

Selection guide 2018.

Discretes, Logic and MOSFETs



nexperia

EFFICIENCY WINS.

Introduction

Welcome to the 2018 edition of the Nexperia Selection Guide. Here we present all our Discrete, Logic and MOSFET devices in one single document to give you a complete overview of our portfolio. We hope that makes it even easier for you to find the right product for your design.

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

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

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

All the functionality you need in one spot

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

Bipolar transistors

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

Diodes

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

ESD protection, filtering and signal conditioning

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

MOSFETs

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

Logic

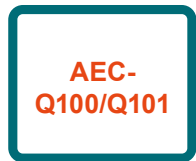
- › Comprehensive portfolio operating from 0.7 V to 15.0 V
- › Unrivalled package innovation and lowest power logic solutions

Packages

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

As an innovative company we are continually adding to our product portfolio, so to discover all our latest product information you should visit our website – www.nexperia.com

Our commitment: quality and reliability



AEC-Q100/Q101 qualified

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



Go for quality

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

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



Design for excellence

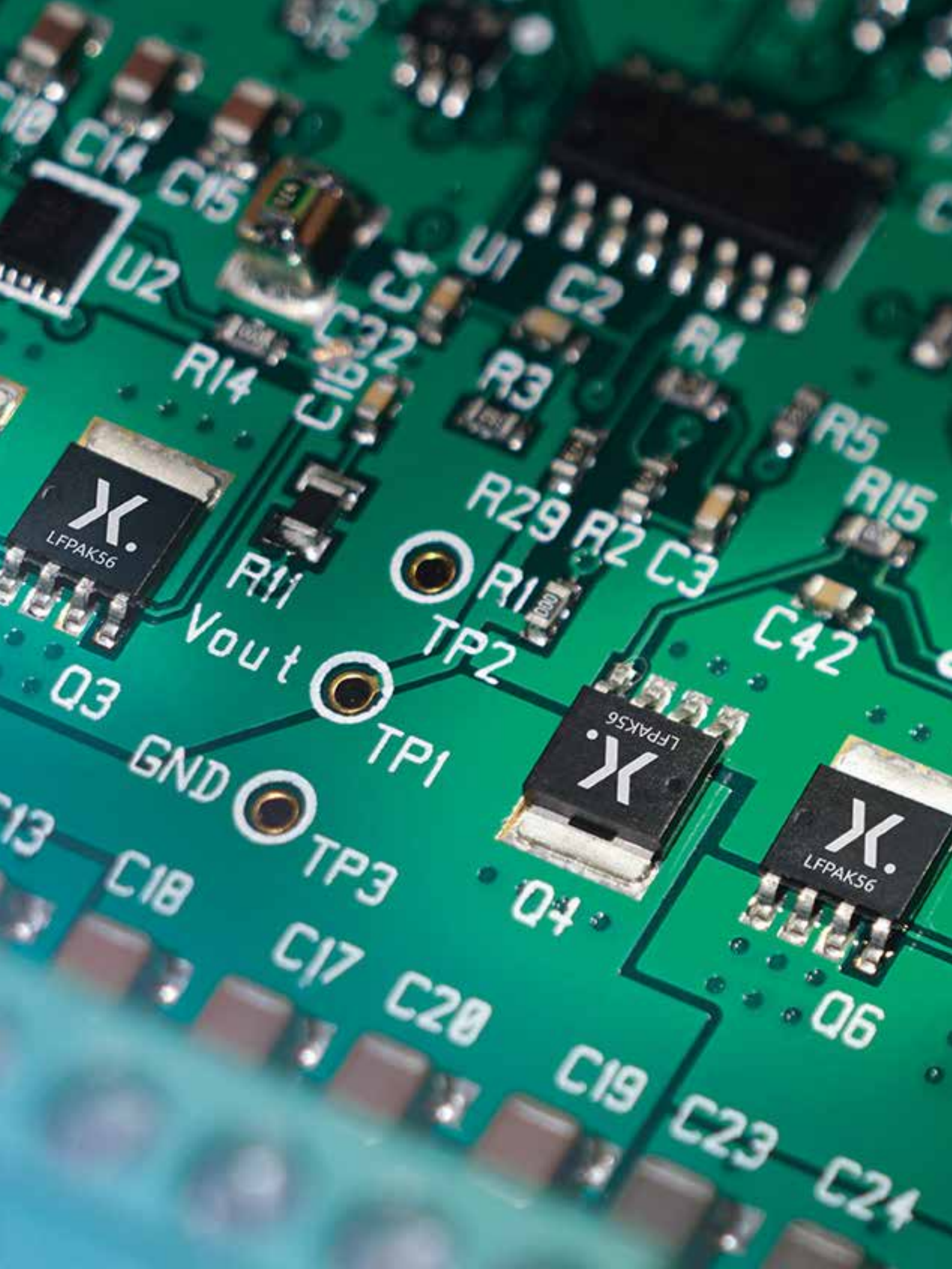
Nexperia's Design for Excellence (DfX) program ensures that each new development builds on past learning and that best practices are always employed. The result is continual product improvement.



