas	SOT457	6
TSOP-6/ TSOP6	Vishay	SOT457	6
TSOP6	Vishay	SOT457	6
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	SOT457	6
TSSLP-2-1	Infineon	DSN0603-2 (SOD962)	2
TSST8*	Rohm	DFN2020MD-6 (SOT1220)	6
TUMT3	Rohm	SOT323	3
TUMT5*	Rohm	DFN2020-6 (SOT1118)	6
TUMT6*	Rohm	DFN2020-6 (SOT1118)	6
U-DFN2020-3 Type B 2.0 x 2.0 x 0.6	Diodes Inc.	DFN2020-3 (SOT1061)	3
U-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN 1.6 x 1.6	ON Semi	DFN1616-6 (SOT1189)	6
UDFN 1.7 x 1.35, 0.4P	ON Semi	DFN1714U-8 (SOT983)	8
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN10 2.5 x 1, 0.5P	ON Semi	DFN2510A-10 (SOT1176)	10
UDFN12 2.5 x 1.35, 0.4P	ON Semi	DFN2514-12 (SOT1167)	12
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6B	Toshiba	DFN2020MD-6 (SOT1220)	6
UF6	Toshiba	SOT363	6
UF6/ USV/ US6	Toshiba	SOT363	6
UFP	Renesas	SOD523	2
UMD2	Rohm	SOD323F	2
UMD3/UMT3	Rohm	SOT323	3
UMD5/UMT5	Rohm	SOT353	5
UMD6/ UMT6	Rohm	SOT363	6
UMLP 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
UMT3	Rohm	SOT323	3

Types with * show footprint compability only


























Package cross reference list – Part 5

Type	Competitor	Nexperia	Pins/Leads
UMT3F*	Rohm	SOT323	3
UMT5/UMD5	Rohm	SOT353	5
UMT6	Rohm	SOT363	6
UMT6/UMD6	Rohm	SOT363	6
UPAK (SOT89)	Renesas	SOT89	3
URP	Renesas	SOD323	2
US-Flat	Toshiba	SOD323F	2
US6	Toshiba	SOT363	6
US6/UF6/USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5
USV	Toshiba	SOT363	6
USV/US6/UF6/	Toshiba	SOT363	6
VESM*	Toshiba	DFN1010D-3 (SOT1215)	3
VML0806*	Rohm	DFN1006B-3 (SOT883B)	3
VML1006	Rohm	DFN1006-3 (SOT883)	3
VMN2*	Rohm	DFN1006-2 (SOD882)	2
VMN2*	Rohm	DFN1006D-2 (SOD882D)	2
VMN3*	Rohm	DFN1006-3 (SOT883)	3
VMT3*	Rohm	DFN1010D-3 (SOT1215)	3
VMT6*	Rohm	DFN101 OB-6 (SOT1216)	6
VS6	Toshiba	SOT457	6
VSON-5	Renesas	SOT665	5
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6
WDFN-8	OnSemi	LFPK33 (SOT1210)	8
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WEMT6	Rohm	SOT666	6
WEMT6/EMT6/EMD6	Rohm	SOT666	6
WLCSP 1 x 1*	Fairchild	WLCSP4	3
WLCSP-4*	Fairchild	WLCSP4	3
WLCSP-4*	ON Semi	WLCSP4	3
WLCSP1.6 x 1.6*	AOS	WLCSP6	6
WLCSP2	ON Semi	DSN0603-2 (SOD962)	2
WLL-2-2	Infineon	DSN0402-2 (SOD992)	2
WLP1.5x 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
WLPI.Ox 1.0*	Texas Instruments	DFN1010D-3 (SOT1215)	3
WLPI.Ox 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
X1 -DFN 1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X1-DFN1212-3*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X1-DFN1616-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-DFN0806-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X2-DFN1006-2	Diodes Inc.	DFN1006D-2 (SOD882D)	2
X2-DFN1006-3	Diodes Inc.	DFN1006B-3 (SOT883B)	3
X2-DFN1010-3	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X2-DFN1310-6*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
X2-DFN2015-3*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6

Types with * show footprint compatibility only


























Type	Competitor	Nexperia	Pins/Leads
X2-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X3-DFN0603-2	Diodes Inc.	DSN0603-2 (SOD962)	2
X3DFN-2	ON Semi	DSN0603-2 (SOD962)	2
XDFN3	ON Semi	DFN1006-3 (SOT883)	3
XI-DFN1006-2	Diodes Inc.	DFN1006-2 (SOD882)	2
μ8FL	OnSemi	LFPK33 (SOT1210)	8

Package cross reference matrix – Part 1

Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
2	DSN0402-2 (SOD992)		0.4 x 0.2 x 0.12			SMD0402	CL2	DSN2 0.4 x 0.2		WLL-2-2		ST01005		SLP- 0402P2X3
	DSN1006-2 (SOD993)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DSN1006U-2 (SOD995)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250		(VMN2)	CTS2 (fSC)	(SOD923-2)		TSLP-2-1	XI-DFN1006-2	SOD 882 uQFN-2L	LLP1006-2M LLP1006-2L	SLP1006P2
	DFN1006D-2 (SOD882D)		1.0 x 0.6 x 0.37	250		(VMN2)	CTS2 (fSC)	DSN2 1.0 x 0.6		TSLP-2-7/ -17	X2- DFN1006-2	SOD882T	LLP1006-2L LLP1006-2M	SLP1006P2T
	DFN1608D-2 (SOD1608)		1.6 x 0.8 x 0.37	780		KMD2		DSN2 1.6 x 0.8		TSNP-2-2				SLP1610N2
	DSN0603-2 (SOD962)		0.6 x 0.3 x 0.3	525		GMD2	SC2	DSN2, X3DFN-2 WLCSP2	MP6	TSSLP-2-1	X3- DFN0603-2	DFN2	CLP0603	SLP- 0603P2X3
	SOD80C	Mini- Melf	3.5 x 1.5 x 1.5	300					LLD		MiniMelf	MiniMelf	MiniMelf	
	SOD123F		2.6 x 1.6 x 1.1	830				S-Flat SOD-123-FL			PowerDI123	SOD-123		
	SOD123W		2.6 x 1.7 x 1.0	900		PMDU	S-Flat	SOD-123-FL	SRP-F		PowerDI123	Strmite flat		
	SOD128		3.8 x 2.5 x 1.0	1000		PMDT	M-Flat					SMA flat		
	SOD323	SC-76	1.7 x 1.25 x 0.95	400				USC	SOD-323	URP	SOD323	SOD-323	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-32K) 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 LDPK(S)-(1) MP-25Z	D2PAK, PG- TO263-3	T0263 (D2PAK)	D2PAK, H2PAK-2	TO-263 3-lead TO-263AB / D2PAK TO-263	
SOT23			2.9 x 1.3 x 1.0	250		SSD3/ SST3	S-Mini TSM	SOT-23	MPAK	SOT23	SOT-23	SOT23	SOT23	SOT23
SOT89		SC-62	4.5 x 2.5 x 1.5	1300		MPT3	PW-Mini	SOT-89	UPAK (SOT89)	SOT89	SOT89			
SOT323	SC-70	2.0 x 1.25 x 0.95	200		UMD3/ UMT3 TUMT3	USM	SC-70	CMAK/ CMPAK	SOT323	SOT-323	SOT-323	SC-70 3 leads	SOT-323	

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

Package cross reference matrix – Part 2

Pins/ leads	Nexperia	Industry standard names	Size (L x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
3	TO-220 (SOT78)		15.6 x 10 x 4.4			TO-220FM	TO-220	TO-220-3L, TO-220F-3FS, TO-220-3	MP-25(K)	PG- TO220-3, TO220	TO220-3	TO-220	TO-220, TO- 220AB	
	I2PAK (SOT226)		11 x 10 x 4.3					I2PAK, TO-262-2L, TO-262-3L	MP-25SK, TO-262	PG- TO262-3, TO262		I2PAK	TO-262	
	SOT223		6.5 x 3.5 x 1.65					SOT-223		SOT-223	SOT223	SOT-223		
4	LFPAK56 (SOT669)	Power- S08	4.9 x 4.45 x 1.0	3000		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK, HSOP-8	PG-TD- SON-8	Power- Di5060-8	Power- FLAT (6x5)	PowerPAK SO-8(L)	
	SOT143B		2.9 x 1.3 x 1.0	250			CP4		MPAK-4R	SOT143	SOT-143			SOT-143
	SOT223	SC-73	6.5 x 3.5 x 1.65	1700				SOT-223		SOT223	SOT-223		SOT223	
5	SOT353	SC-88 A	2.0 x 1.25 x 0.95	300		UMD5/ UMT5	USV	SC-88 A	CMPAK- 5C0		SOT353		SOT353	SC70-5L
	SOT665		1.6 x 1.2 x 0.55	300		EMD5/ EMT5	ESV	SOT-553	VSON-5					
6	DFN1010-6 (SOT891)	x SON6	1.0 x 1.0 x 0.48				CS6	SOT963						
	DFN1010B-6 (SOT1216)		1.1 x 1.0 x 0.37	350		(VMT6)	(FS6)	(SOT063)			(SOT963)			
	DFN1410-6 (SOT886)	x SON6	1.45 x 1.0 x 0.48	250										SLP1510N6
	DFN1616-6 (SOT1189)	H x SON6	1.6 x 1.6 x 0.48					UDFN 1.6 x 1.6					LLP75-/L	SLP1616P6
	DFN2020-6 (SOT1118)		2.0 x 2.0 x 0.62	1300		HU- ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020- 6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN2020D-6 (SOT1118D)		2.0 x 2.0 x 0.62	1300		HU- ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020- 6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN- 2020MD-6 (SOT1220)		2.0 x 2.0 x 0.62	1250		HU- ML2020L8 (Single)	UDFN6B	UDFN-6 WDFN6			UDFN2020- 6 Type E		PowerPAK SC-70 Thin PowerPAK SC-70	
	SOT363	SC-88	2.0 x 1.25 x 0.95	300		UMD6/ UMT6	US6 UF6 USV	SC-88	CMPAK-6	SOT363	SOT-363		SC70-6	SC70-6L
	SOT457	SC-74	2.9 x 1.5 x 1.0	750		SMD6/ SMT6	SM6 VS-6	SC-74 TSOP-6	TSOP-6	SC74 TSOP6	SOT23-6 SOT26		TSOP6 TSOP-6	SOT23-6L
SOT666		1.6 x 1.2 x 0.55	300		EMD6/ EMT6 WEMT6	ES6 ESV	SOT-563	SMFPAK-6	SOT666	SOT563		SC89- 6lead	SC-89	
7	D2PAK-7 (SOT427)		11 x 10 x 4.3						MP-25ZT, 7pin TO-263	D2PAK7P, PG-TO263-7		D2PAK-7, H2PAK-6	TO-263-7L	
8	LFPAK33 (SOT1210)		3.3 x 3.3 x 0.85			HSMT8	TSON Advance	µ8FL, WDFN-8		PG-TSD- SON-8	Power Di3333-8	Power FLAT 3.3 x 3.3	PowerPAK 1212-8	
	LFPAK56D (SOT1205)		4.9 x 4.45 x 1.0	3000		HSOP8 (Dual)		SO-8FL Dual, DFN-8	HSOP-8 dual	PG-TD- SON-8	Power Di5060-8	Power FLAT 5x6 Dual	PowerPAK SO-8L Dual	
	SOT96	S08	4.9 x 3.9 x 1.75	1500		SOP8	FM8	SOIC-8 NB	SOP-8				S08	
	DFN1714-8 (SOT 1166)	HUSON8	1.7 x 1.35 x 0.52											SLP1713P8
	DFN1714U-8 (SOT983)	H x SON8	1.7 x 1.35 x 0.48					UDFN 1.7 x 1.35, 0.4P						SLP1713P8
10	DFN2510-10 (SOT 1165)	x SON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L	SLP1610P4	

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

Package cross reference matrix – Part 3

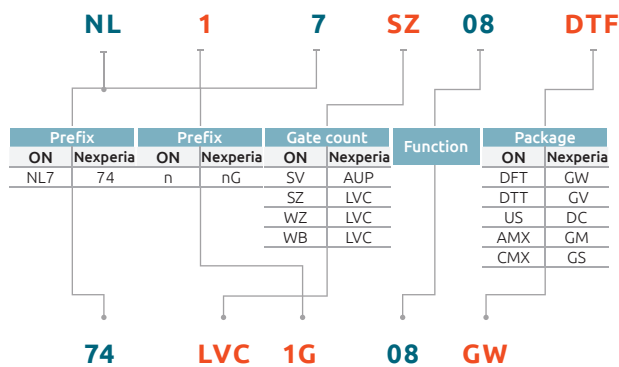
Pins/leads	Nexperia	Industry standard names	Size (L x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
10	DF-N2510A-10 (SOT1176)	x SON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2626-10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

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

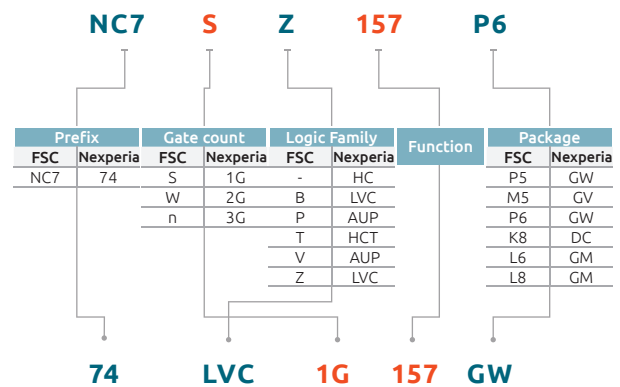
Competitive cross reference - Logic

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

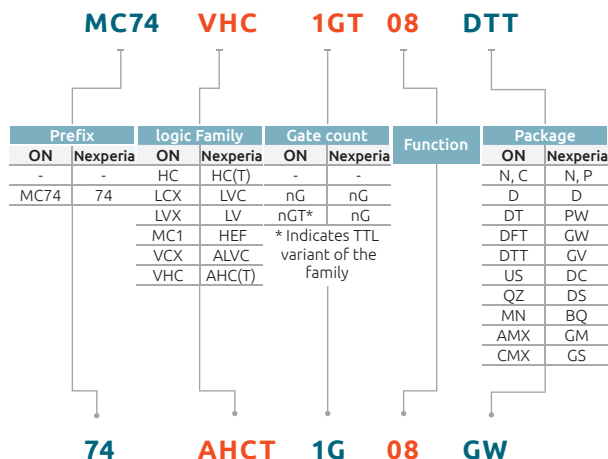
On semiconductor low pin count logic



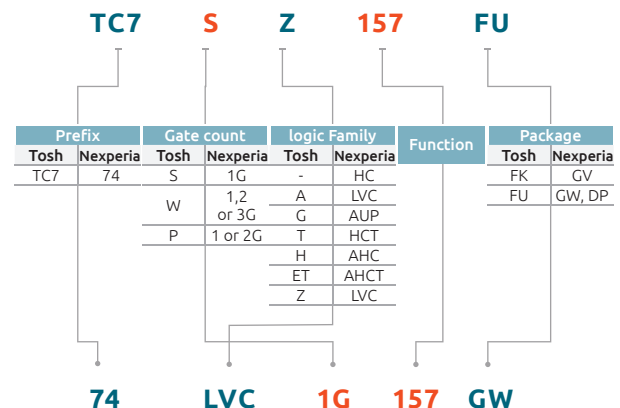
Fairchild semiconductor tiny logic



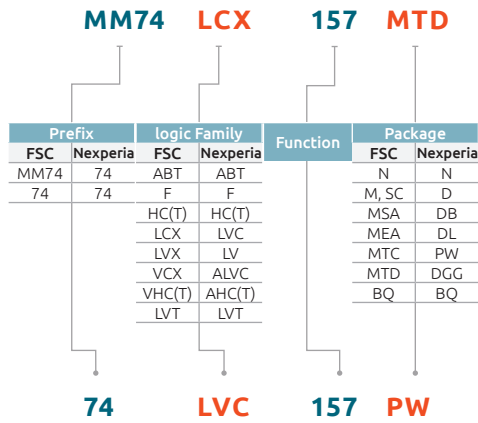
On semiconductors logic



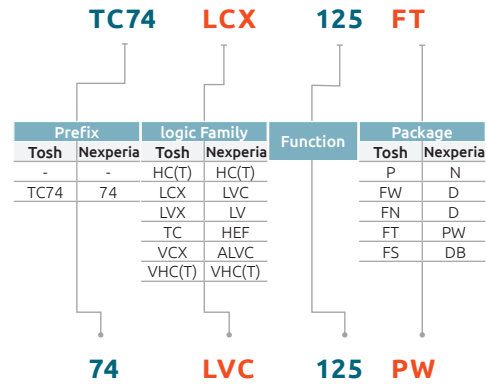
Toshiba one gate



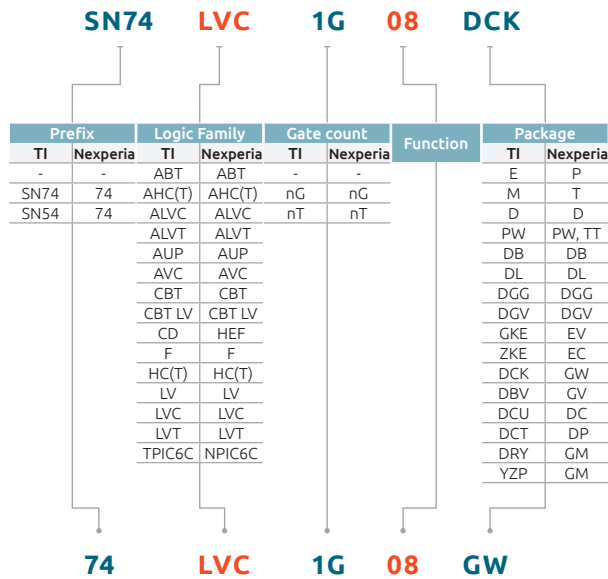
Fairchild semiconductor standard logic



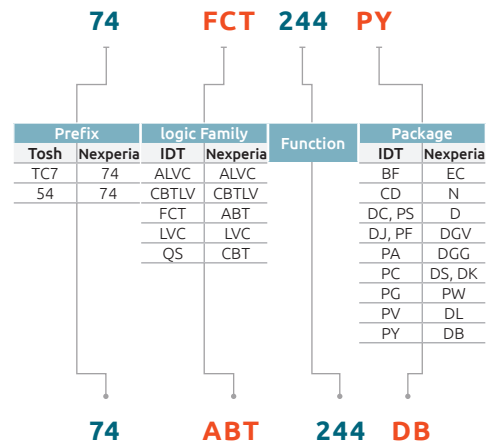
Toshiba standard logic



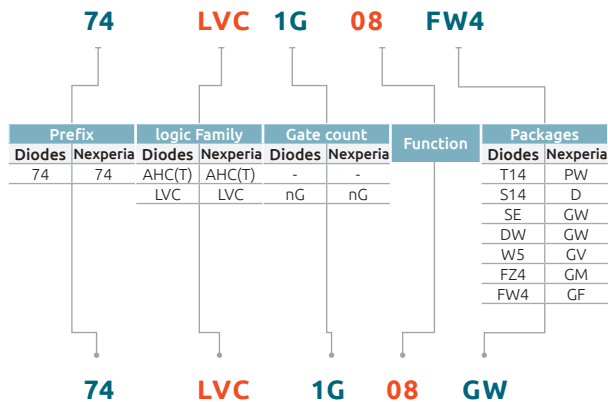
Texas instruments logic



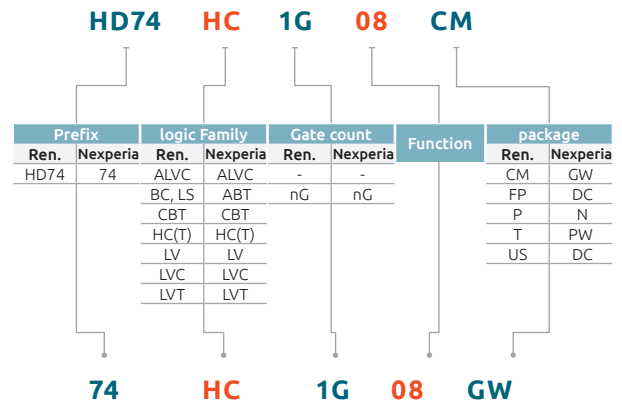
IDT logic




Diodes Inc. logic











Renesas logic



Product orientation (tape and reel pack)

2 pin packages	Orientation in tape	Package	Packing 12NC ending	
			DFN1006-2 (SOD882)	315
			DFN1006D-2 (SOD882D)	315
			DFN1608D-2 (SOD1608)	315
			DSN0603-2 (SOD962)	315
			DSN0402-2 (SOD992)	315
			DSN1006-2 (SOD993)	315
			DSN1006U-2 (SOD995)	315
			DSN1608-2 (SOD963&964)	315
			SOD80	115, 135
			SOD123F	115
			CFP3 (SOD123W)	115
			SOD123	115, 118
			CFP5 (SOD128)	115
			SOD323	115, 135
	SOD323F	115		
	SOD523	115, 135, 315, 335		

3 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending		
			SOT89		146			DFN1010D-3 (SOT1215)	147
								DFN2020-3 (SOT1061)	115, 135
								DFN2020D-3 (SOT1061D)	115, 135
								SOT89	115, 135
								SOT663	115
								CFP15 (SOT1289)	139, 146
								DPAK (SOT428)	118
								D2PAK (SOT404)	118
Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending				
		DFN1006-3 (SOT883)	315			SOT89	147		
		DFN1006B-3 (SOT883B)	315						
		SOT23	185, 215, 235						
		SOT323	115, 135						
		SOT416	115, 135						