Zero defect

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

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



Selection guide 2018.

Discretes, Logic and MOSFETs

Bipolar
transistors

1

Diodes

2

ESD protection,
TVS, filtering
and signal
conditioning

3

MOSFETs

4

Logic

5

Packages

6

New products	8
Bipolar transistors	8
Diodes	9
ESD protection, TVS, filtering and signal conditioning.....	9
MOSFETs	10
Logic	11

Bipolar transistors 13

General purpose bipolar transistors.....	14
Transistors single NPN.....	14
Transistors single PNP	14
High performance transistors (superior power dissipation)	15
Transistors double	15
Switching transistors single	16
Switching transistors double	16
Medium power transistors	17
Medium power transistors high performance (175 °C capable)	17
High performance transistors (175°C capable & superior power dissipation).....	17
High voltage transistors	18
LED driver	18
Constant current source	18
Darlington transistors.....	19
Schmitt triggers	19
Low noise transistors	19
Matched pair transistors - part 1.....	20
Matched pair transistors - part 2.....	20
MOSFET driver	21
Medium frequency transistors.....	21
Low V_{CEsat} (BISS) transistors	22
Low V_{CEsat} (BISS) transistors single NPN up to 2000 mW ...	22
Low V_{CEsat} (BISS) transistors single NPN up to 750 mW	23
Low V_{CEsat} (BISS) transistors single PNP up to 2000 mW ...	24
Low V_{CEsat} (BISS) transistors single PNP up to 750 mW.....	25
Low V_{CEsat} (BISS) transistors double	26
Low V_{CEsat} (BISS) transistors load switches	27
Low V_{CEsat} (BISS) high voltage transistors	28
Low V_{CEsat} (BISS) RETs	28
Low V_{CEsat} (BISS) transistors PNP - N-channel MOSFET combination	29
Low V_{CEsat} (BISS) power transistors single	29
Low V_{CEsat} (BISS) power transistors double.....	29
Resistor equipped transistors (RETs)	30
RETs 100 mA single - part 1	30
RETs 100 mA single - part 2.....	30
RETs 100 mA double.....	31
RETs 500mA single / double.....	31
3-terminal adjustable shunt regulators	32

Diodes 35

Zener diodes	36
General purpose Zener diodes	36
Zener diodes specifications	37
Switching diodes	38
General purpose, high speed switching diodes $\leq 90V$	38
General purpose, high speed switching diodes 100V.....	38
General purpose, switching diodes $\geq 100V$	39
Controlled avalanche switching diodes.....	40
Low leakage current switching diodes	40
PN rectifiers	40

PN rectifiers	41
PN rectifiers - Automotive qualified.....	41
Nomenclature pn-rectifier consumer grade types	41
Nomenclature pn-rectifier automotive grade types	41
Schottky rectifiers	42
General purpose schottky diodes ≤ 250 mA.....	42
Low capacitance schottky diodes.....	43
Medium power low VF schottky rectifiers single ≥ 200 mA - leadless DSN / DFN packages.....	44
Medium power low VF schottky rectifiers single ≥ 200 mA.....	46
Medium power low VF schottky rectifiers single ≥ 200 mA - leaded packages.....	47
Medium power low VF schottky rectifiers dual ≥ 200 mA.....	48
Nomenclatures	49