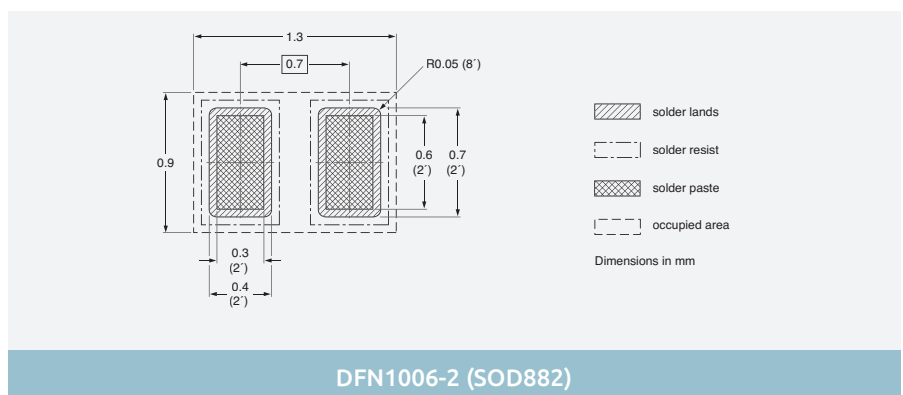
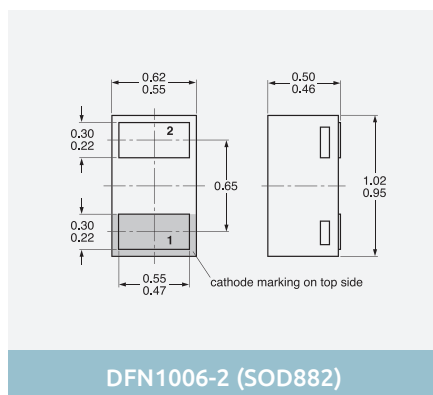
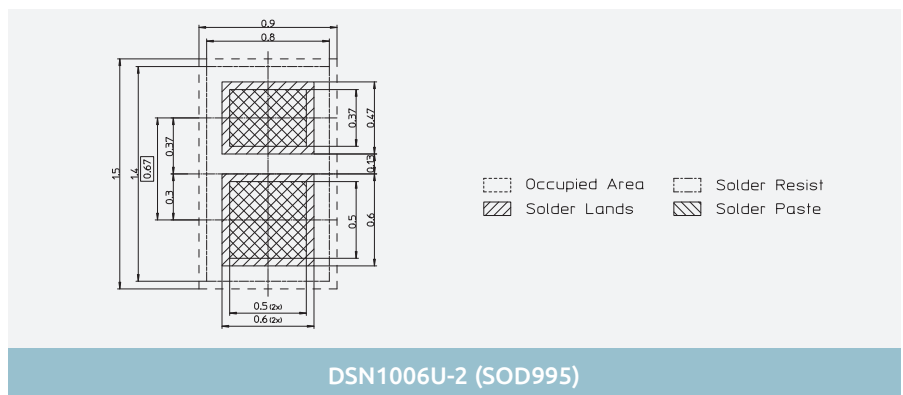
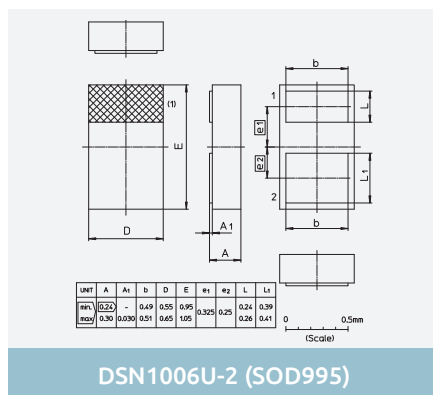
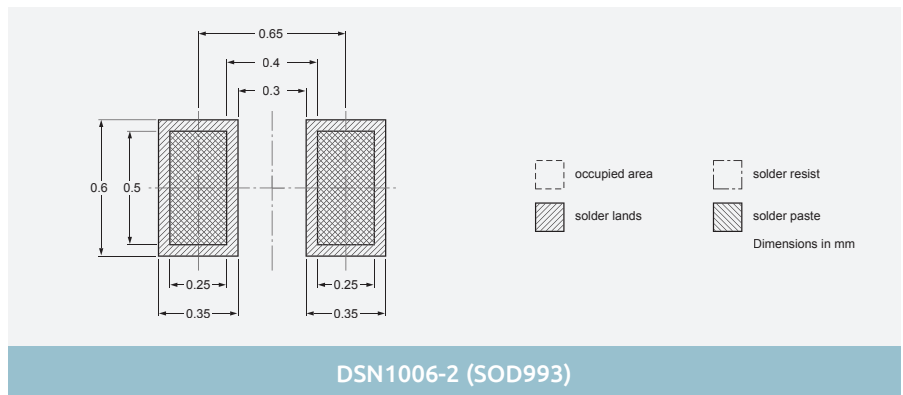
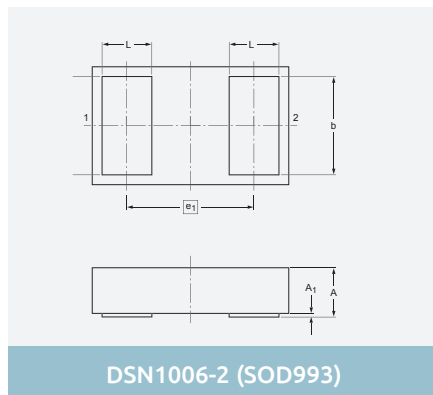
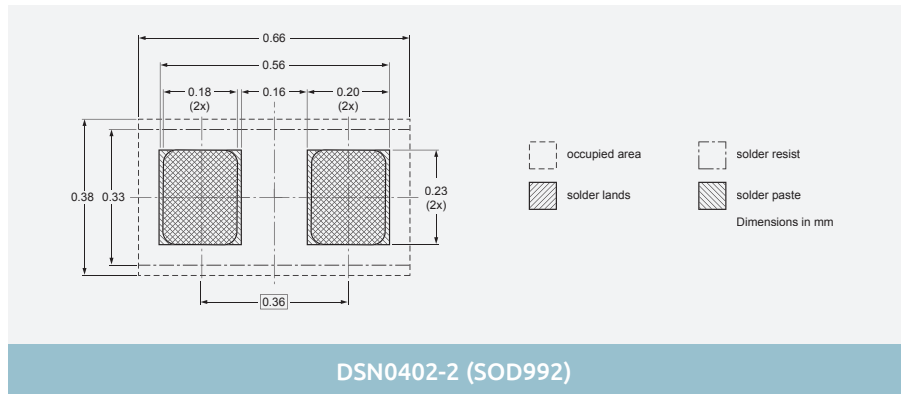
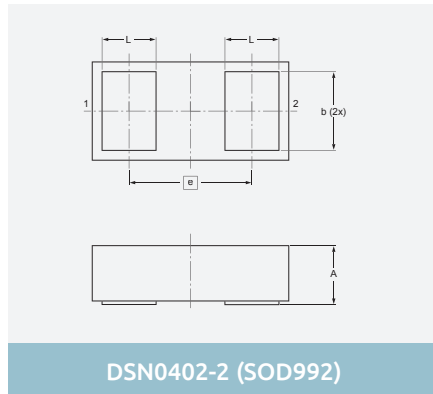
4 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending		
			WLCSP4 (0808)		084			SOT89	115, 135
Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending				
		SOT143B	215, 235						
		SOT223	115, 135						
		DFN1010-4 (SOT1194)	115						

5 pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending		
		LFPAK (SOT669)	115		SOT353	115, 135		
		WLCSP5 (1208)	087		SOT665	115		
		Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
			SOT753	125				

6 pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
		DFN1410-6 (SOT886)	115		DFN1412-6 (SOT1268)	147	
		DFN1616-6 (SOT1189)	115		DFN2020-6 (SOT1118)	115	
		DFN2020MD-6 (SOT1220)	184		DFN2020D-6 (SOT1118D)	115	
		LFPAK33 (SOT1210)	115		DFN2020MD-6 (SOT1220)	115	
		LFPAK56D (SOT1205)	115		SOT363	115, 135	
		WLCSP6 (1510)	023		SOT457	115, 135	
					SOT666	115, 315	
		Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending
			DFN1010-6 (SOT891)	132			
DFN1010E-6 (SOT1202)			132				
DFN1410-6 (SOT886)			132				
DFN2020MD-6 (SOT1220)			125				
SOT363			125, 165				
SOT457			125, 165				

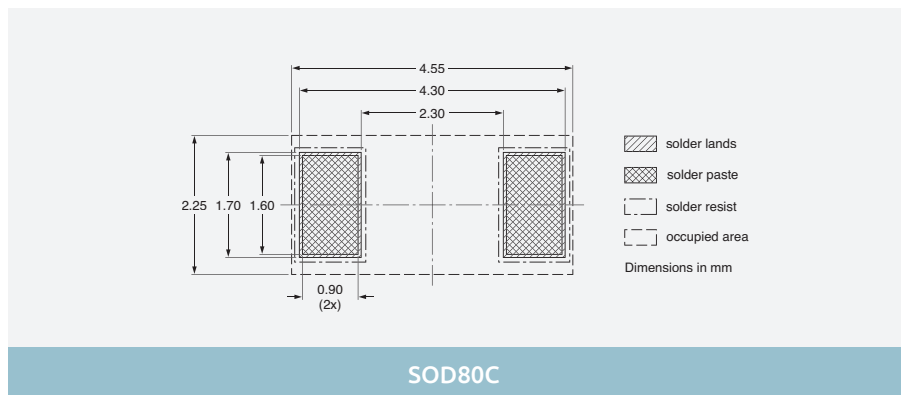
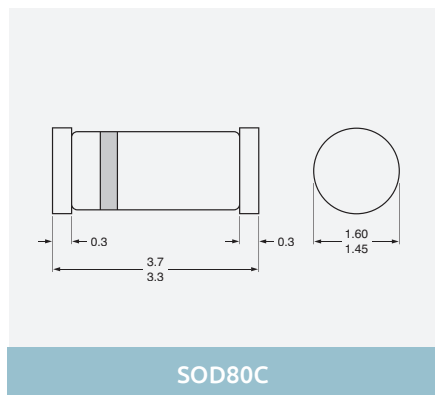
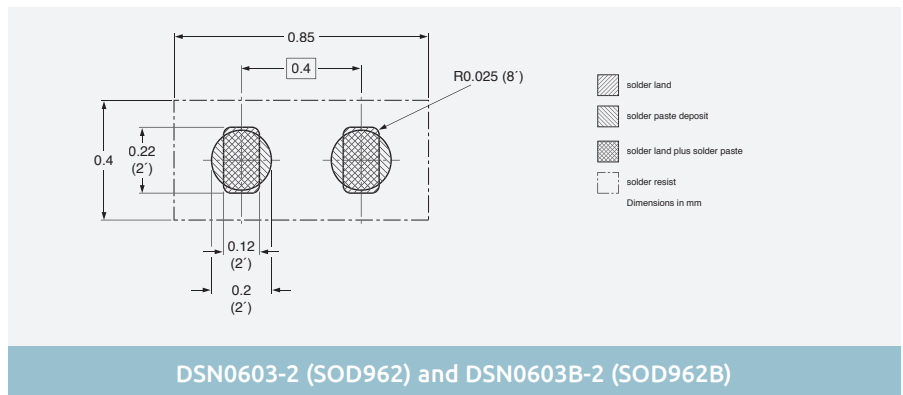
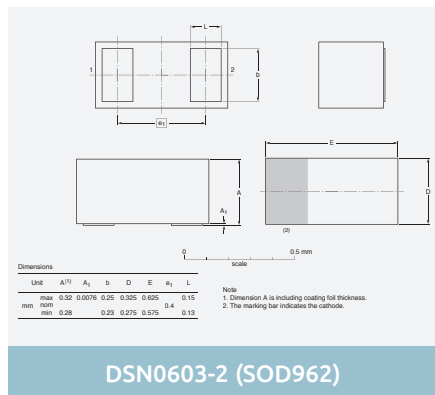
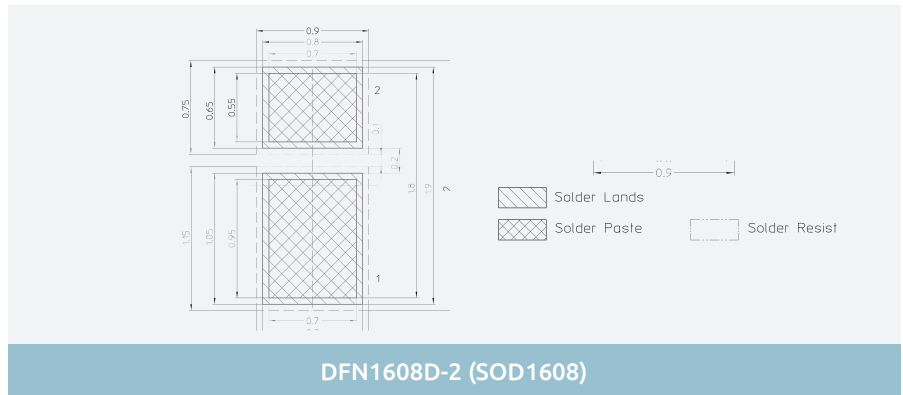
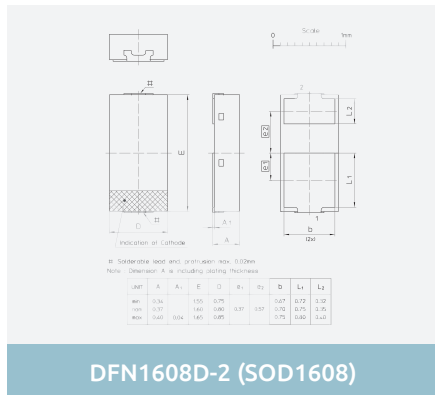
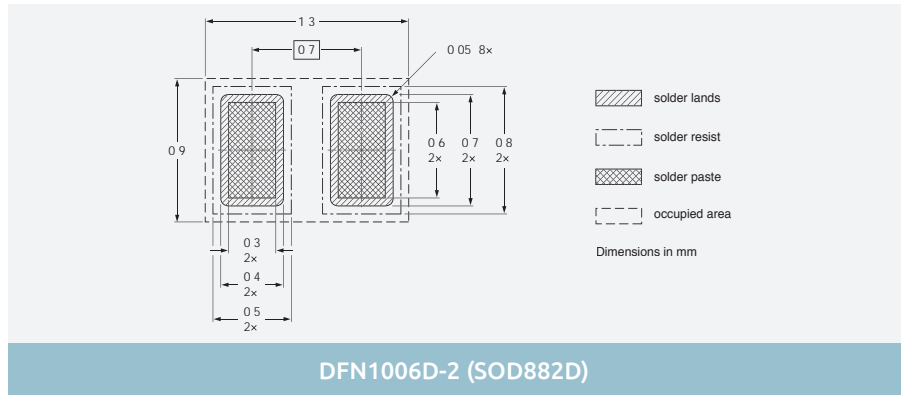
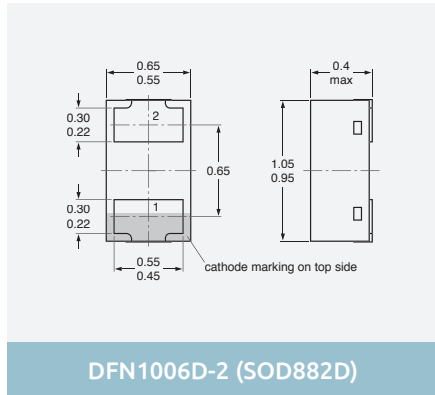
multi I/O pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending	
		DFN2110-9 (SOT1178)	115				
		DFN2111-7 (SOT1358)	471				
		DFN2510A-10 (SOT1176)	115				
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN5050-32 (SOT617-3)					
		Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending

2-pin SMD packages



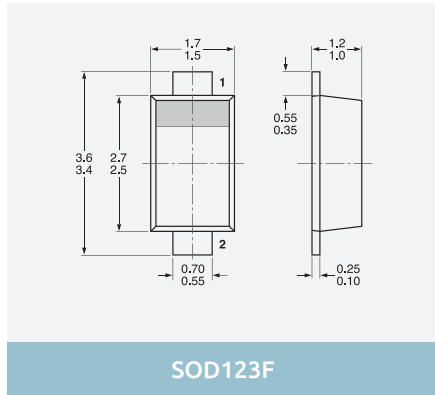
Dimensions in mm

2-pin SMD packages

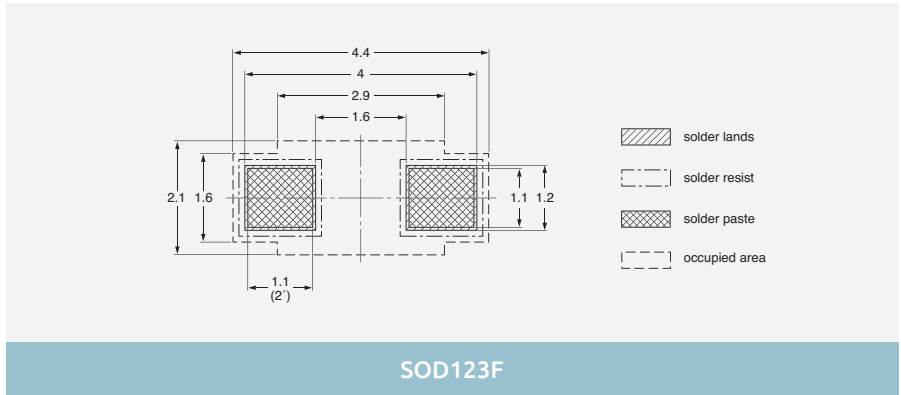


Dimensions in mm

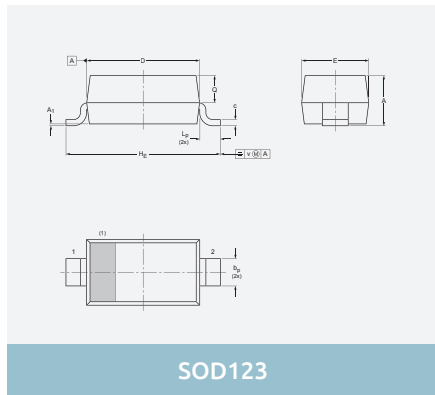
2-pin SMD packages



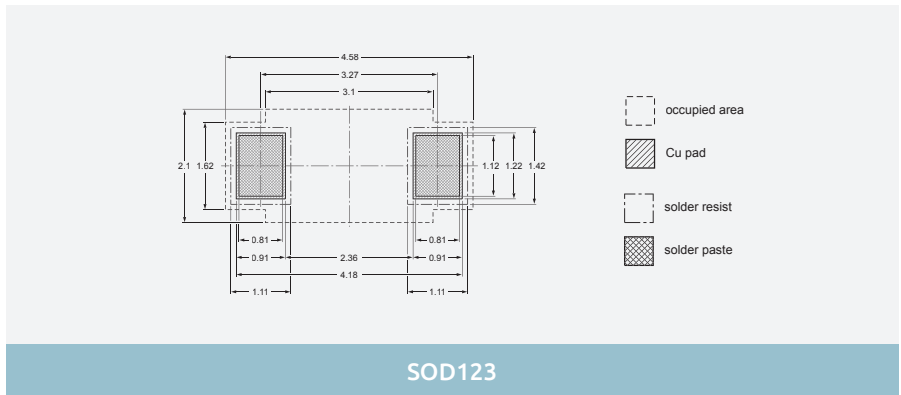
SOD123F



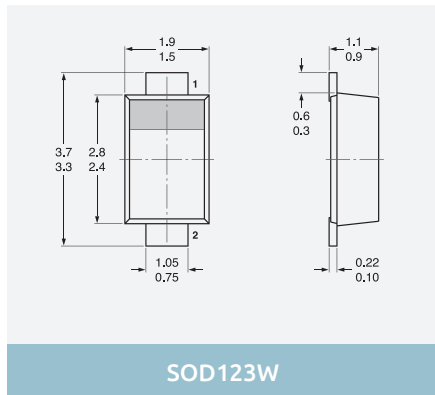
SOD123F



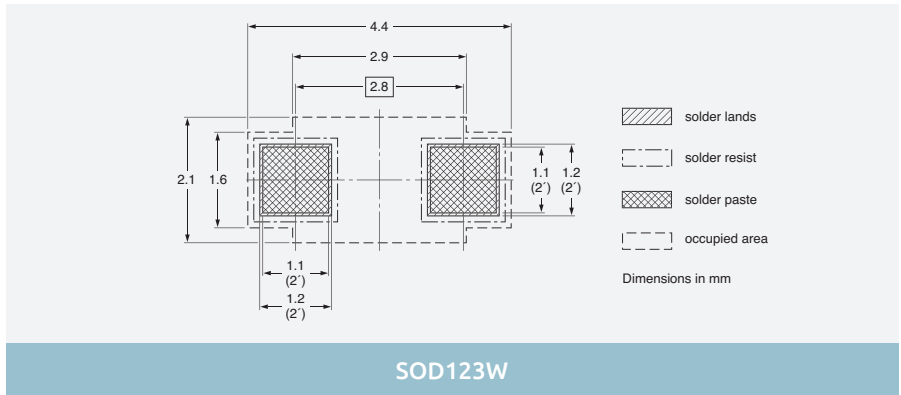
SOD123



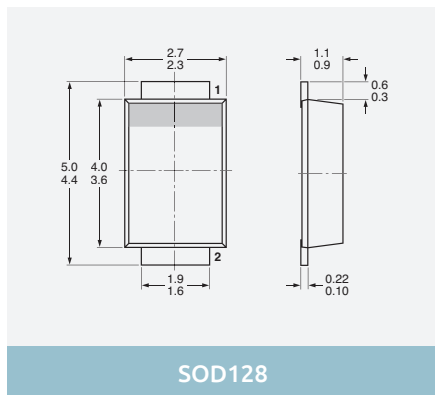
SOD123



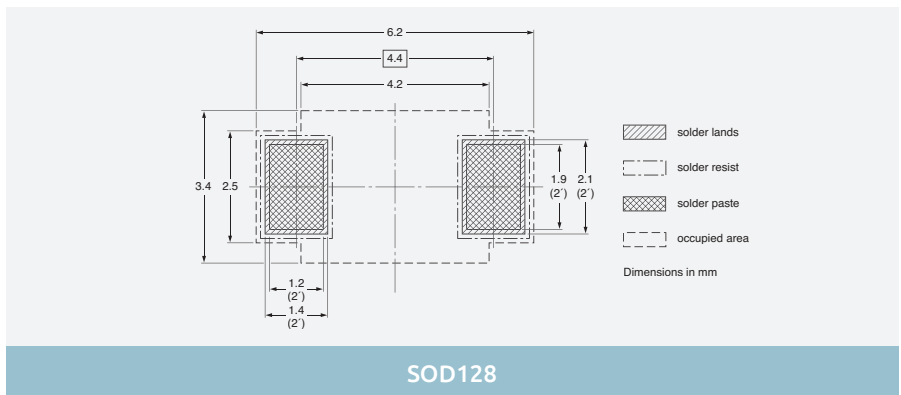
SOD123W



SOD123W



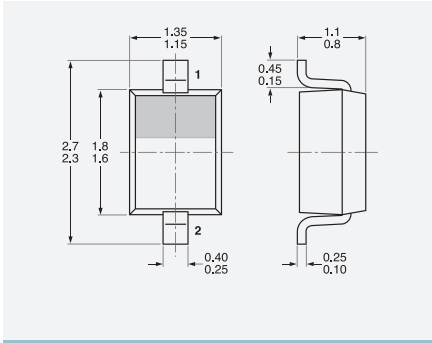
SOD128



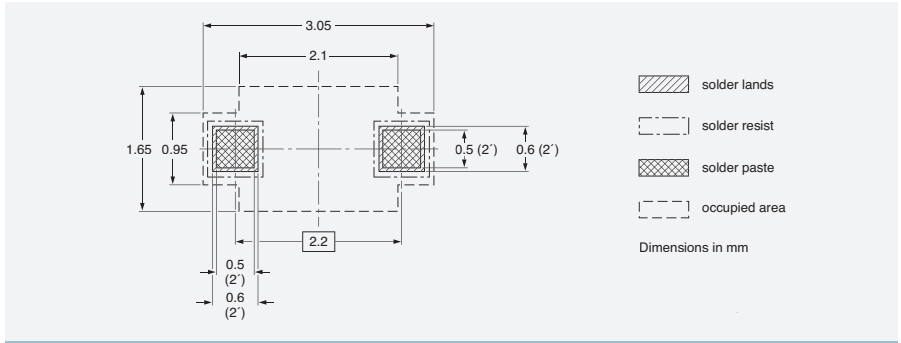
SOD128

Dimensions in mm

2-pin SMD packages

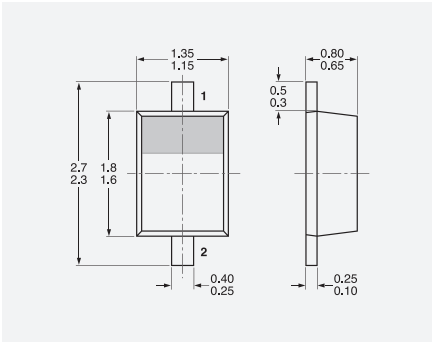


SOD323 (SC-76)

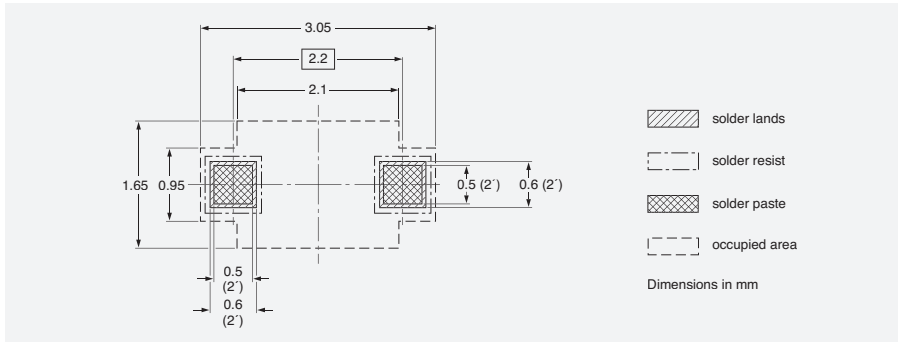


SOD323 (SC-76)

- solder lands
 - solder resist
 - solder paste
 - occupied area
- Dimensions in mm

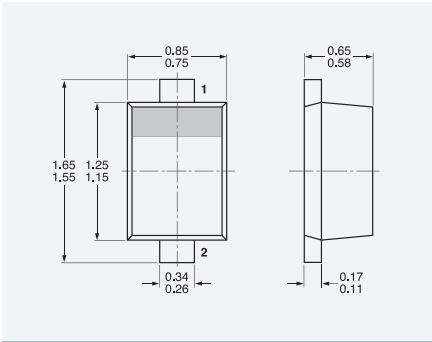


SOD323F (SC-90)

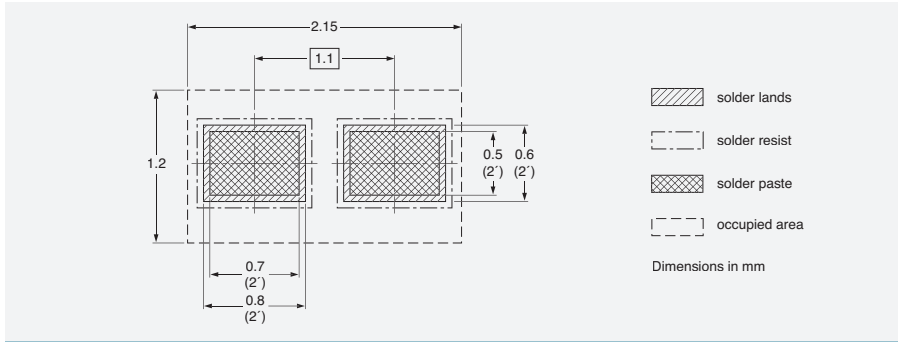


SOD323F (SC-90)

- solder lands
 - solder resist
 - solder paste
 - occupied area
- Dimensions in mm



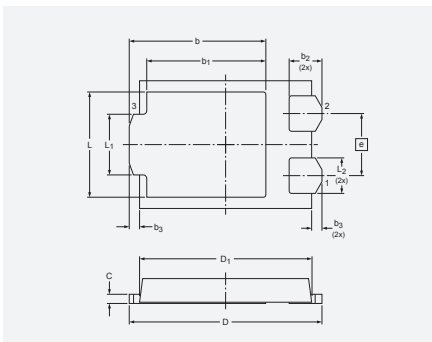
SOD523 (SC-79)



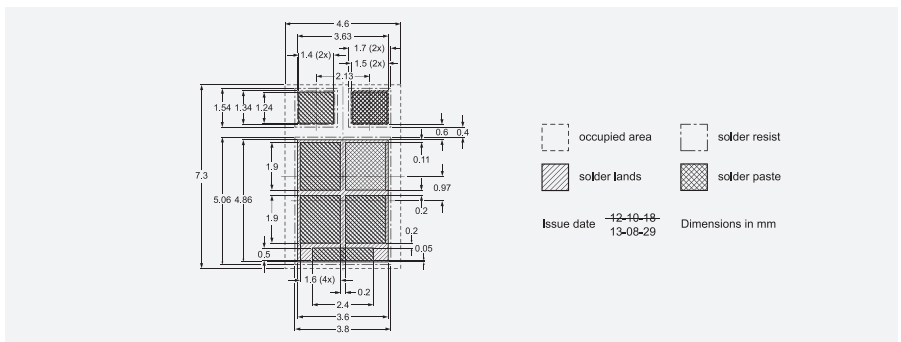
SOD523 (SC-79)

- solder lands
 - solder resist
 - solder paste
 - occupied area
- Dimensions in mm

3-pin SMD packages



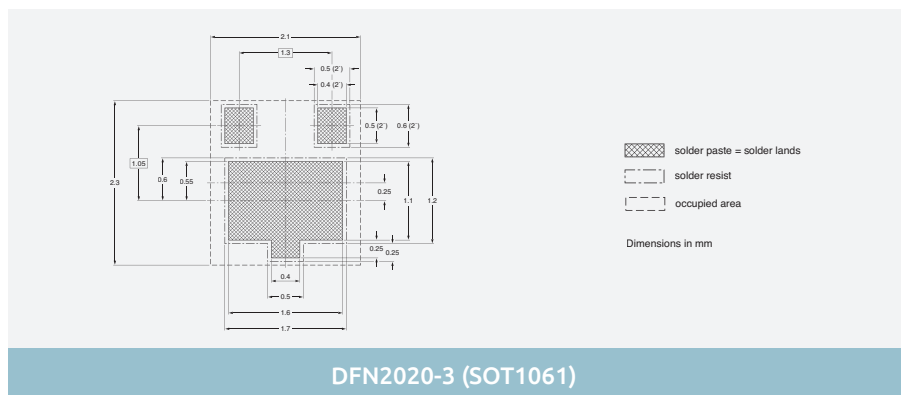
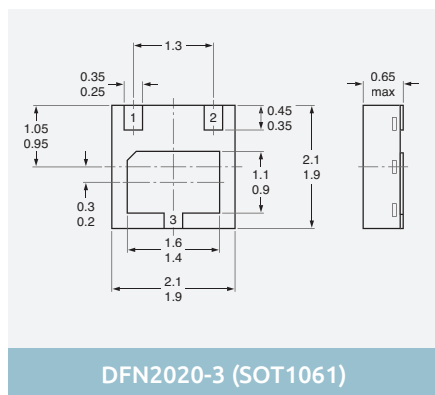
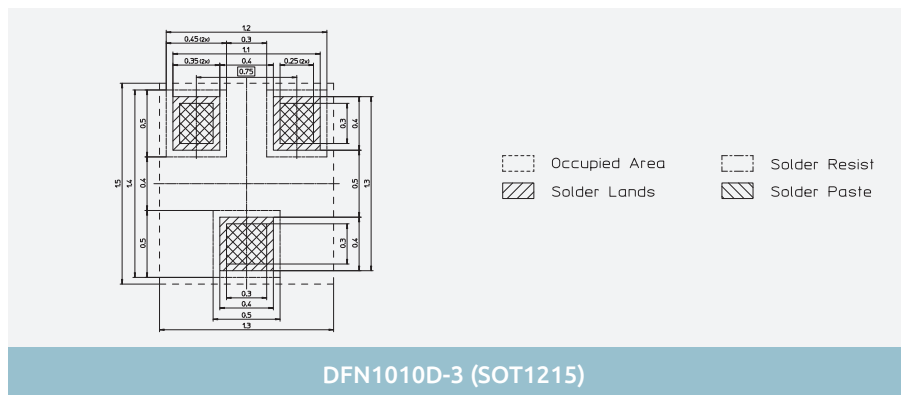
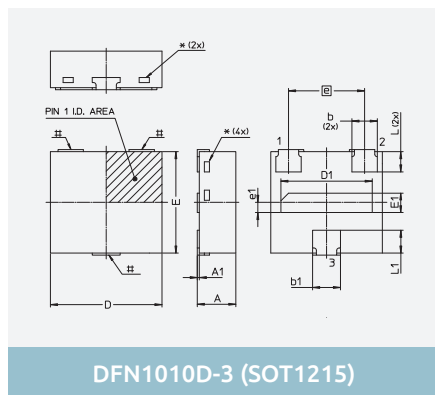
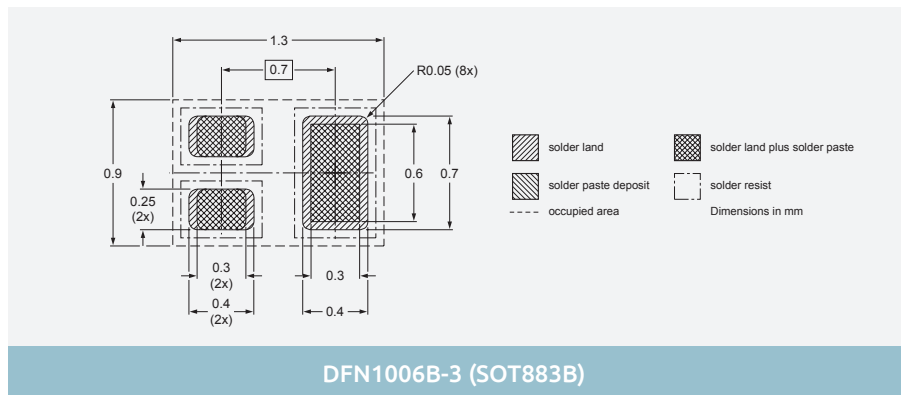
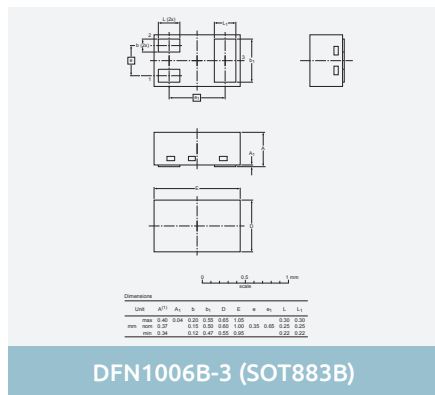
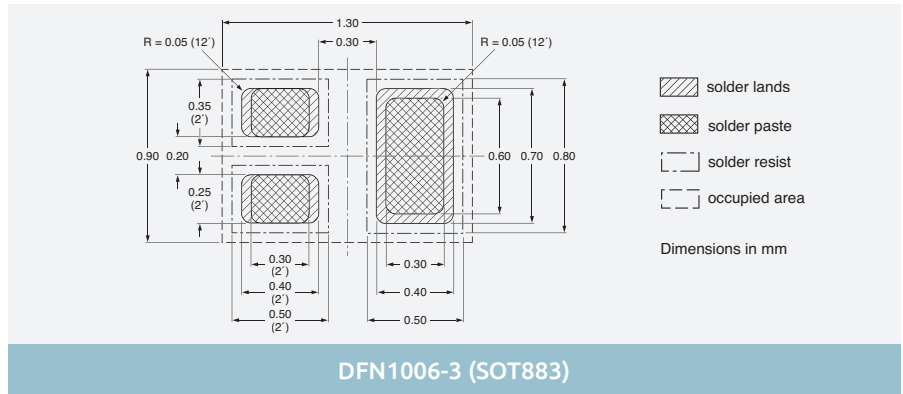
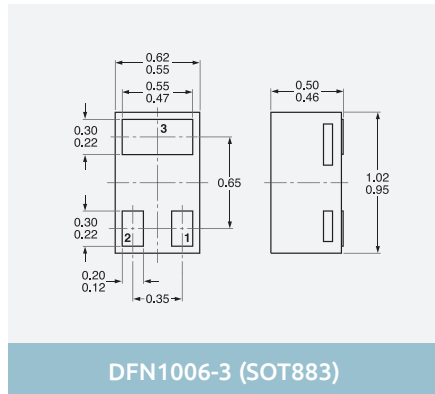
CFP15 (SOT1289)



CFP15 (SOT1289)

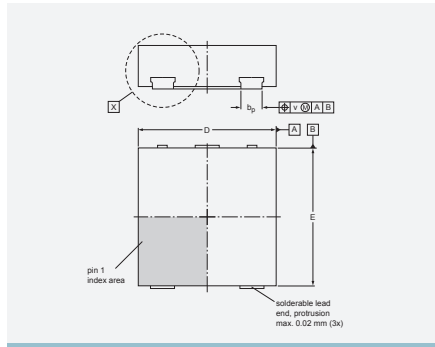
- occupied area
 - solder resist
 - solder lands
 - solder paste
- Issue date: 12-10-18 / 13-08-29
 Dimensions in mm

3-pin SMD packages

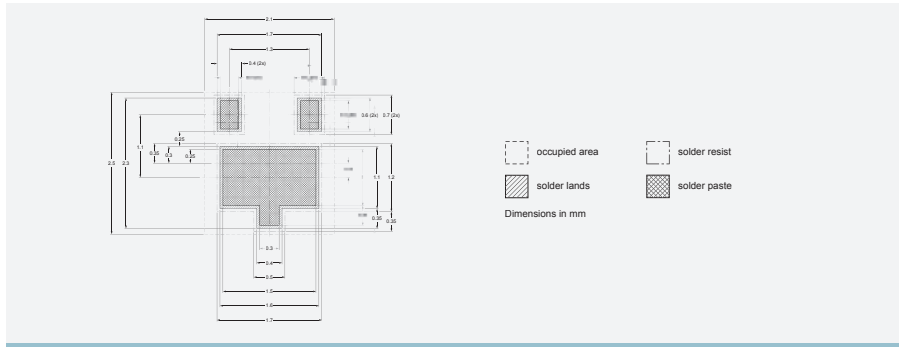


Dimensions in mm

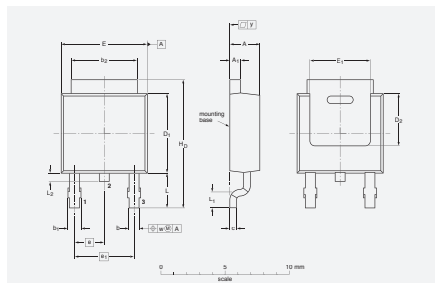
3-pin SMD packages



DFN2020D-3 (SOT1061D)



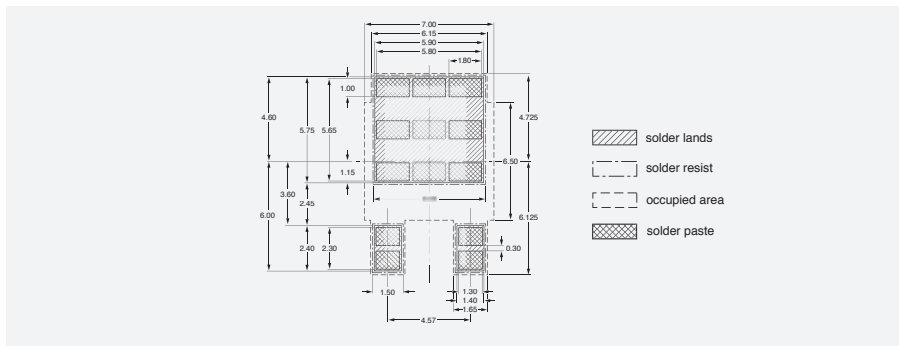
DFN2020D-3 (SOT1061D)



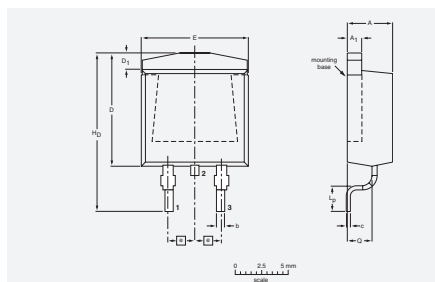
DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁	h	h ₀	E	D ₁	D ₂	E	e	e ₁	H ₀	L	L ₁	L ₂	w	T
mm	3.38	0.93	1.1	5.45	6.32	4.0	4.0	4.75	4.40	2.285	4.57	10.4	2.93	0.5	0.9	0.2
mm	2.22	0.48	0.71	0.9	5.00	5.99	4.0	4.47	4.40	2.285	4.57	9.9	2.95	0.5	0.2	0.2

DPAK (SOT428)



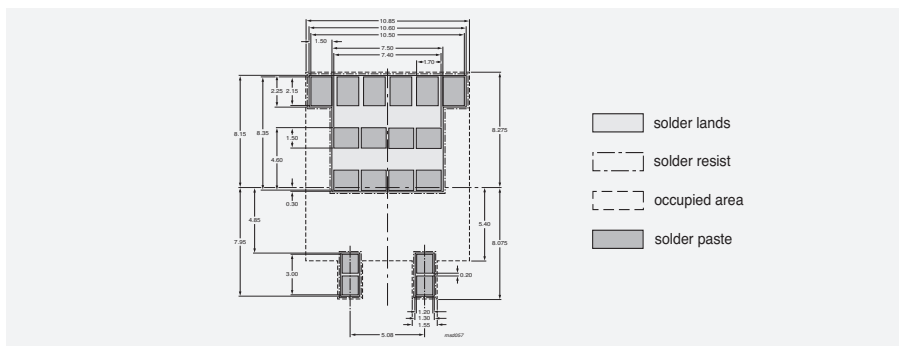
DPAK (SOT428)



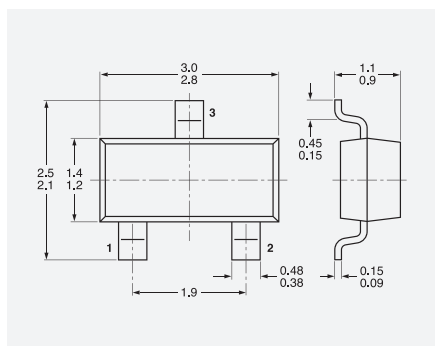
DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁	h	e	D	D ₁	E	e	L _p	H ₀	Q
mm	4.50	1.40	0.85	0.94	11	1.40	10.30	2.54	2.90	15.40	2.40
mm	4.10	1.27	0.80	0.90	11	1.20	9.70	2.54	2.10	14.80	2.20