ESD protection, TVS, filtering and signal conditioning 51

Low capacitance ESD protection for high-speed interfaces.....	52
Low capacitance ESD protection for high-speed interfaces	52
TRIOS protection devices.....	55
General ESD protection devices.....	58
General purpose ESD protection devices.....	58
Application-specific ESD solutions	60
Audio interface protection.....	60
Automotive high-speed network protection	61
Automotive in-vehicle network bus line protection.....	61
Battery and charger port protection	62
HDMI and display port protection.....	62
Antenna protection (NFC, WiFi,...).....	63
USB and SATA protection	63
EMI solutions with integrated protection	64
Common mode filter for USB 2.0	64
Common mode filter for USB 3.x	64
Common mode filter for HDMI and MIPI	64
HDMI signal conditioning	65
LCD and camera RC filter with integrated protection	65
Memory and SIM card filter with integrated protection ..	66
USB 3.x and eSATA protection and filtering for high-speed and super-speed lines.....	66
Transient voltage surge suppressor (TVS).....	67
TVS diodes for mobile applications	67
TVS diodes, 24 W/40 W (automotive).....	67
TVS diodes, 400 W	68
TVS diodes, 600W	69
Nomenclatures	70

MOSFETs 73

Automotive MOSFETs.....	74
Automotive grade MOSFETs nomenclature.....	74
N-channel 30V automotive power MOSFETs	74
N-channel 40V automotive power MOSFETs	75
N-channel 55V-60V automotive power MOSFETs	76
N-channel 75V-80V automotive power MOSFETs	79
N-channel 100V automotive power MOSFETs.....	80
Small-signal automotive MOSFETs – Low $R_{DS(on)}$	82
Small-signal automotive MOSFETs – High $R_{DS(on)}$	84
Small-signal automotive MOSFETs – Dual.....	84

Contents

Power MOSFETs	86
N-channel 25V-30V MOSFETs	86
N-channel 40V-60V MOSFETs	88
N-channel 75V-200V MOSFETs	90
P-channel MOSFETs	92
Power MOSFETs nomenclature	93
Small-signal MOSFETs	94
Small-signal MOSFETs in DFN1006 and DFN1006B packages	94
Small-signal MOSFETs in DFN1010D-3 single and DFN1010B-3 dual packages.....	95
Small-signal low-leakage MOSFETs.....	95
Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages.....	96
Small-signal MOSFETs in WLCSP4 and WLCSP6 packages	97
Small-signal MOSFETs single (N-channel)	98
Small-signal MOSFETs single (P-channel).....	100
Small-signal MOSFET-Schottky combination	100
Small-signal MOSFETs dual	102
Small-signal MOSFETs complementary	102

Logic 105

Automotive logic.....	106
Analog switches.....	106
Buffers/Inverters.....	107
Buffers/Inverters.....	108
Counters/Frequency dividers.....	109
Bus switches.....	110
Digital decoders/Demultiplexers	110
Digital multiplexers.....	111
Flip-flops.....	111
Flip-flops.....	112
Flip-flops.....	113
Gates.....	114
Latches/Registered drivers	115
Gates.....	115
Level shifters/Translators	116
Multivibrators	116
Schmitt-triggers.....	117
Shift registers.....	118
Shift registers.....	119
Transceivers.....	120
Analog switches.....	121
Bus switches.....	121
Buffers/Inverters.....	122
Buffers/Inverters.....	123
Digital decoders/Demultiplexers	124
Digital multiplexers.....	124
Flip-flops.....	124
Gates.....	125
Gates.....	126
Latches/Registered drivers	126
Multivibrators	127
Schmitt-triggers.....	127
Level shifters/Translators	128
Buffers, Drivers, Transceivers	129
Buffers/Inverters/Drivers.....	129
Transceivers.....	137
Schmitt-triggers.....	138
Counters/Frequency dividers	141
Flip-flops, Latches, Registers	143
FIFO registers.....	143
Flip-flops.....	143
Latches/Registered drivers	146

Gates.....	148
AND Gates	148
Combination Gates.....	149
Configurable Gates.....	149
EXCLUSIVE-NOR Gates	150
EXCLUSIVE-OR Gates	150
NAND Gates.....	150
NOR Gates	152
OR Gates	153
Logic voltage translators	154
Level shifters/Translators	154
Specialty logic	155
Digital comparators.....	155
Multivibrators	155
Parity generators-checkers	155
Phase-locked loops.....	156
Printer interfaces	156
Switches, Multiplexers, Demultiplexers	157
Bus Switches.....	157
Decoders/Demultiplexers	158
Digital Multiplexers.....	159
Analog Switches.....	160
Nomenclatures	161

Packages 163

Package details and packing methods	164
Package details and packing methods SMD – Part 1.....	164
Package details and packing methods SMD – Part 2.....	165
Package details and packing methods SMD – Part 3.....	166
Package details and packing methods SMD – Part 4.....	167
Package details and packing methods WLCSP	168
Packing details glass diodes, single ended and through hole packages.....	168
Package cross reference	169
Package cross reference list – Part 1	169
Package cross reference list – Part 2	170
Package cross reference list – Part 3	171
Package cross reference list – Part 4	172
Package cross reference list – Part 5	173
Package cross reference matrix – Part 1	174
Package cross reference matrix – Part 2	175
Package cross reference matrix – Part 3	176
Competitive cross reference - Logic	176
Packing methods.....	177
Product orientation (tape and reel pack).....	178
Minimized outline drawings and reflow soldering footprint.....	181
2-pin SMD packages	181
3-pin SMD packages	184
4-pin SMD packages	187
5-pin SMD packages	188
6-pin SMD packages	189
8-pin SMD packages	194
8-pin SMD packages	195
8-pin SMD packages	196
More than 8-pin SMD packages	198
Glass diodes.....	204
Single-ended and through-hole packages.....	205

Index.....	206
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New products

As an innovative company we invest significantly in R&D, and continually expand our portfolio with the latest generation of technology and products. Here is a snapshot of our most recent releases, but don't forget to visit the website for the most up-to-date information - www.nexperia.com

Bipolar transistors

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

Diodes

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

ESD protection, TVS, filtering and signal conditioning

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

ESD protection, TVS, filtering and signal conditioning

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

MOSFETs

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

Logic

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



Bipolar transistors

1

General purpose bipolar transistors.....	14
Transistors single NPN.....	14
Transistors single PNP	14
High performance transistors (superior power dissipation)	15
Transistors double.....	15
Switching transistors single.....	16
Switching transistors double.....	16
Medium power transistors	17
Medium power transistors high performance (175 °C capable)	17
High performance transistors (175°C capable & superior power dissipation)	17
High voltage transistors.....	18
LED driver	18
Constant current source	18
Darlington transistors.....	19
Schmitt triggers.....	19
Low noise transistors.....	19
Matched pair transistors - part 1	20
Matched pair transistors - part 2	20
MOSFET driver	21
Medium frequency transistors.....	21
Low V_{CEsat} (BISS) transistors.....	22
Low V_{CEsat} (BISS) transistors single NPN up to 2000 mW.....	22
Low V_{CEsat} (BISS) transistors single NPN up to 750 mW	23
Low V_{CEsat} (BISS) transistors single PNP up to 2000 mW	24
Low V_{CEsat} (BISS) transistors single PNP up to 750 mW.....	25
Low V_{CEsat} (BISS) transistors double.....	26
Low V_{CEsat} (BISS) transistors load switches	27
Low V_{CEsat} (BISS) high voltage transistors	28
Low V_{CEsat} (BISS) RETs	28
Low V_{CEsat} (BISS) transistors PNP - N-channel MOSFET combination.....	29
Low V_{CEsat} (BISS) power transistors single	29
Low V_{CEsat} (BISS) power transistors double	29
Resistor equipped transistors (RETs)	30
RETs 100 mA single - part 1	30
RETs 100 mA single - part 2.....	30
RETs 100 mA double.....	31
RETs 500mA single / double.....	31
3-terminal adjustable shunt regulators	32