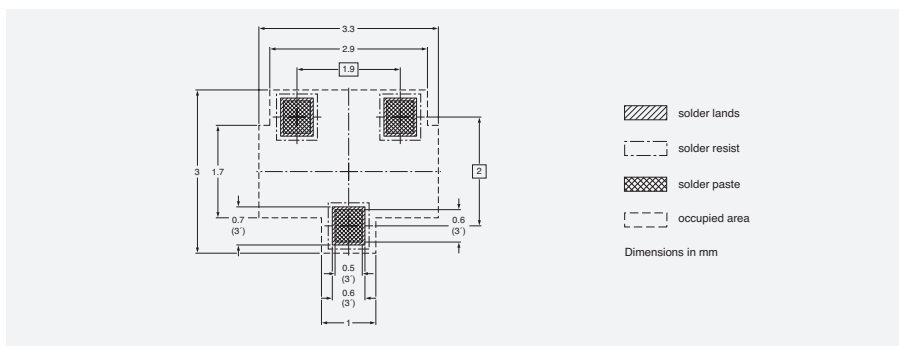
D²PAK (SOT404)



D²PAK (SOT404)



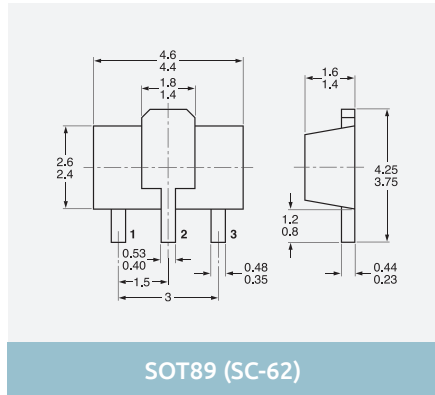
SOT23



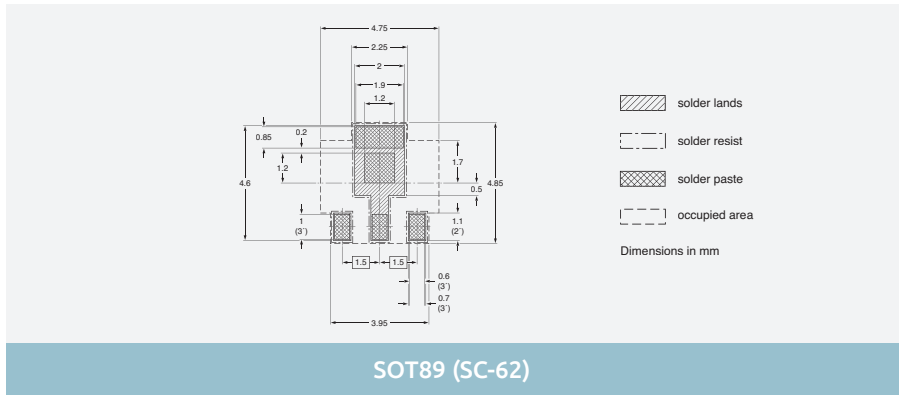
SOT23

Dimensions in mm

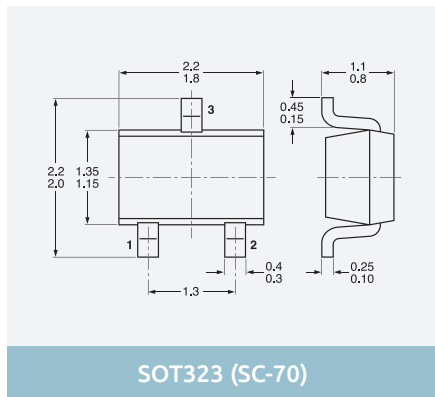
3-pin SMD packages



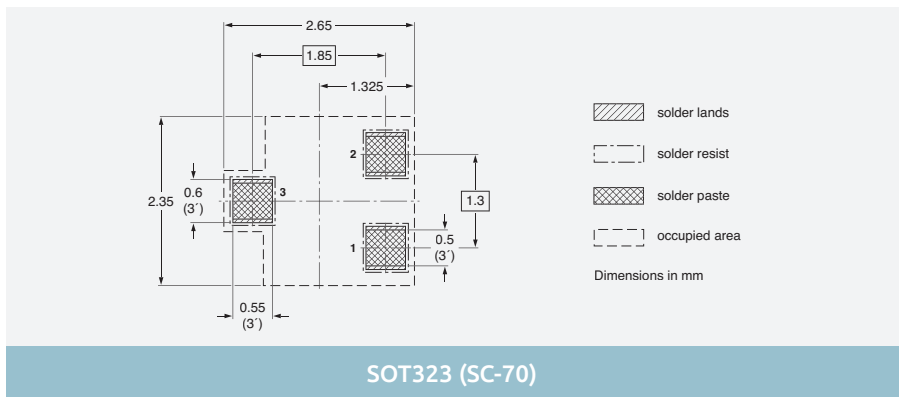
SOT89 (SC-62)



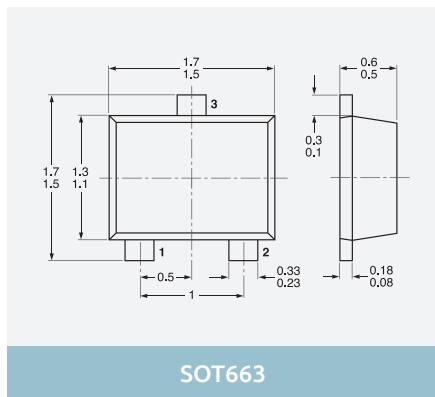
SOT89 (SC-62)



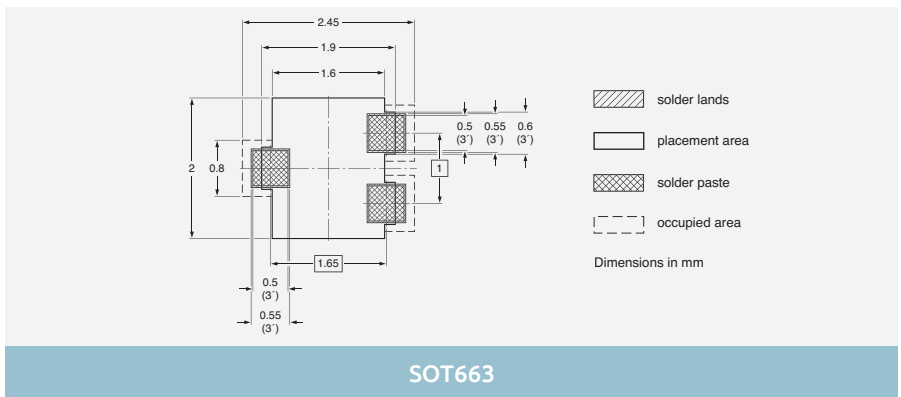
SOT323 (SC-70)



SOT323 (SC-70)

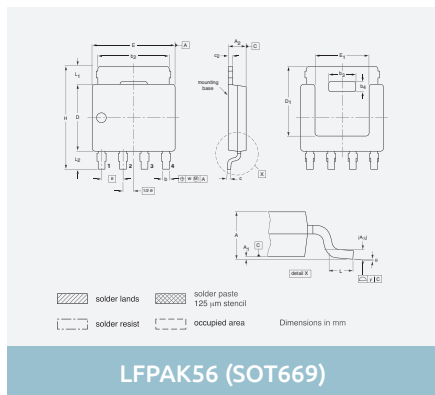


SOT663

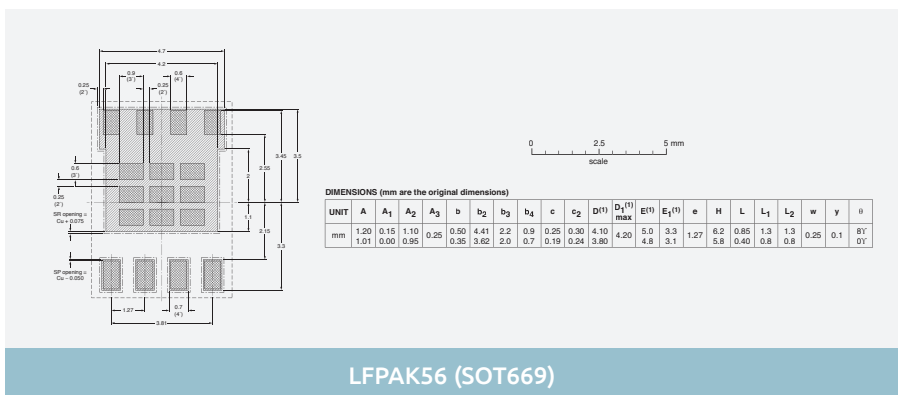


SOT663

4-pin SMD packages

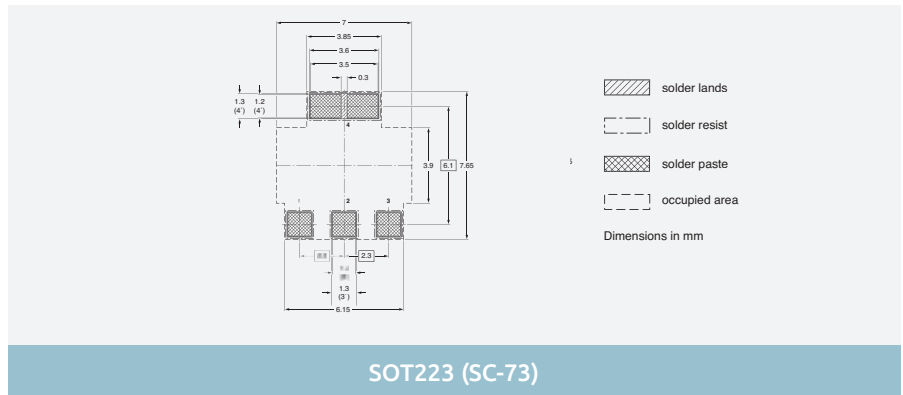
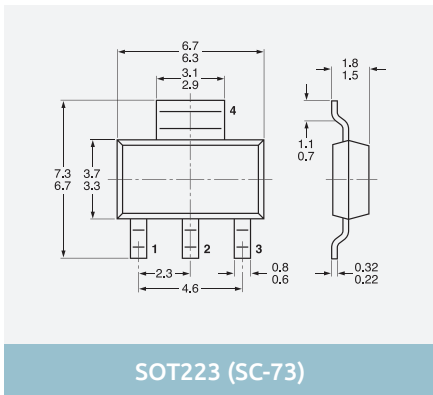
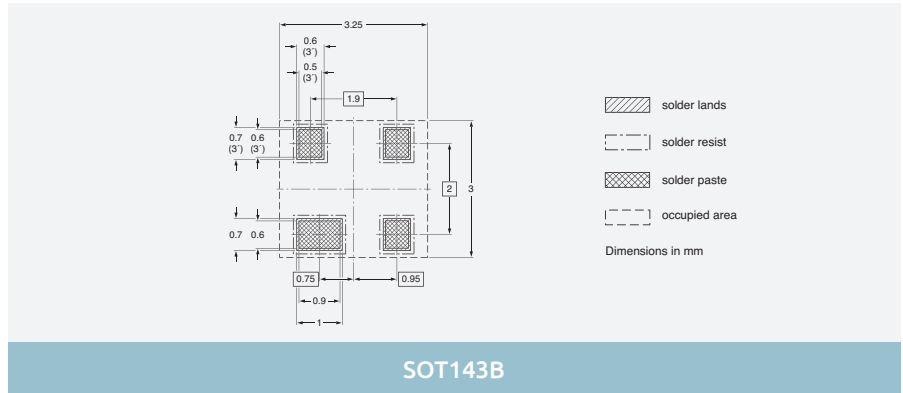
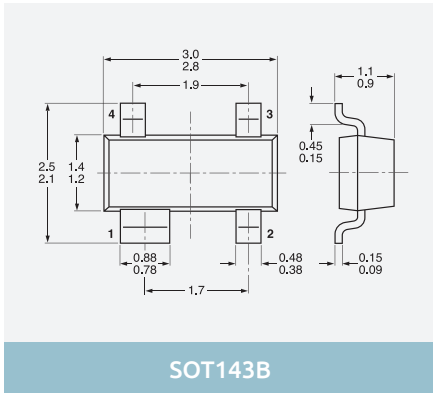


LPAK56 (SOT669)

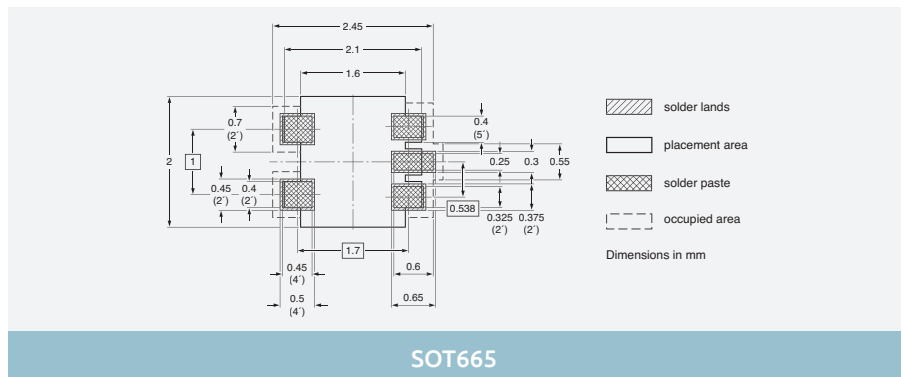
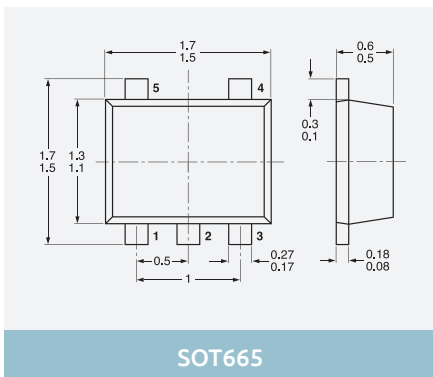
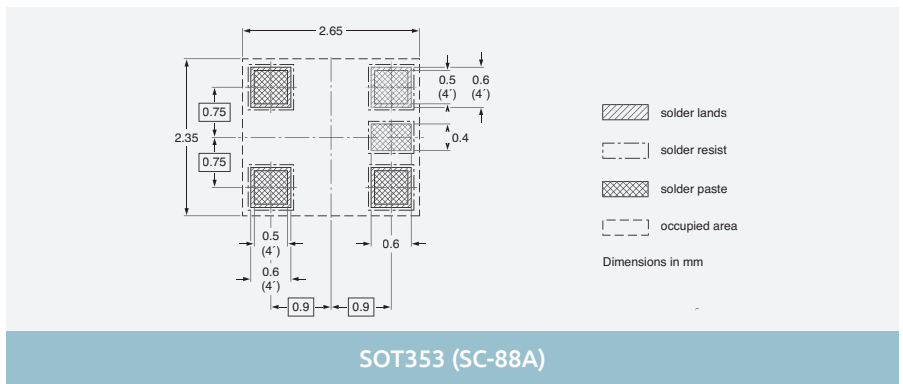
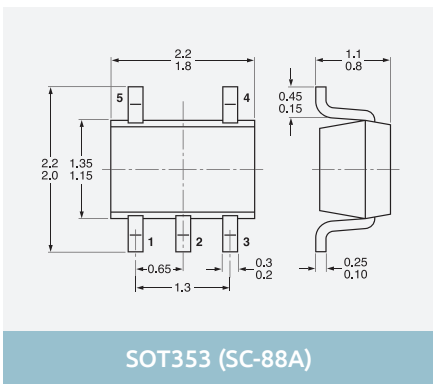


LPAK56 (SOT669)

4-pin SMD packages

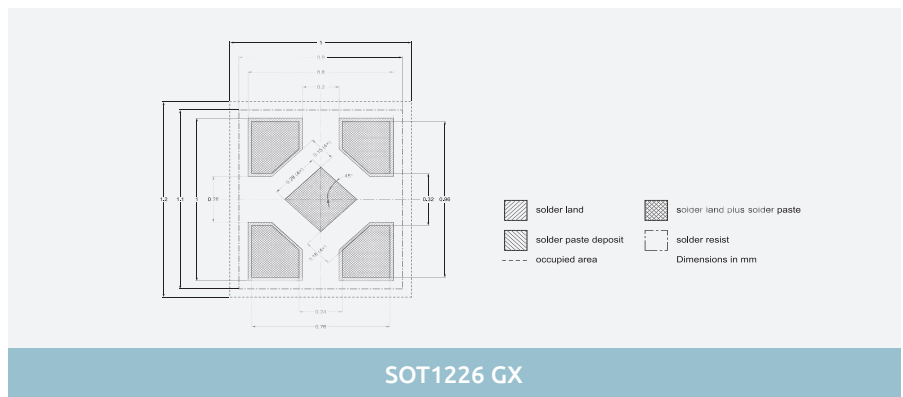
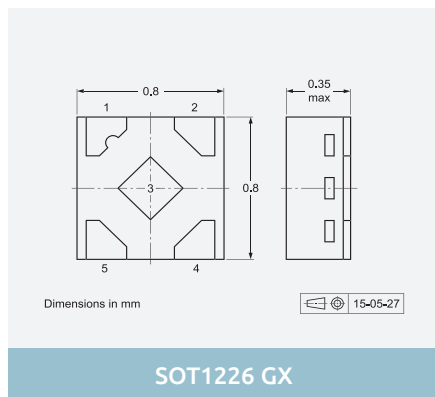
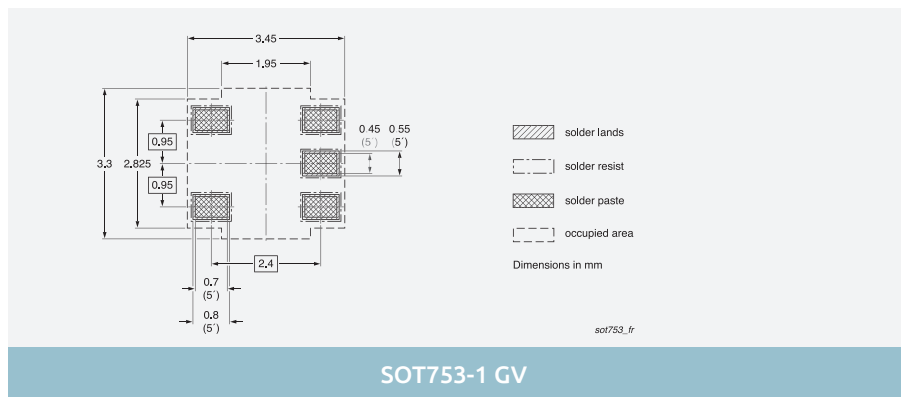
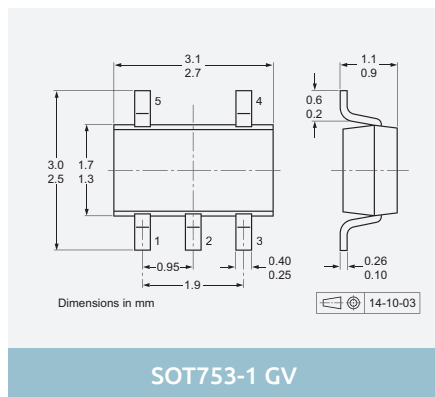
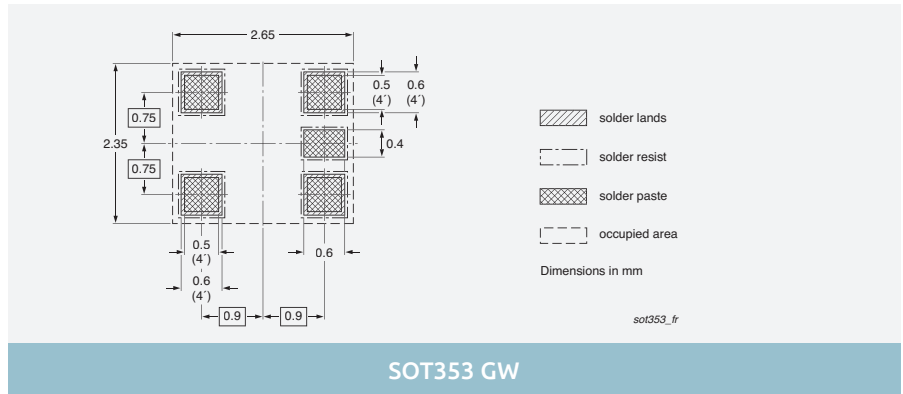
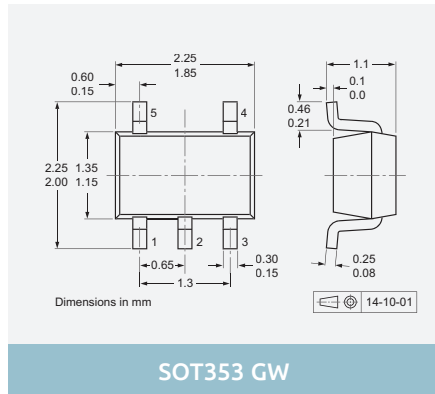


5-pin SMD packages

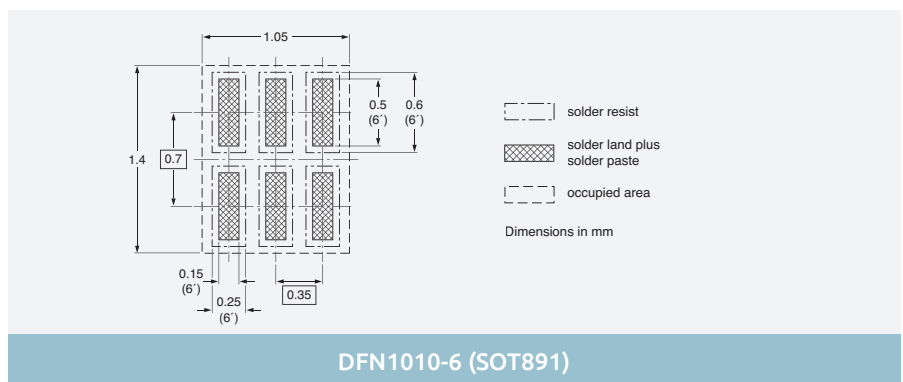
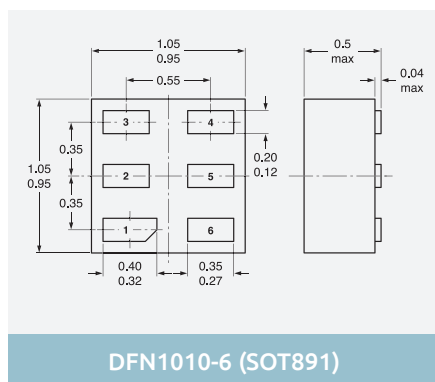