Transistors single NPN

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
Size (mm)									
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
25	100	450	1200	100					
30	100	110 - 200	450 - 800	100	BC848B	PMST5089			
		350	900	100		BC848W			
32	100	110 - 420	220 - 800	100	BCW31 / 32 / 33	PMST5088			
		180 - 380	310 - 630	250	BCW60B / C / D				
45	100	110 - 420	220 - 800	100	BC847 / A / B / C	BC847W / AW / BW / CW	BC847QA / BQA / CQA	BC847AM / BM / CM	BC847AMB / BMB / CMB
		120 - 380	220 - 630	100	BCX70G / H / J / K				
		110 - 200	220 - 450	100	BCW71 / 72				
50	100	500	1250	100	PMBT6429	PMST6429			
		210 - 290	340 - 460	100 - 150	2PD601ART 2PD601ARL 2PD601ASL	2PD601ARW / SW			
60	100	250	650	100	PMBT6428	PMST6428			
65	100	110 - 200	220 - 450	100	BCV71 / 72				
50	100	110 - 200	220 - 450	100	BC846 / A / B	BC846W / AW / BW		BC846BM	BC846BMB
	150	120 - 200	240 - 400	80	NXP3875Y / G				
	150	120 - 270	270 - 560	100		2PC4081Q / R / S		2PC4617QM / RM	2PC4617QMB / RMB
45	500	210	340	100	2PD601BRL				
		290	460	100	2PD601BSL				
45	500	100 - 250	250 - 600	100	BC817 / -16 / -25 / -40	BC817W / -16W / -25W / -40W	BC817-25QA/-40QA		
		100	600	100	BCX19				
50	500	85 - 170	170 - 340	140 - 180	2PD602AQL 2PD602ARL 2PD602ASL	2PD1820AR / S			
60	500	50	-	100		PMSTA05			
45	800	100-250	250-600	100	BCW66F/G/H				

Transistors single PNP

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
Size (mm)									
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
30	100	125 - 220	500 - 800	100	BC858B	BC858W			
32	100	120 - 215	260 - 500	100	BCW29 / 30				
		180 - 380	310 - 630	100	BCW61B / C / D				
45	100	210 - 290	340 - 460	70 - 80	2PB709ART 2PB709ARL 2PB709ASL	2PB709ARW / SW			
		180 - 380	310 - 630	100	BCX71H / J / K				
		120 - 215	260 - 500	100	BCW69 / 70				
		125 - 420	250 - 800	100	BC857 / A / B / C	BC857W / AW / BW / CW	BC857QA / BQA / CQA	BC857AM / BM / CM	BC857AMB / BMB / CMB
60	100	120	260	150	BCW89				
65	100	125 - 200	250 - 475	100	BC856 / A / B	BC856W / AW / BW		BC856BM	BC856BMB
100	100	30	-	50	BSS63				
50	150	120 - 270	270 - 560	100		2PA1576Q / R / S		2PA1774QM / RM / SM	2PA1774QMB / RMB / SMB
	200	210	340	100	2PB709BRL				
		290	460	100	2PB709BSL				
25	500	100	600	80	BCX18				
45	500	100 - 250	250 - 600	80	BC807 / -16 / -25 / -40	BC807W / -16W / -25W / -40W	BC807-25QA/-40QA		
		100	600	80	BCX17				
50	500	85 - 170	170 - 340	100 - 140	2PB710ARL 2PB710ASL	2PB1219AQ / R / S			
60	500	100	-	50		PMSTA55			
80	500	100	-	50	PMBTA06	PMSTA06			
		100	-	50	PMBTA56	PMSTA56			
45	800	100-250	250-600	80	BCW68F/G/H				

High performance transistors (superior power dissipation)

Types in **bold** represent new products

Package							SOT23
Size (mm)							2.9 x 1.3 x 1.0
P _{tot} (mW)							775
Polarity	V _{CEO} (V)	V _{ebo} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)	
NPN	45	5	0,5	100	250	100	BC817K-16
				160	400	100	BC817K-25
				250	600	100	BC817K-40
PNP	45	5	0,5	100	250	80	BC807K-16
				160	400	80	BC807K-25
				250	600	80	BC807K-40



Transistors double

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

Switching transistors single

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT23	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)							1700	1300	250	200	250	250
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)	t _{off} (ns)						
NPN	40	200	100	300	180	1200			PMBS3904	PMSS3904		
	15	600	40	120	500	20			PMBT2369	PMST2369		
	40	200	100	300	300	250			MMBT3904			
	30	600	100	300	250	250			PMBT3904	PMST3904	PMBT3904M	PMBT3904MB
	40	600	100	300	250	250	PZT4401	PXT4401	PMBT4401	PMST4401		
					300	250			MMBT2222A			
	40	800	100	300	300	250	PZT2222A	PXT2222A	PMBT2222A	PMST2222A		
PNP	40	100	100	300	150	700			BSR14			
	40	200	100	300	250	300			PMBS3906	PMSS3906		
									MMBT3906			
	40	600	100	300	200	350	PZT4403	PXT4403	PMBT3906	PMST3906	PMBT3906M	PMBT3906MB
						365			PMBT4403	PMST4403		
	60	600	100	300	200	300			PMBT2907			
						365				PMST2907A		
							PZT2907A	PXT2907A	PMBT2907A			