Dimensions in mm

5-pin SMD packages

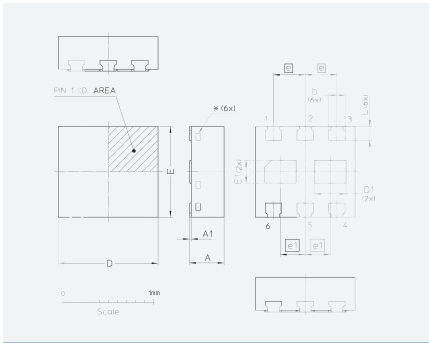


6-pin SMD packages

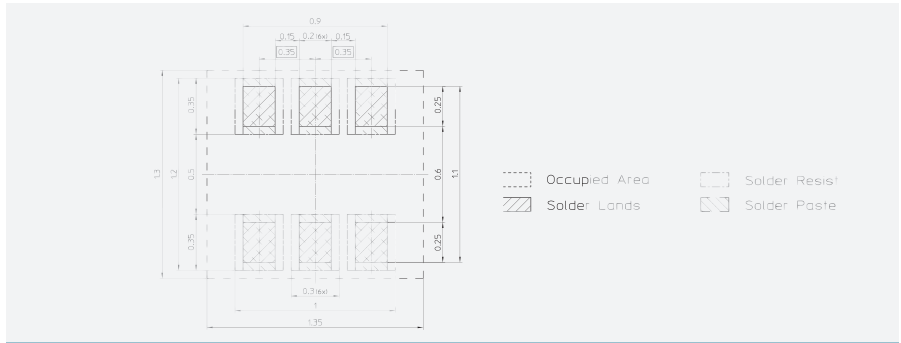


Dimensions in mm

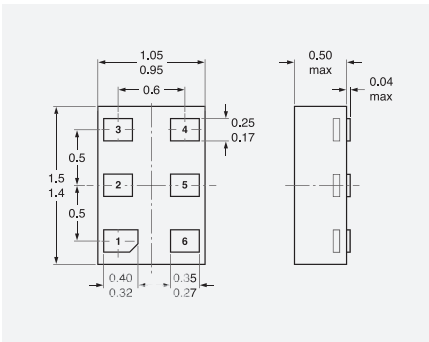
6-pin SMD packages



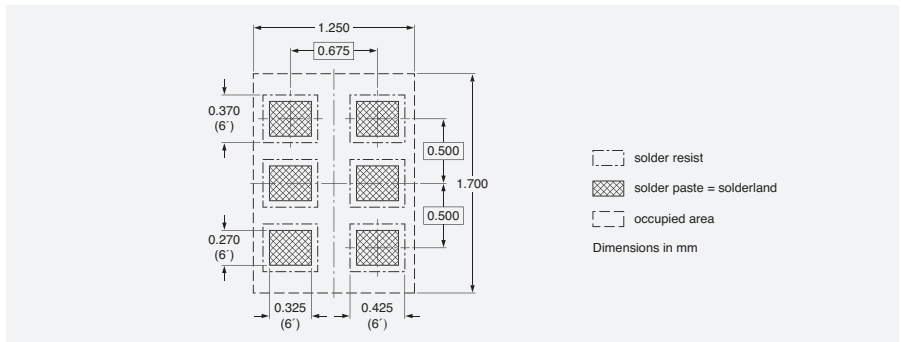
DFN1010B-6 (SOT1216)



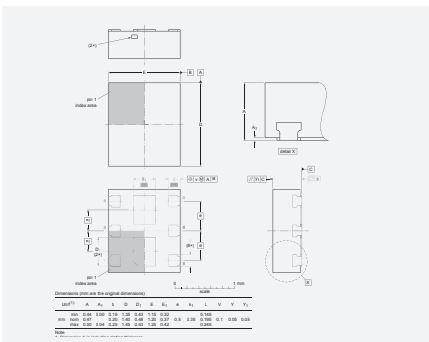
DFN1010B-6 (SOT1216)



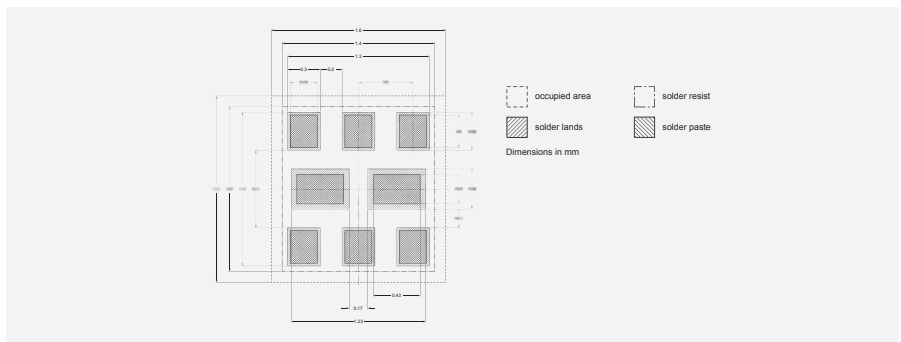
DFN1410-6 (SOT886)



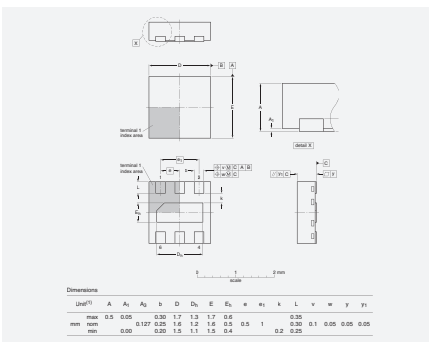
DFN1410-6 (SOT886)



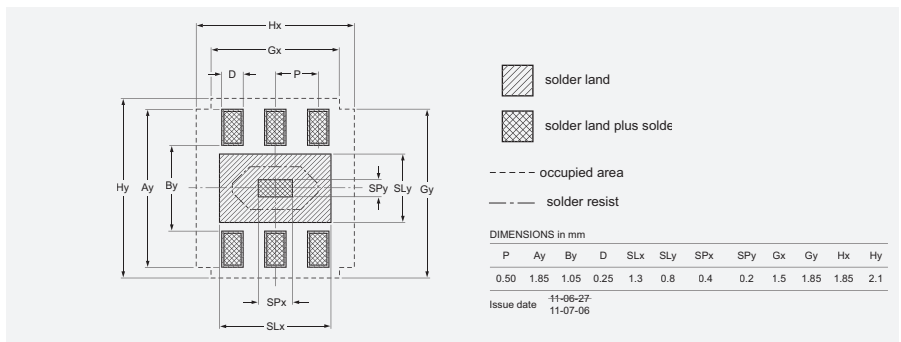
DFN1412-6 (SOT1268)



DFN1412-6 (SOT1268)



DFN1616-6 (SOT1189)

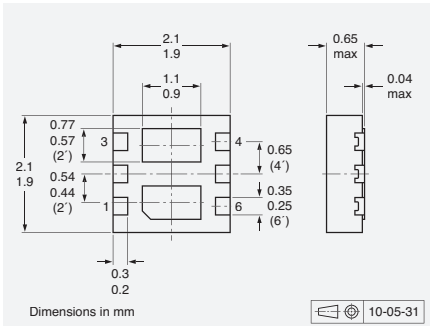


DFN1616-6 (SOT1189)

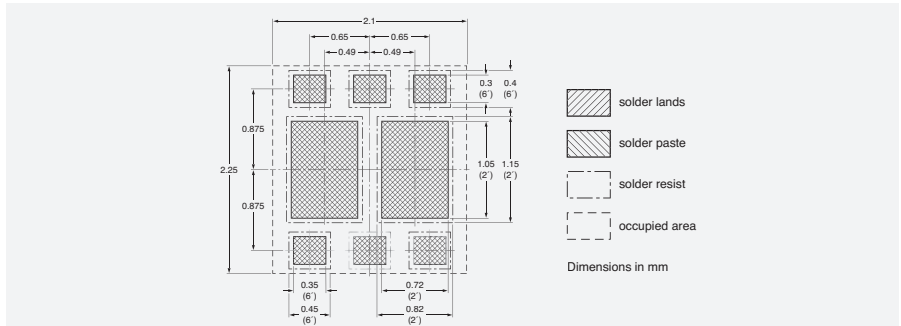
Dimensions in mm

DIMENSIONS in mm											
P	Ay	By	D	SLx	SLy	SPx	SPy	Gx	Gy	Hx	Hy
0.50	1.85	1.05	0.25	1.3	0.8	0.4	0.2	1.5	1.85	1.85	2.1
Issue date		-11-06-27 11-07-06									

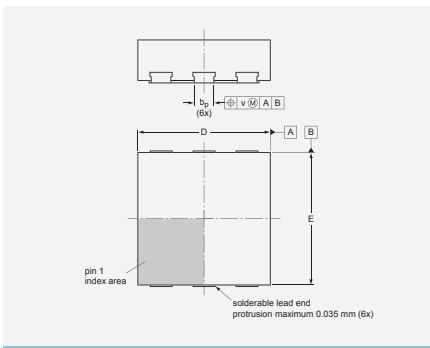
6-pin SMD packages



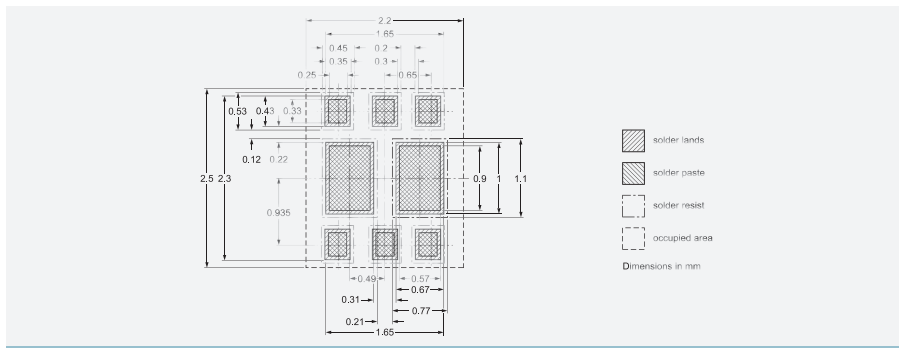
DFN2020-6 (SOT1118)



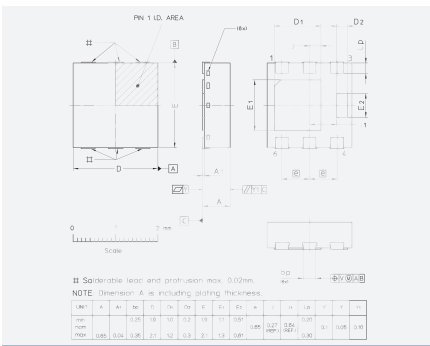
DFN2020-6 (SOT1118)



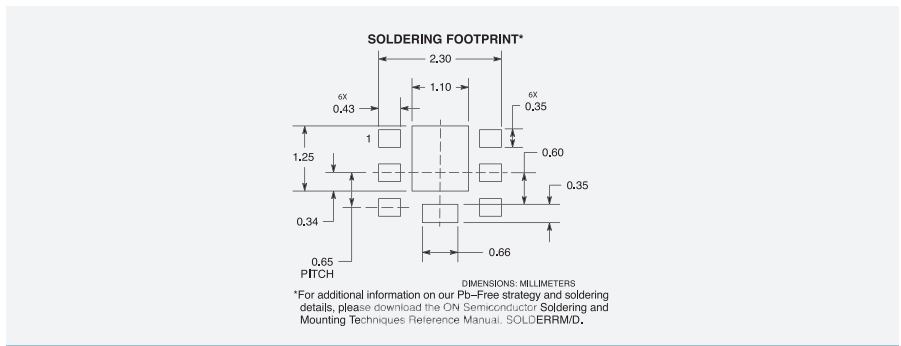
DFN2020D-6 (SOT1118D)



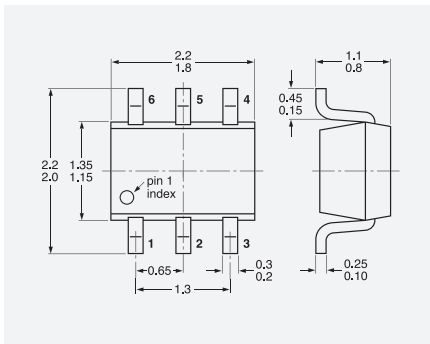
DFN2020D-6 (SOT1118D)



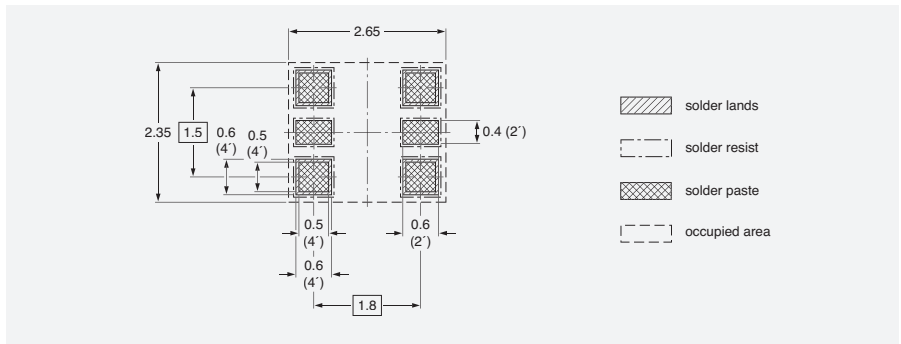
DFN2020MD-6 (SOT1220)



DFN2020MD-6 (SOT1220)



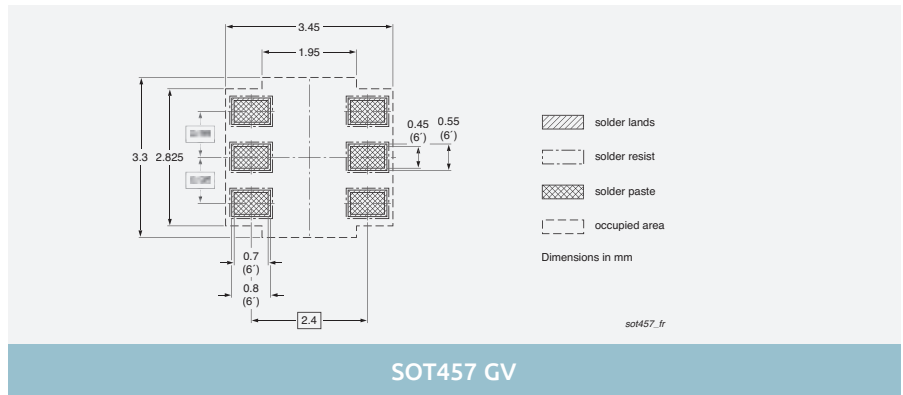
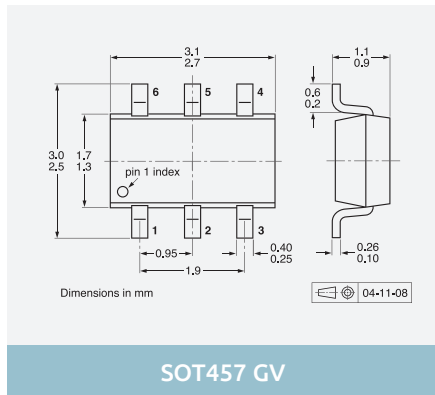
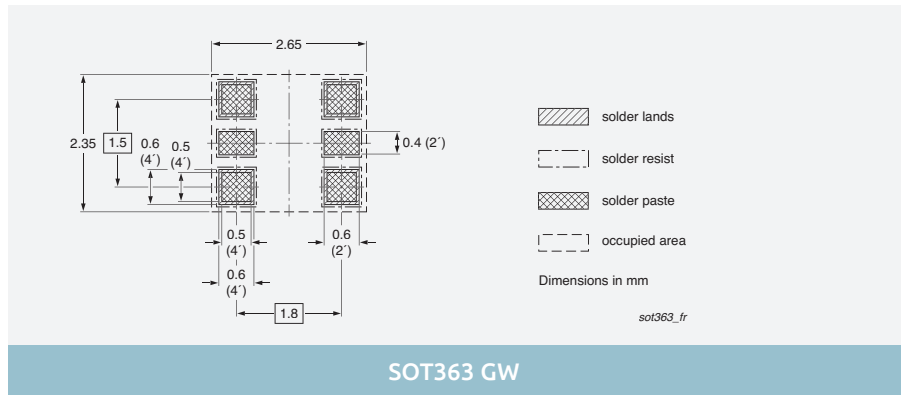
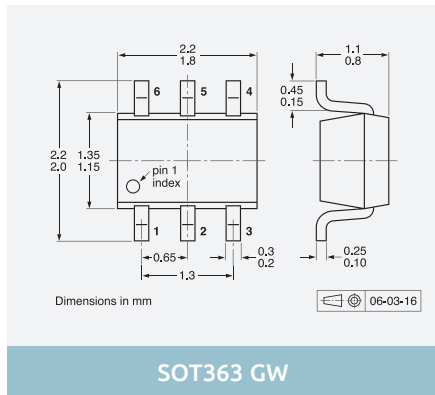
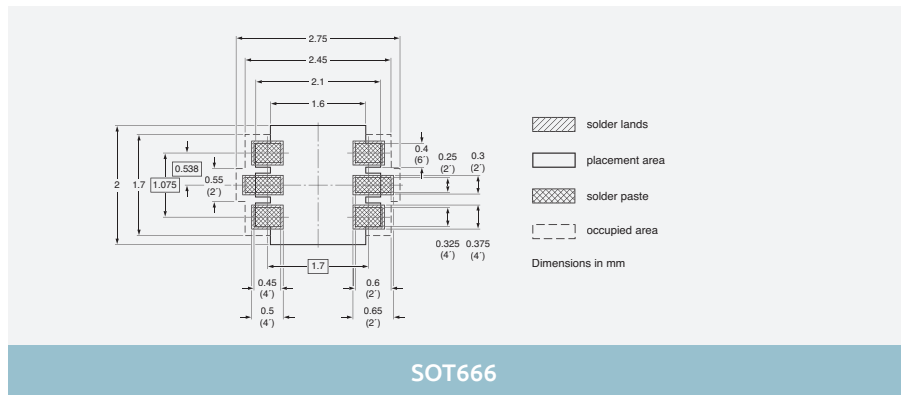
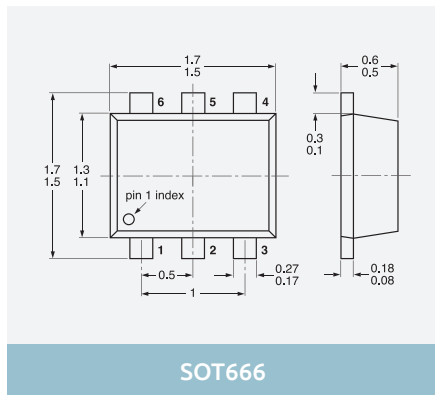
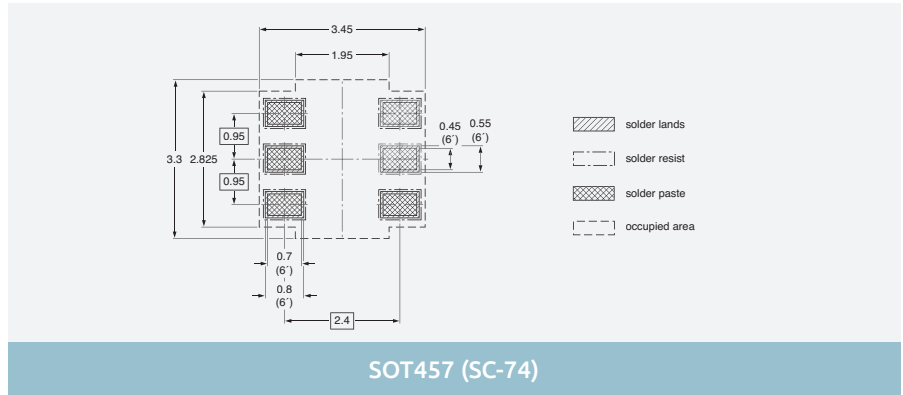
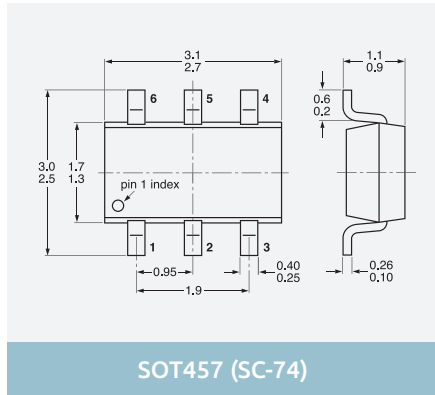
SOT363 (SC-88)



SOT363 (SC-88)