Switching transistors double

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

Medium power transistors

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

1) Typical value

Medium power transistors high performance (175 °C capable)

Types in **bold** represent new products

Package							SOT223 (SC-73)
Size (mm)							6.5 x 3.5 x 1.65
P _{tot} (mW)							1700
Polarity	V _{CEO} (V)	V _{EB0} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	80	7	1	63	250	100	BCP56H
					160	100	BCP56-10H
				100	250	100	BCP56-16H
PNP	80	7	1	63	250	100	BCP53H
					100	100	BCP53-10H
				100	250	100	BCP53-16H

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

Types in **bold** represent new products

Package							SOT23
Size (mm)							2.9 x 1.3 x 1.0
P _{tot} (mW)							950
Polarity	V _{CEO} (V)	V _{EB0} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	45	7	0.5	100	250	100	BC817K-16H
				160	400	100	BC817K-25H
				250	600	100	BC817K-40H

High voltage transistors

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

For high-voltage transistors with increased performance please refer to our high-voltage low VCEsat (BISS) transistor portfolio on page 19.

LED driver

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

Constant current source

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

Darlington transistors

Package					SOT223 (SC-73)	SOT89 (SC-62)	SOT23
							
Size (mm)					6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0
P _{tot} (mW)					1700	1300	250
Polarity	V _{CE0} (V)	I _C (mA)	h _{FE} min	f _T min (MHz)			
NPN	30	500	10000	125			PMBTA13
			20000		PZTA14	PXTA14	PMBTA14
					220		BCV29
	45	1000	2000	200	BSP50	BST50	
	60	500	10000	220		BCV49	BCV47
		1000	2000	200	BSP51	BST51	
80					BSP52	BST52	
PNP	30	500	20000	125			PMBTA64
				220		BCV28	BCV26
	45	1000	2000	200	BSP60	BST60	
	60	500	10000	220		BCV48	BCV46
		1000	2000	200	BSP61	BST61	
	80					BSP62	BST62

Schmitt triggers

Package							SOT143B
Size (mm)							2.9 x 1.3 x 1.0
P_{tot} (mW)							250
Polarity	V_{CE0} (V) TR1	V_{CE0} (V) TR2	I_C (mA)	h_{FE} min	h_{FE} max	V_{CEsat} typ (mV)	
NPN	30	6	100	110	800	250	BCV63 / B
PNP	30	6	100	220	475	250	BCV64B

Low noise transistors

Package							SOT23	SOT323 (SC-70)
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P_{tot} (mW)							250	200
Polarity	V_{CE0} (V)	I_C (mA)	Noise figure max (dB)	h_{FE} min	h_{FE} max	f_T min (MHz)		
NPN	30	100	4	200	450	100	BC849B	BC849BW
				420	800	100	BC849C	BC849CW
	45	100	4	200	450	100	BC850B	BC850BW
				420	800	100	BC850C	BC850CW
PNP	30	100	4	220	475	100	BC859B	BC859BW
				420	800	100	BC859C	BC859CW
	45	100	4	220	475	100	BC860B	BC860BW
				420	800	100	BC860C	BC860CW

Matched pair transistors - part 1

Types in **bold** represent new products

Package							SOT143B	SOT457 (SC-74)	LFP4K56D (SOT1205)
Size (mm)							2.9 x 1.3 x 1.0	2.9 x 1.5 x 1.0	5 x 6 x 1.1
P _{tot} (mW)							250	750	1250
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	h _{FE1} /h _{FE2}	V _{BE1} - V _{BE2} (mV)			
NPN	30	100	110	800	0.7 ¹⁾	n.a.	BCV61/A/B/C		
	45	100	200	450	0.9 ¹⁾	n.a.	BCM61B		
						2		BCM847DS	
	80	100	63	250	0.95	n.a.	BCM56DS		
	100	3000	150	-	0.95	n.a.			PHPT610035NK
Configuration									
PNP	30	100	100	800	0.7 ¹⁾	n.a.	BCV62/A/B/C		
	45	100	200	450	0.9 ¹⁾	n.a.	BCM62B		
						2		BCM857DS	
	65	100	200	450	0.9	2		BCM856DS	
	80	100	63	250	0.95	n.a.	BCM53DS		
Configuration									

¹⁾ I_{C1} / I_{E2}

Matched pair transistors - part 2

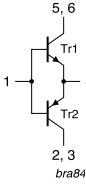
Types in **bold** represent new products

Package							SOT353 (SC-88A)	SOT363 (SC-88)	SOT666	SOT1216 (DFN1010B-6)
Size (mm)							2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.1 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}

MOSFET driver

Types in **bold** represent new products

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

Medium frequency transistors

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

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

Types in **bold** represent new products

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)							1700	1650	750	1300	1300
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A					
12	5.3	10.6	300 / 530	0.5	2	18		PBSS301NX			
	5.8	11.6	300 / 530	0.5	2	18	PBSS301NZ				
	6	7	280 / 440	0.5	2	20				PBSS4612PA	
20	3	5	220 / 390	0.5	2	40		PBSS4320X			
	4	15	300 / 450	0.5	2	30			PBSS301ND		
	5	10	300 / 450	0.5	2	35		PBSS4520X			
	5.3	10.6	300 / 570	0.5	2	20		PBSS302NX			
	5.8	10.2	300 / 570	0.5	2	20	PBSS302NZ				
	6	7	280 / 440	0.5	2	20				PBSS4620PA	
	7	15	300 / 550	0.5	2	12		PBSS4021NX			
	8	20	300 / 550	0.5	2	9	PBSS4021NZ				
30	3	5	300 / 490	0.5	2	45		PBSS4330X			
	3	5	300 / 465	0.5	2	40				PBSS4330PA	PBSS4330PAS
	3.5	6	300 / 500	0.5	2	70			PBSS4032ND ³⁾		
	4.7	10	300 / 500	0.5	2	57		PBSS4032NX ³⁾			
	5.1	10.2	300 / 480	0.5	2	20		PBSS303NX			
	5.4	10	300 / 500	0.5	2	57	PBSS4032NZ ³⁾				
	5.5	11	300 / 480	0.5	2	20	PBSS303NZ				
	6	7	280 / 450	0.5	2	21				PBSS4630PA	
40	2	3	300 / –	0.5	5	140		PBSS4240X			
	4	15	300 / 520	0.5	2	35			PBSS302ND		
		10	300 / 500	0.5	2	21		PBSS4540X			
	5	10	300 / 500	0.5	2	25	PBSS4540Z				
50	2	5	300 / –	0.5	2	90 ²⁾		PBSS4250X			
	3	5	200 / 280	0.5	2	65			PBSS4350D		
			300 / 460	0.5	2	50		PBSS4350X			
			200 / 280	0.5	2	60 ¹⁾	PBSS4350Z				
60	1	2	170 / –	0.5	10	200 ²⁾		PBSS4160X			
	3	6	200 / 360	0.5	5	45					PBSS4360PAS
			200 / –	0.5	5	45	PBSS4360Z	PBSS4360X			
			345 / 570	0.5	2	40			PBSS303ND		
	4.7	9.4	300 / 520	0.5	2	25		PBSS304NX			
	5.2	10.4	300 / 520	0.5	2	25	PBSS304NZ				
	6	7	280 / 440	0.5	2	22				PBSS4560PA	
	6.2	15	300 / 500	0.5	2	17		PBSS4041NX			
80	7	15	300 / 500	0.5	2	13	PBSS4041NZ				
	3	6	240 / 360	0.5	2	40			PBSS304ND		
	4	10	250 / 400	0.5	2	25		PBSS4480X			
	4.6	9.2	300 / 470	0.5	2	25		PBSS305NX			
	5.1	10.2	300 / 470	0.5	2	25	PBSS305NZ				
	5.6	7	270 / 425	0.5	2	25				PBSS4580PA	
100	1	3	150 / 290	0.25	10	75			PBSS8110D		
			150 / 290	0.25	10	73		PBSS8110X			
			150 / 290	0.25	10	73	PBSS8110Z				
	3	4	170 / 275	0.5	2	45			PBSS305ND		
	4.5	9	200 / 330	0.5	2	27		PBSS306NX			
	5.1	10.2	200 / 330	0.5	2	27	PBSS306NZ				
	5.2	6	180 / 285	0.5	2	30				PBSS8510PA	