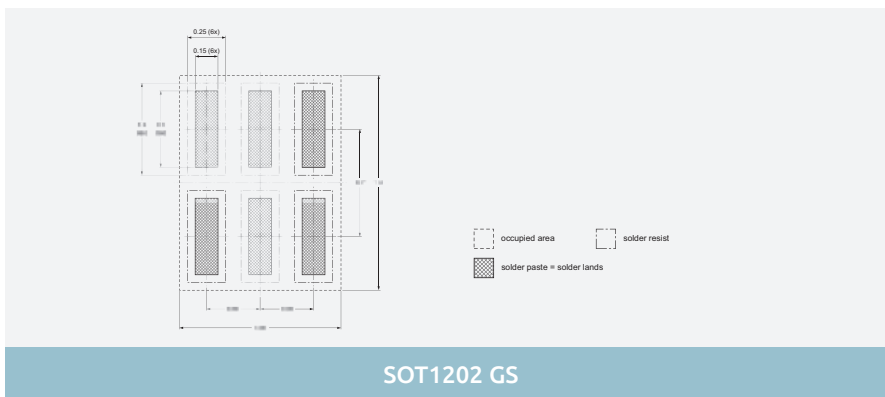
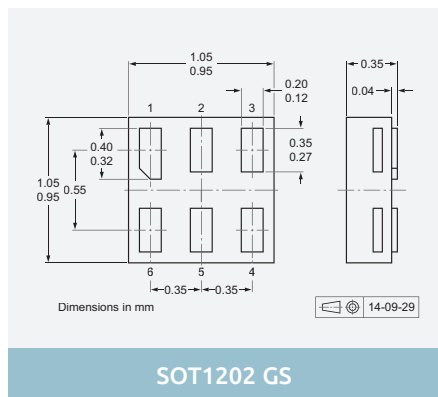
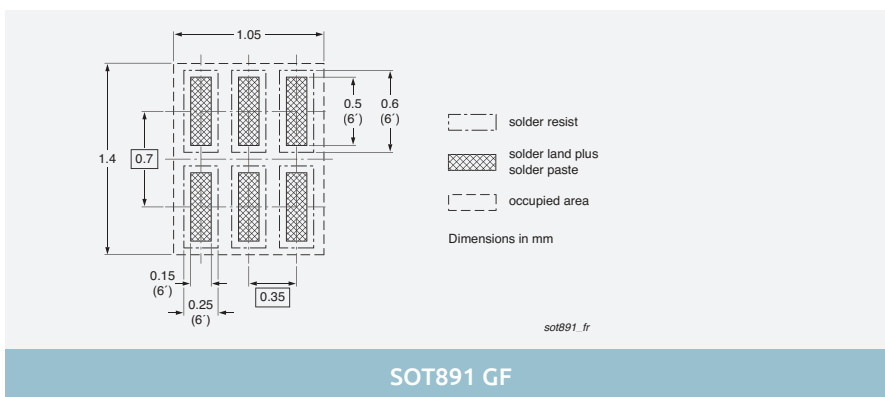
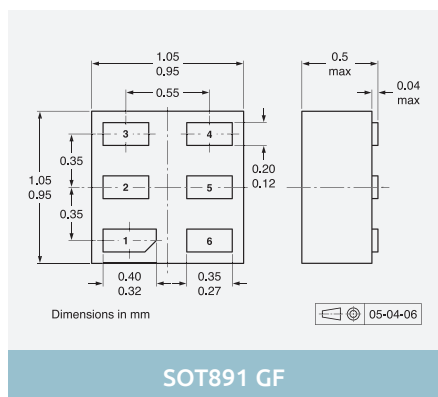
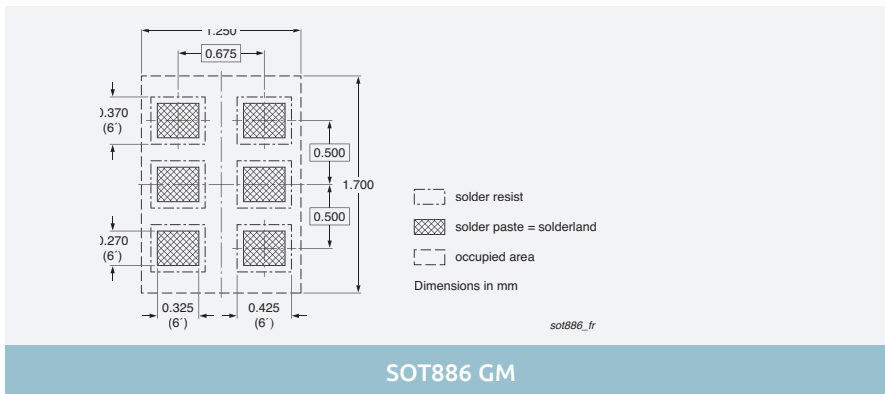
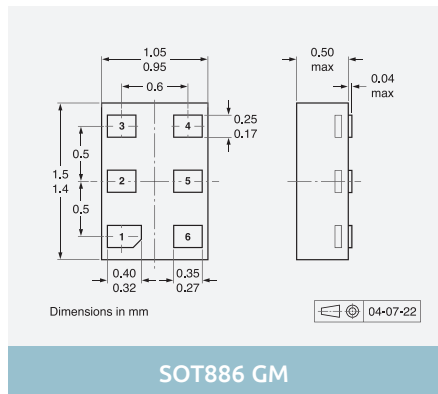
Dimensions in mm

6-pin SMD packages

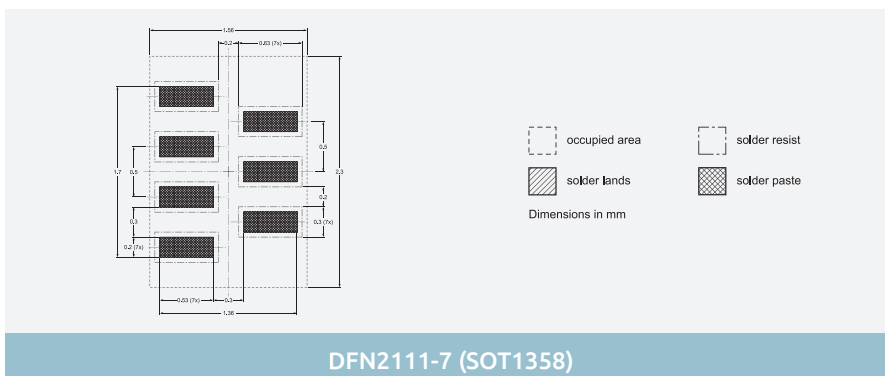
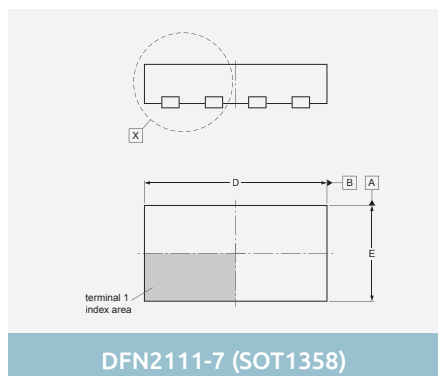


Dimensions in mm

6-pin SMD packages

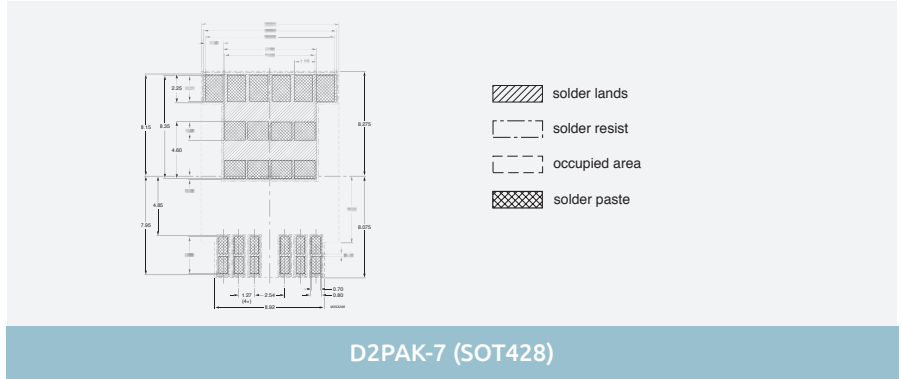
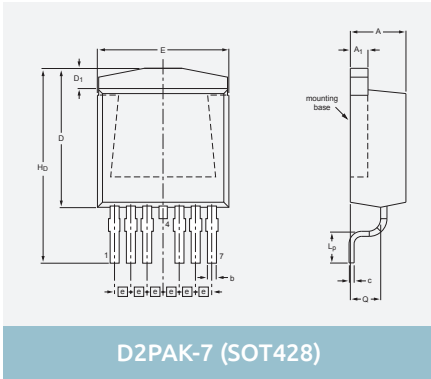


7-pin SMD packages

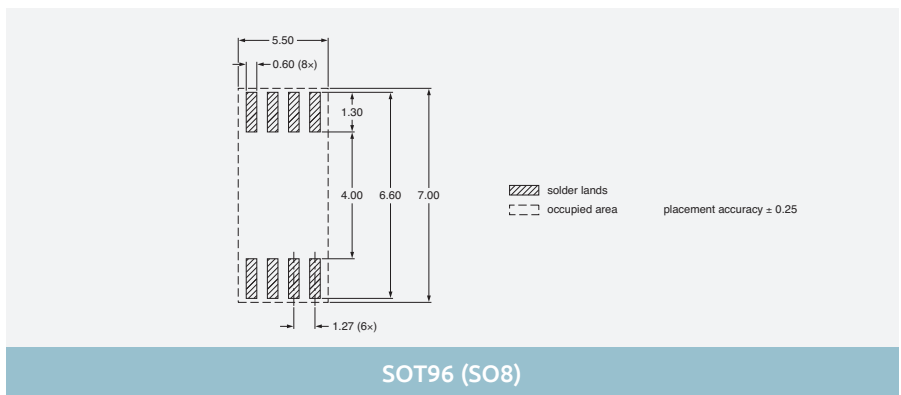
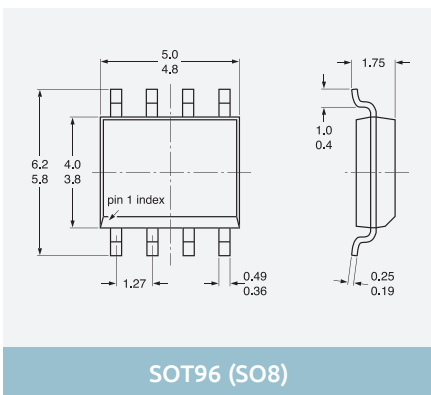
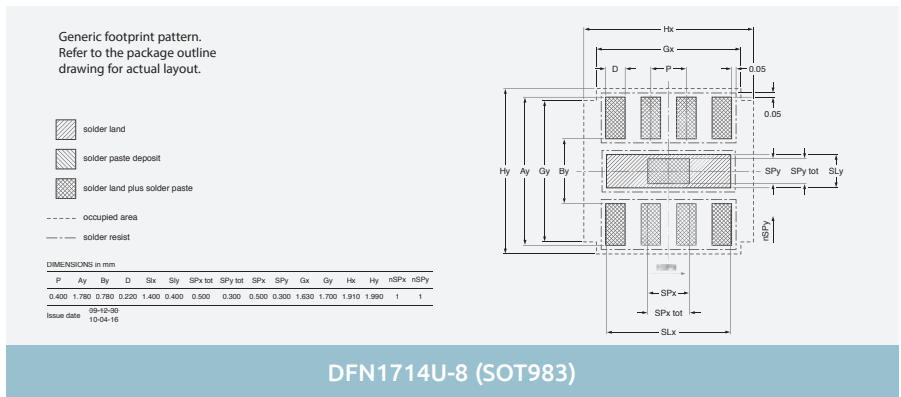
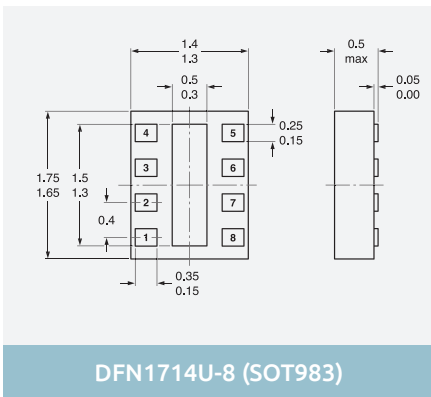
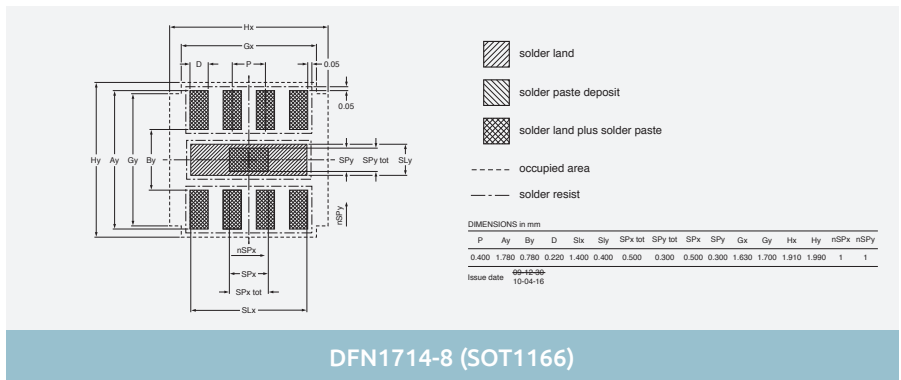
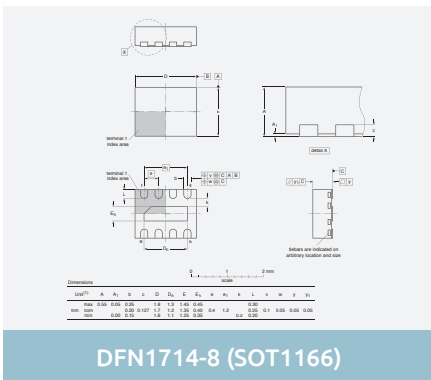


Dimensions in mm

7-pin SMD packages

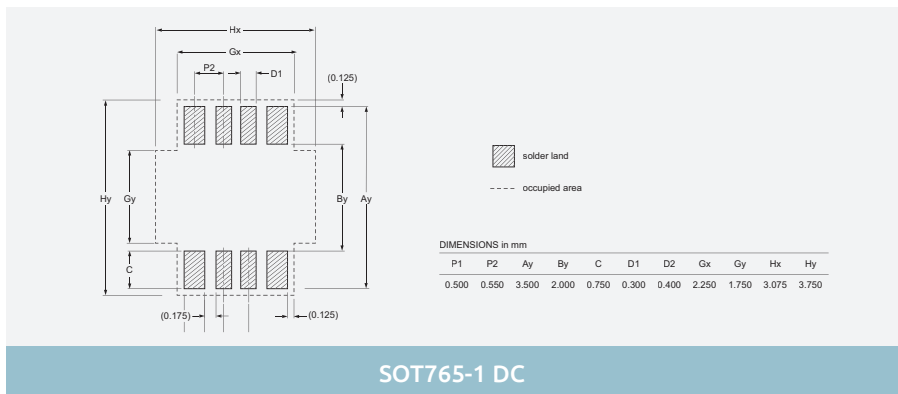
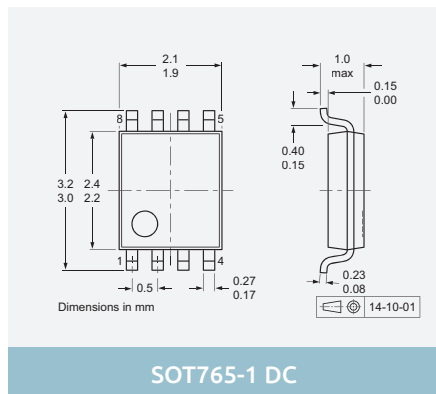
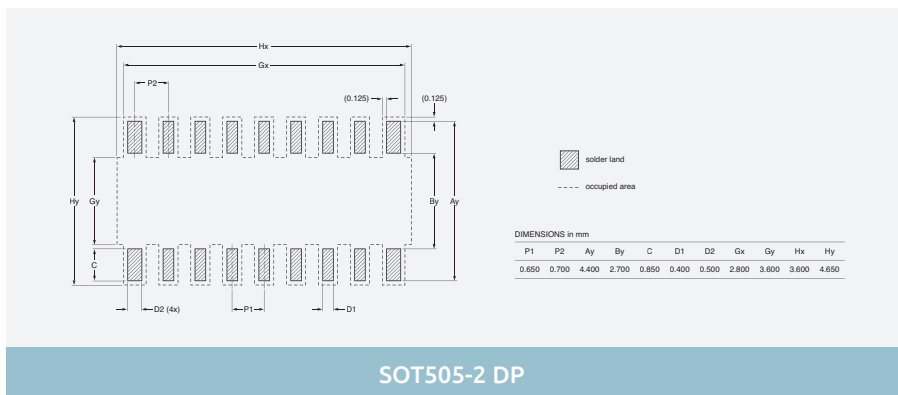
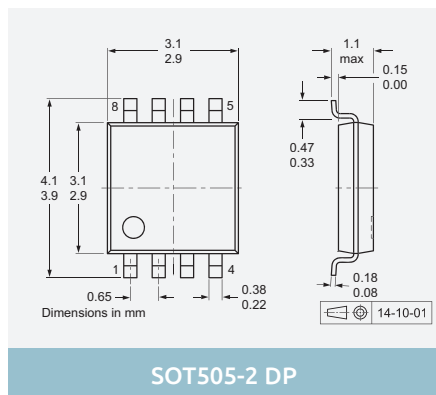
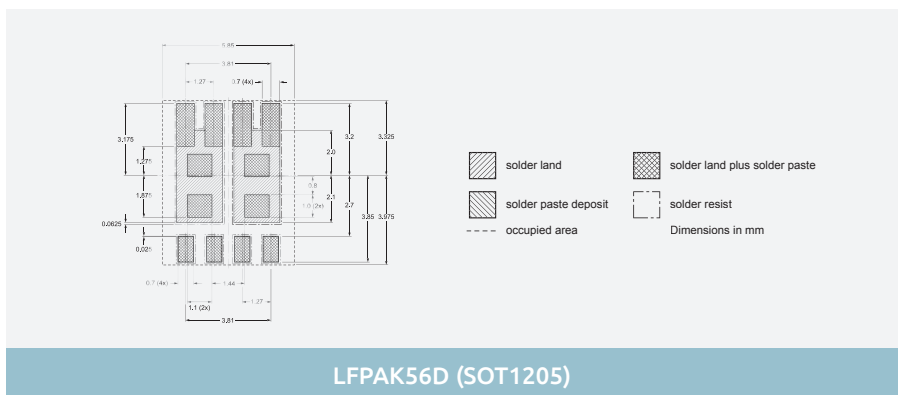
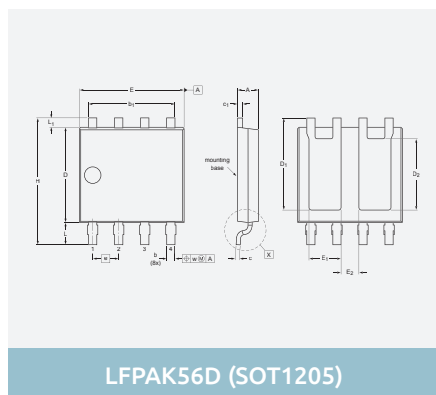
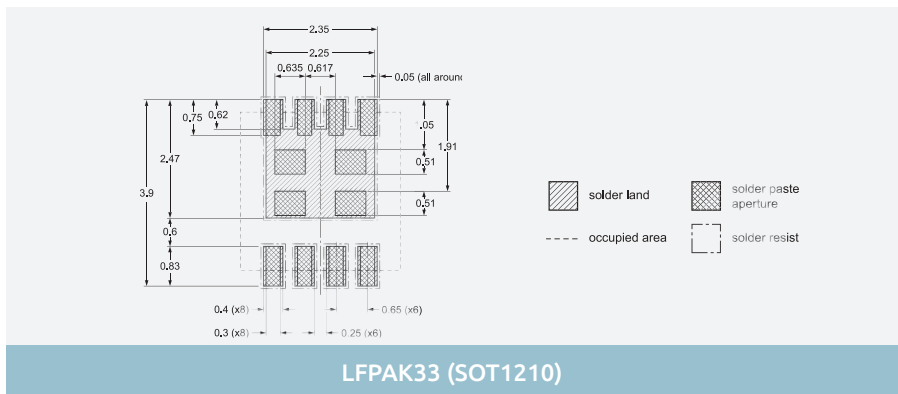
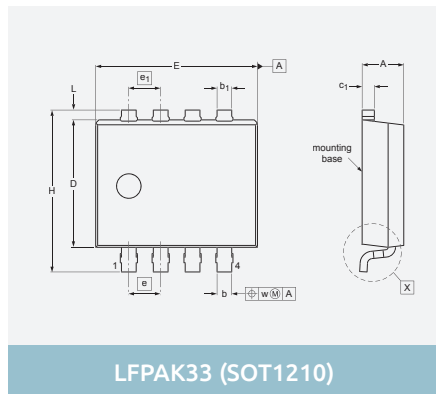


8-pin SMD packages



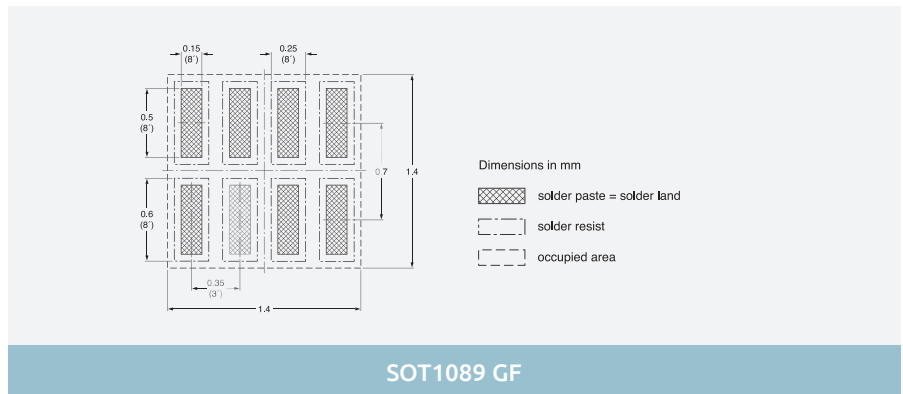
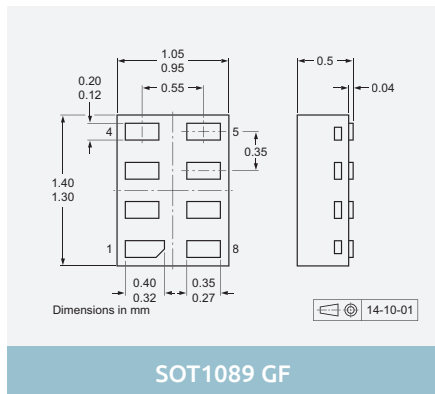
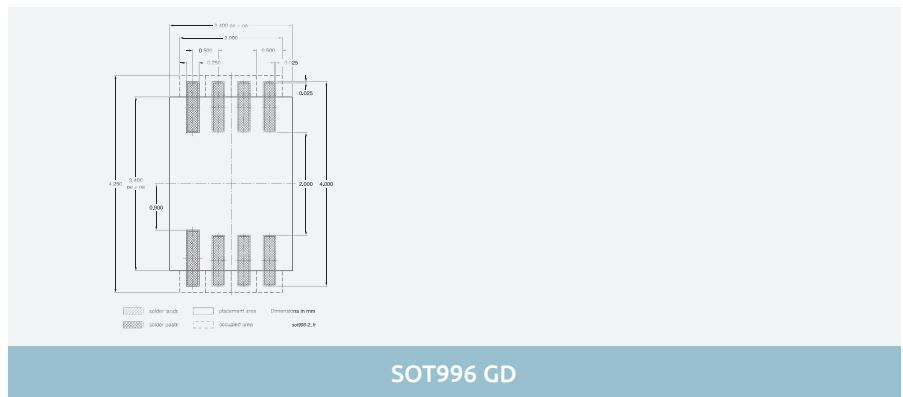
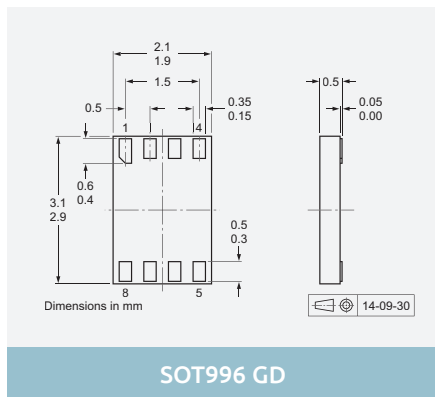
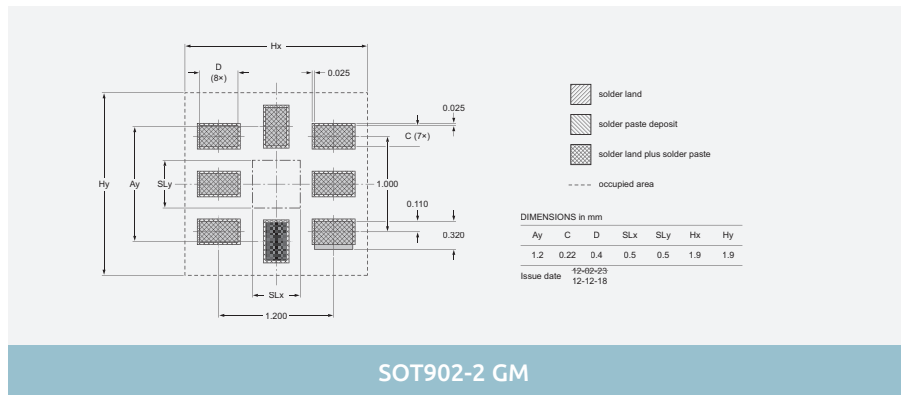
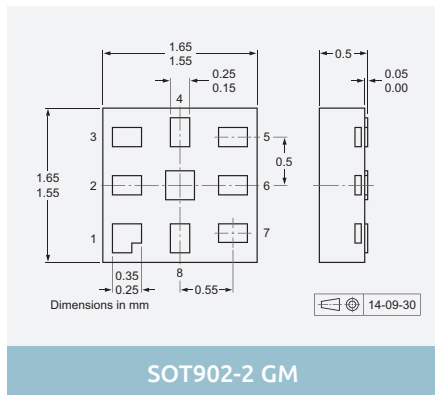
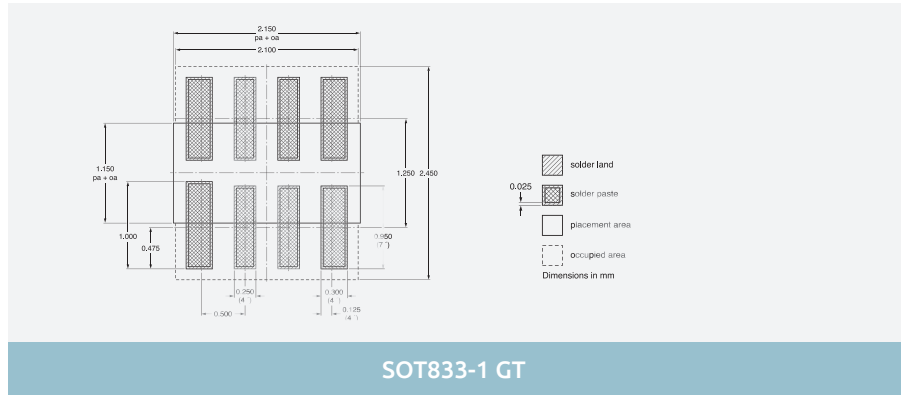
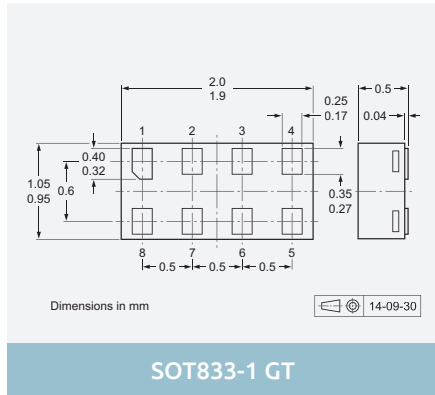
Dimensions in mm

8-pin SMD packages



Dimensions in mm

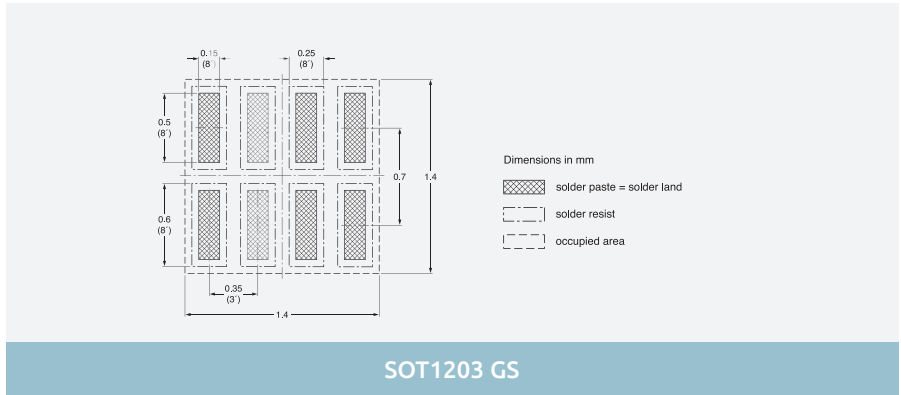
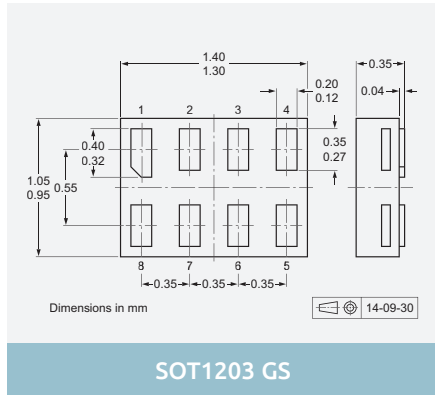
8-pin SMD packages



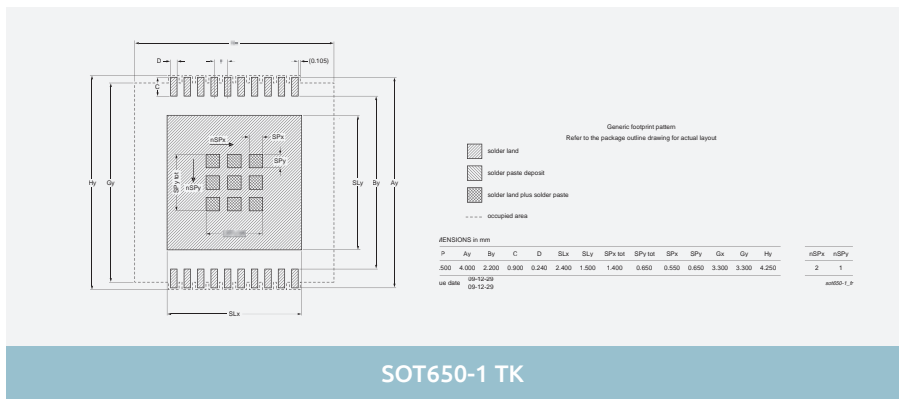
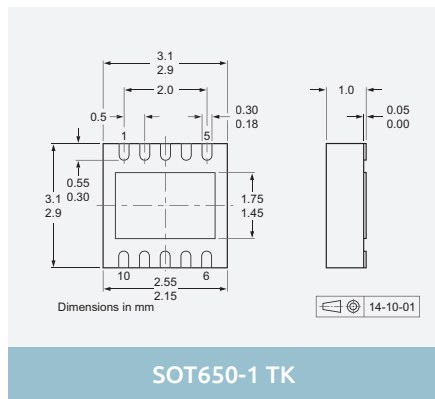
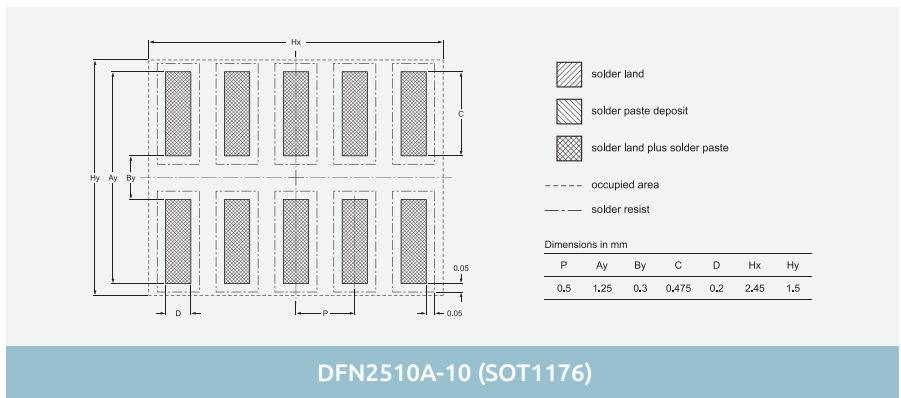
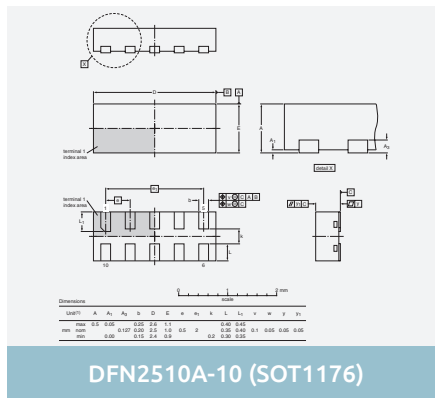
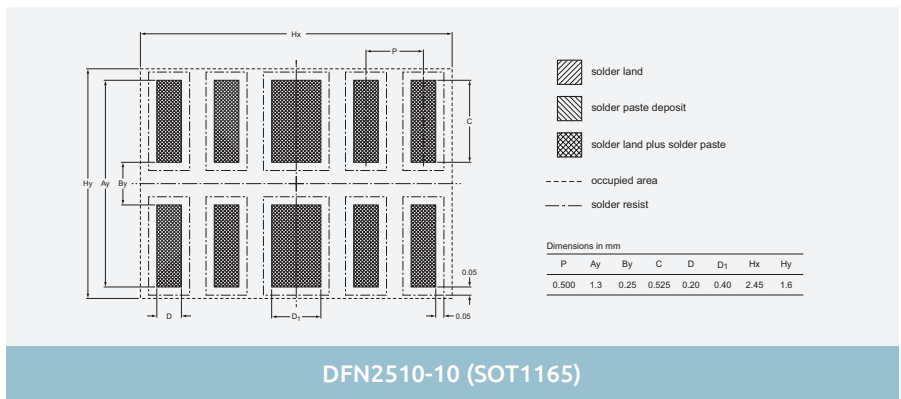
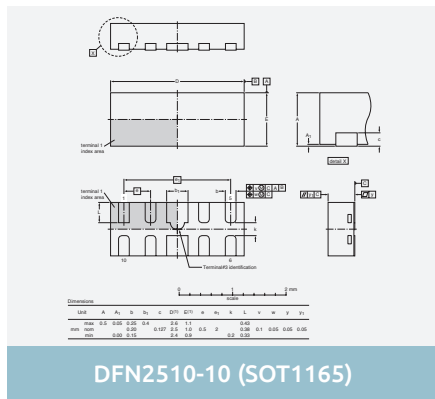
Dimensions in mm

Minimized outline drawings and reflow soldering footprint

8-pin SMD packages



More than 8-pin SMD packages



Dimensions in mm

More than 8-pin SMD packages

SOT1049-3 GM

SOT1049-3 GM

in mm									
Ay	Bx	By	D	D1	Gx	Gy	Hx	Hy	
2.275	1.100	0.690	0.250	0.280	2.300	1.950	3.000	2.800	

SOT1081-1/2 GF

SOT1081-1/2 GF

Dimensions in mm						
P	Ay	By	C	D	Hx	Hy
0.35	1.26	0.26	0.5	0.15	1.75	1.4

SOT1174 GM

SOT1174 GM

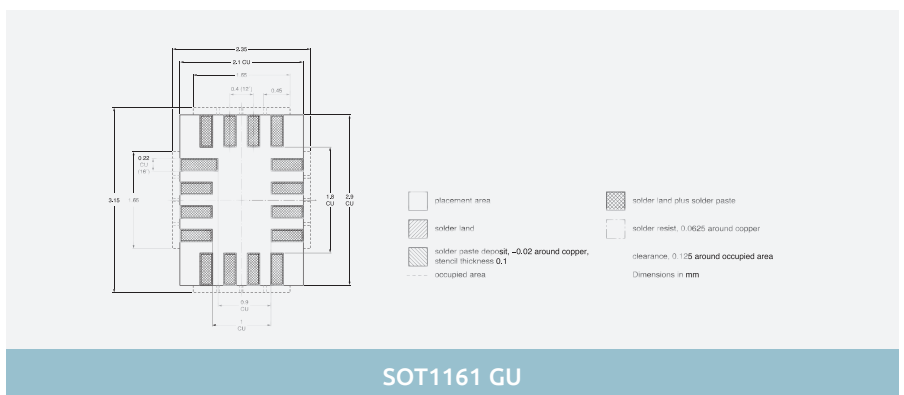
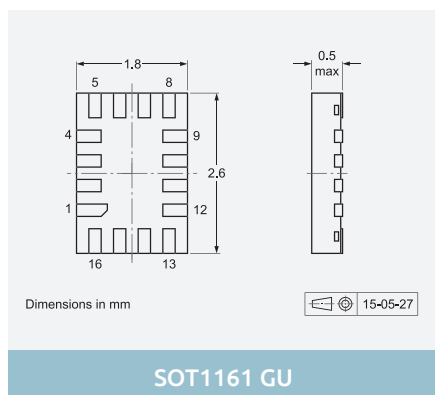
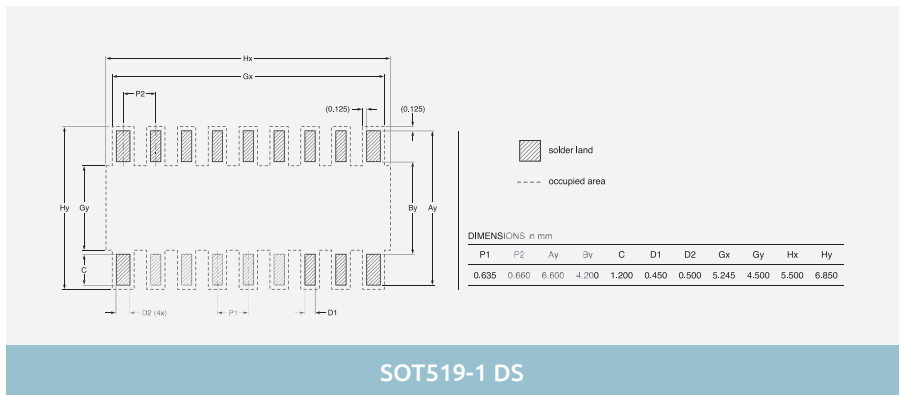
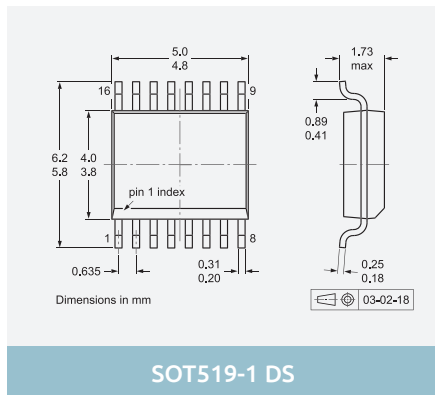
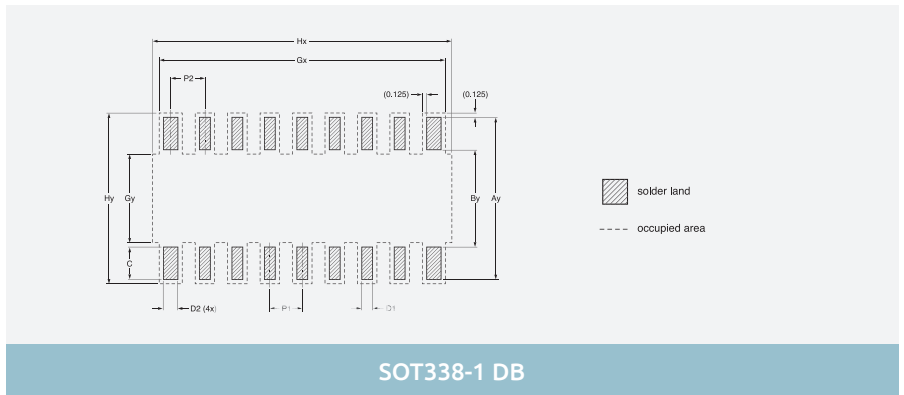
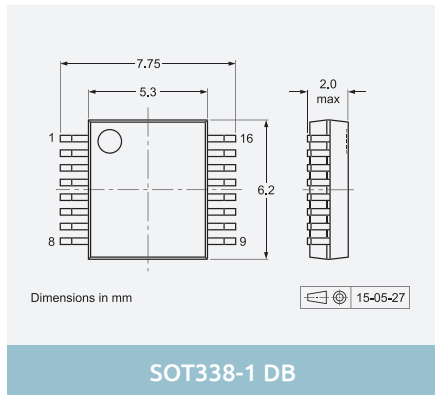
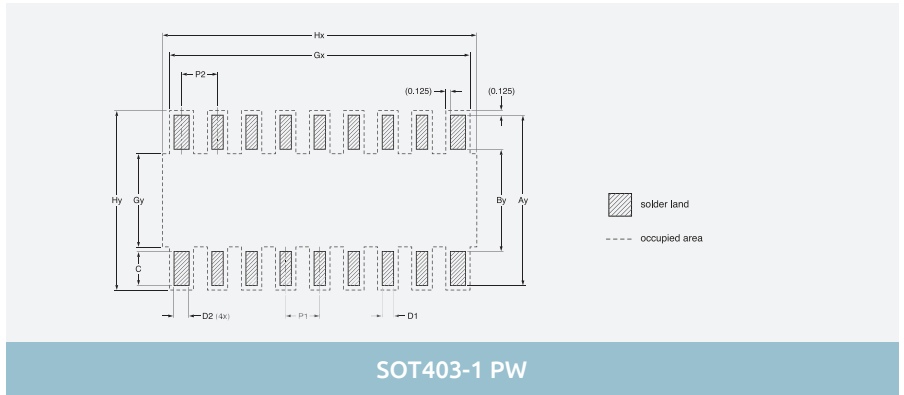
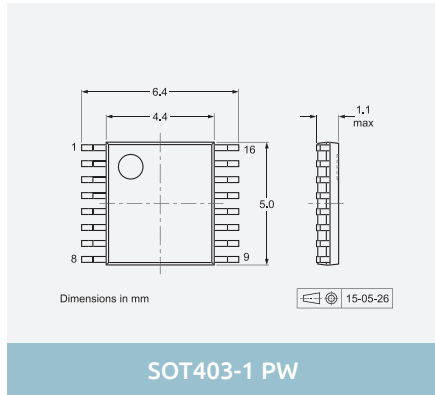
DFN2514-12 (SOT1167)

DFN2514-12 (SOT1167)

DIMENSIONS in mm											
P	Ay	By	D	D1	Gx	Gy	Hx	Hy	nSPx	nSPy	
0.400	1.780	0.780	0.200	2.200	0.400	1.500	0.300	0.400	2.430	1.700	2.710
									1.990	2	1

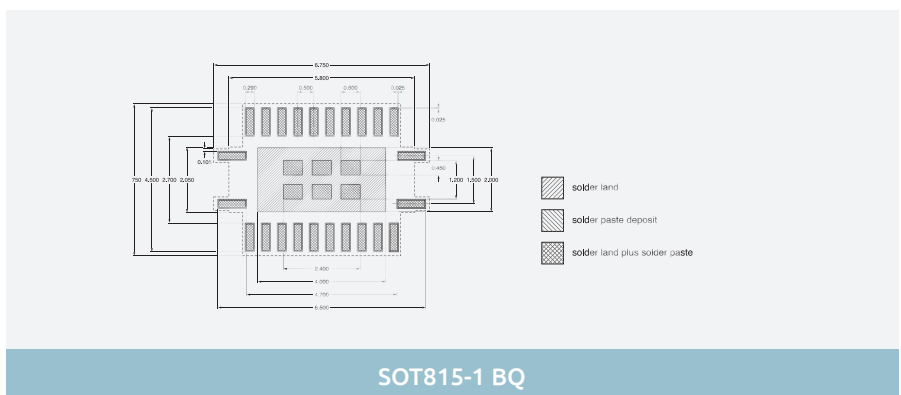
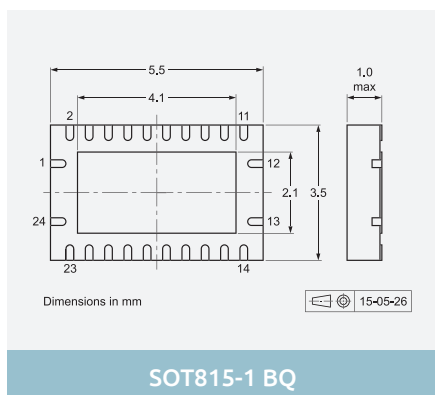
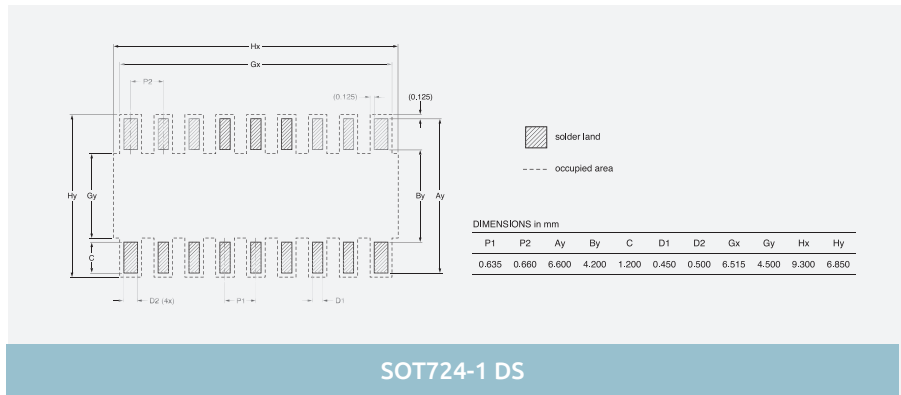
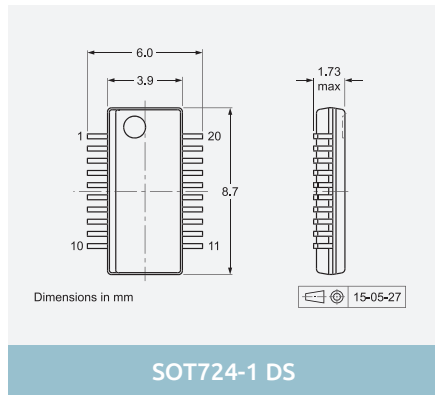
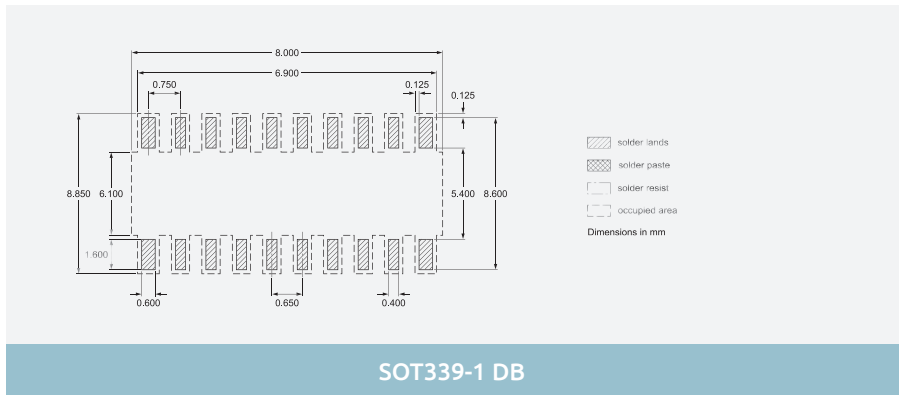
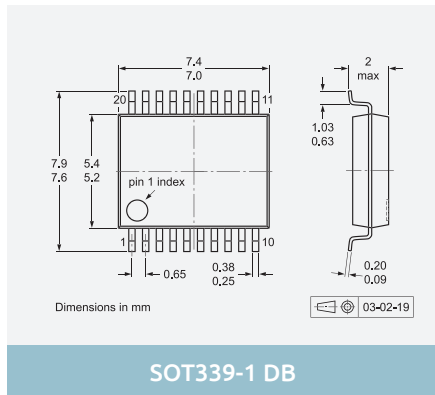
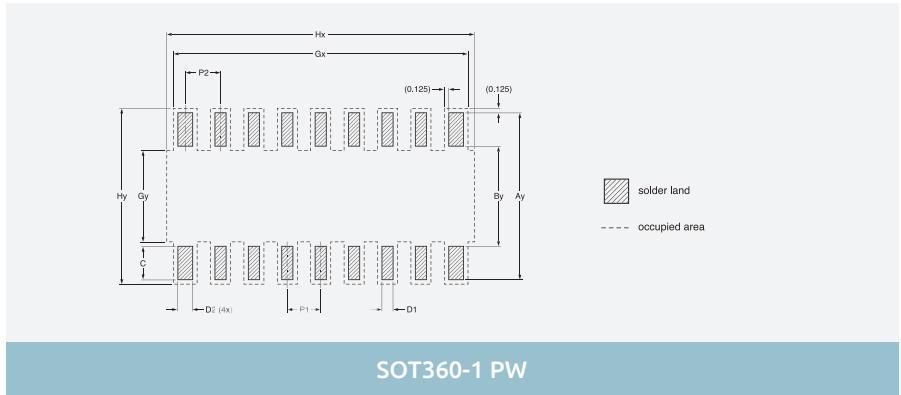
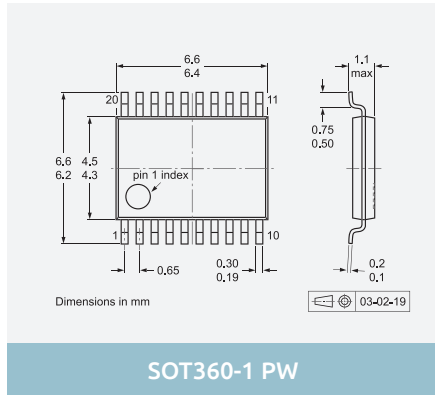
Dimensions in mm

More than 8-pin SMD packages



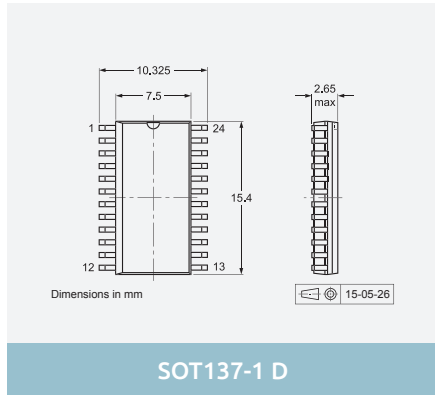
Dimensions in mm

More than 8-pin SMD packages

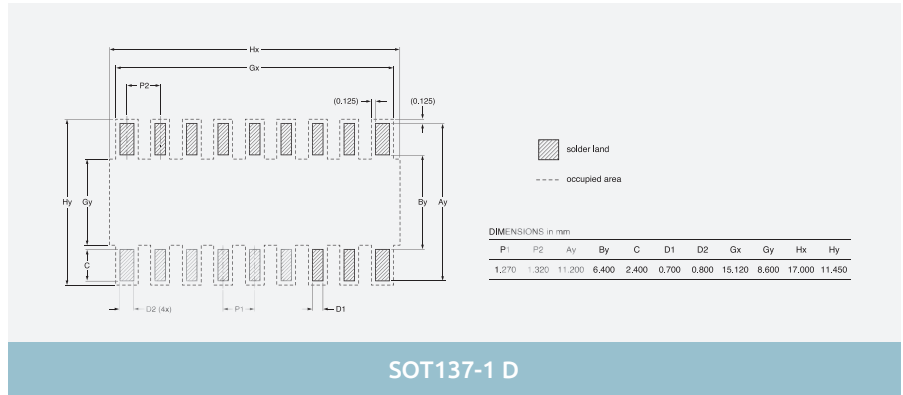


Dimensions in mm

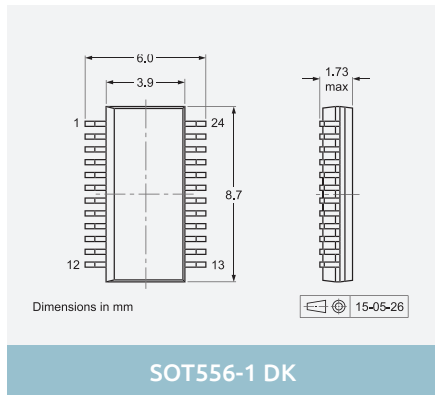
More than 8-pin SMD packages



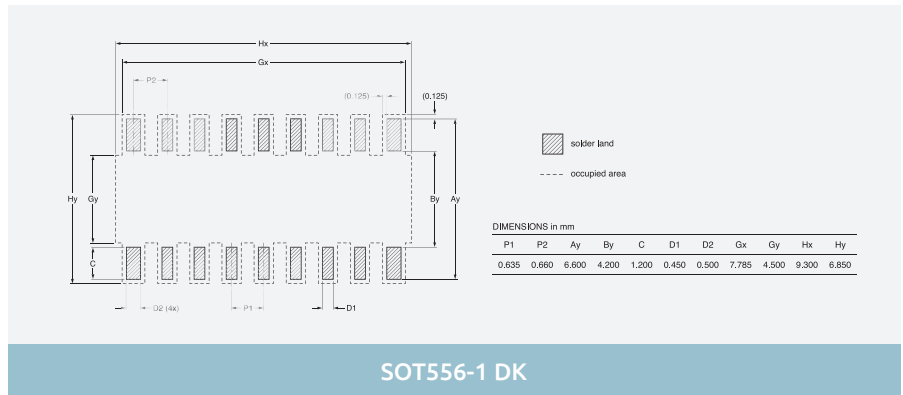
SOT137-1 D



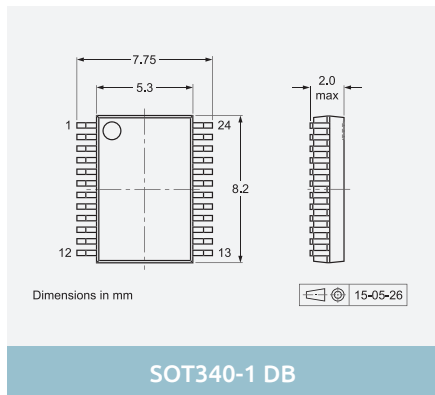
SOT137-1 D



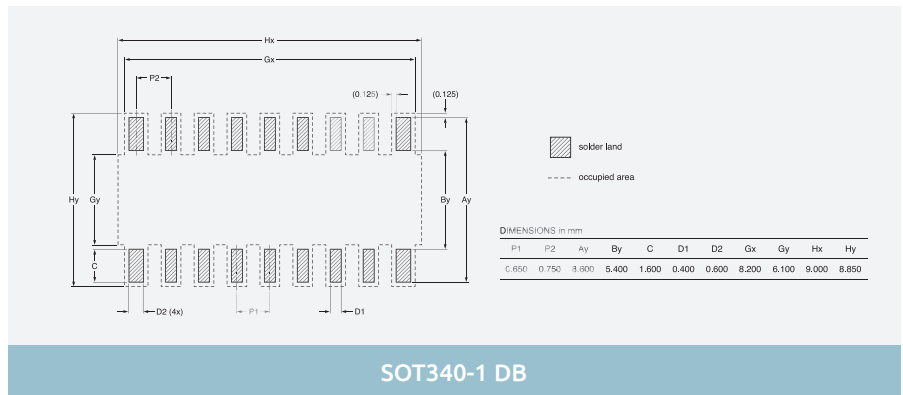
SOT556-1 DK



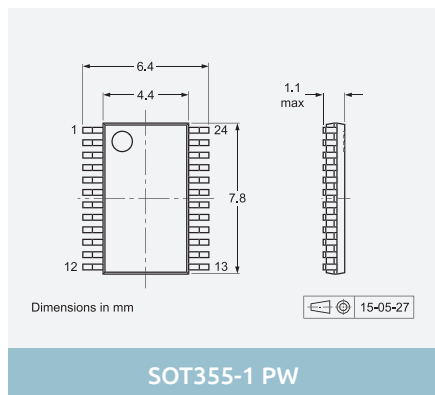
SOT556-1 DK



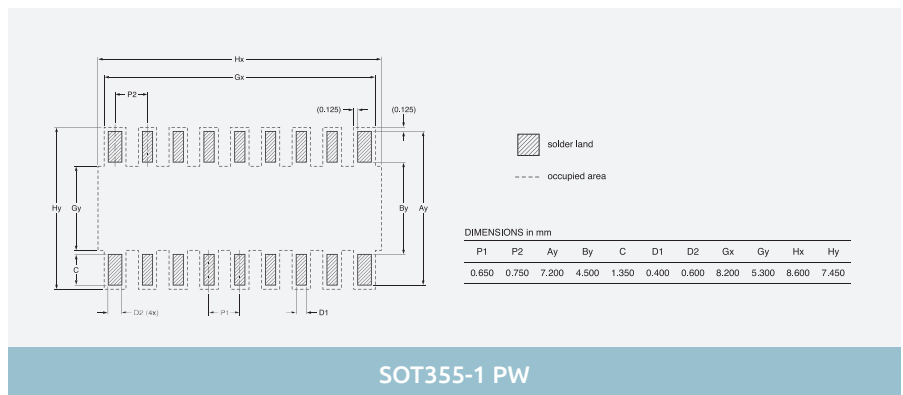
SOT340-1 DB



SOT340-1 DB



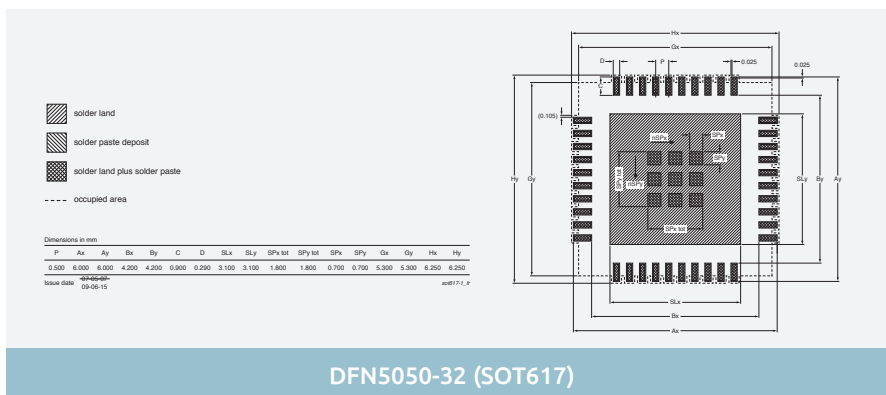
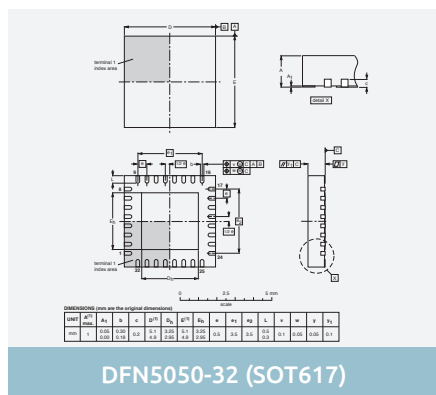
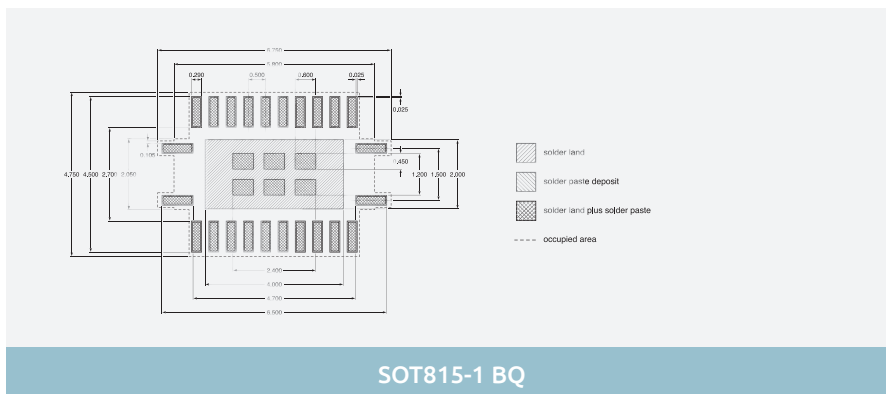
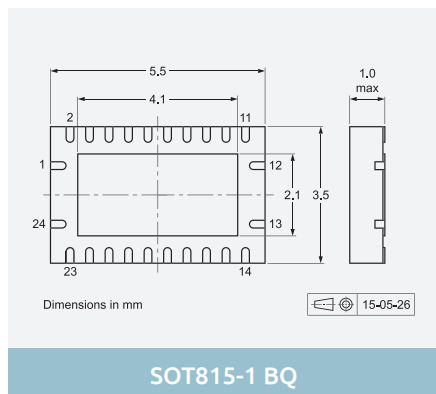
SOT355-1 PW



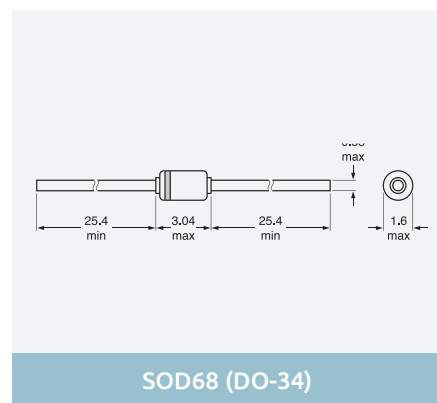
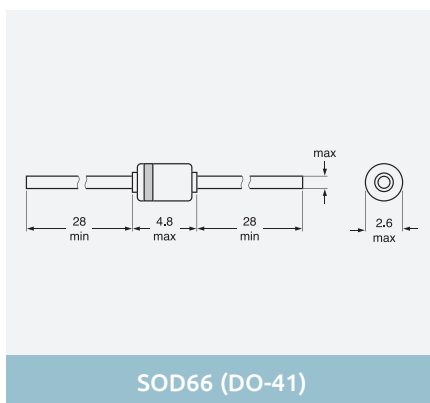
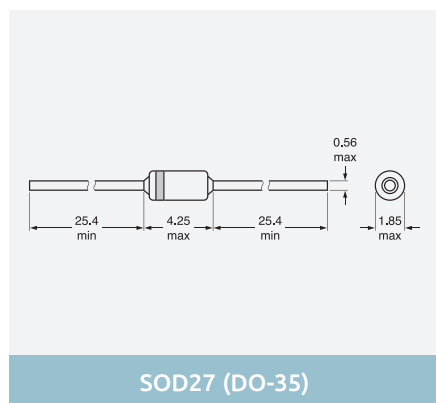
SOT355-1 PW

Dimensions in mm

More than 8-pin SMD packages

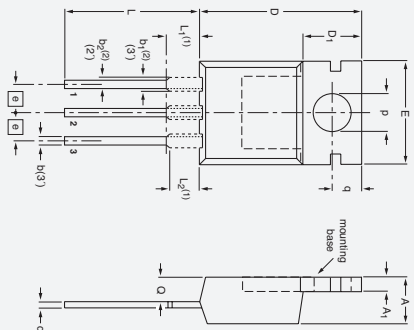


Glass diodes



Dimensions in mm

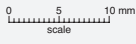
Single-ended and through-hole packages



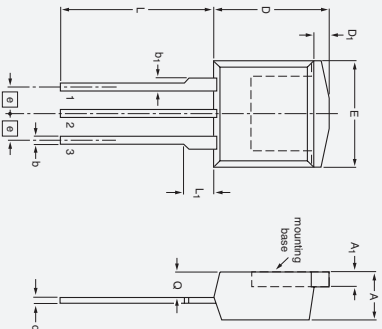
DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁	b	b ₁ (2)	b ₂ (2)	c	D	D ₁	E	e	L	L ₁ (1)	L ₂ (1) max.	p	q	Q
mm	4.7	1.40	0.9	1.6	1.3	0.7	16.0	6.6	10.3	2.54	15.0	3.30	3.0	3.8	3.0	2.6
	4.1	1.25	0.6	1.0	1.0	0.4	15.2	5.9	9.7		12.8	2.79		3.5	2.7	2.2

Notes
 1. Lead shoulder designs may vary.
 2. Dimension includes excess dambar.

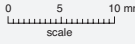


SOT78 (TO220AB)



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	1.40	0.85	1.3	0.7	11	1.6	10.3	2.54	15.0	3.30	2.6
	4.1	1.27	0.60	1.0	0.4		1.2	9.7		13.5	2.79	2.2



SOT226

Dimensions in mm



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