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

Low V_{CEsat} (BISS) transistors single NPN up to 750 mWTypes in **bold** represent new products

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
Size (mm)												
P_{tot} (mW)							480	350	430	250	250	750
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B =$ 0.05 A						
15	0.5	1	200 / 325	0.01	2	-				PBSS2515M	PBSS2515MB	
20	1	3	350 / 470	0.1	2	110 ²⁾	PBSS4120T					
	2	5	220 / 330	0.1	2	45	PBSS4320T					
	4.3	8	300 / 550	0.5	2	21	PBSS4021NT					
30	1	1.5	230 / 380	0.5	2	90						PBSS4130QA
		3	300 / 450	0.5	2	120 ²⁾	PBSS4130T					
	2	3	300 / 450	0.5	2	70	PBSS4230T					
			230 / 380	0.5	2	75						PBSS4230QA
	2.6	5	300 / 500	0.5	2	80	PBSS4032NT ³⁾					
40	0.5	1	200 / 550	0.01	2	200 ²⁾				PBSS2540M	PBSS2540MB	
	1	2	300 / 440	0.5	5	130		PBSS4140U				
			300 / 510	0.5	5	120	PMMT491A					
			300 / 420	0.5	5	130	PBSS4140T					
	2	3	350 / 470	0.1	2	70			PBSS4240Y			
			300 / 450	0.5	2	70	PBSS4240T					
50	2	5	300 / 495	0.5	2	60	PBSS4350T					
60	1	1.5	150 / 240	0.5	2	90						PBSS4160QA
		2	200 / 420	0.5	5	120		PBSS4160U				
			200 / 350	0.5	5	110	PBSS4160T					
	2	3	150 / 240	0.5	2	75						PBSS4260QA
	3.8	8	300 / 500	0.5	2	29	PBSS4041NT					
100	1	3	150 / 400	0.25	10	80			PBSS8110Y			
			150 / 300	0.25	10	70	PBSS8110T					

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

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

Types in **bold** represent new products

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P _{tot} (mW)							1700	1650	750	1300	1300
V _{CE0} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A					
12	5.3	10.6	250 / 400	0.5	2	20		PBSS301PX			
	5.7	11.4	250 / 400	0.5	2	20	PBSS301PZ				
	6	7	220 / 335	0.5	2	20				PBSS5612PA	
20	3	5	200 / –	0.5	2	80 ²⁾			PBSS5320D		
			220 / 450	0.5	2	50		PBSS5320X			
	4	15	250 / 400	0.5	2	35			PBSS301PD		
	5	10	300 / 430	0.5	2	45		PBSS5520X			
	5.1	10.2	250 / 370	0.5	2	25		PBSS302PX			
	5.5	11	250 / 370	0.5	2	25	PBSS302PZ				
	6	7	230 / 345	0.5	2	25				PBSS5620PA	
	6.2	15	250 / 400	0.5	2	18		PBSS4021PX			
	6.6	20	250 / 400	0.5	2	16	PBSS4021PZ				
30	2.7	5	200 / 350	0.5	2	87			PBSS4032PD ³⁾		
	3	5	200 / 380	0.5	2	50		PBSS5330X			
			200 / 320	0.5	2	45				PBSS5330PA	PBSS5330PAS
	4.2	10	200 / 350	0.5	2	70		PBSS4032PX ³⁾			
	4.4	10	200 / 350	0.5	2	70	PBSS4032PZ ³⁾				
	5.1	10.2	250 / 400	0.5	2	25		PBSS303PX			
	5.3	10.6	250 / 400	0.5	2	25	PBSS303PZ				
40	2	3	215 / –	0.5	5	170		PBSS5240X			
	4	15	200 / 310	0.5	2	46			PBSS302PD		
		10	250 / 370	0.5	2	33		PBSS5540X			
	5		250 / 350	0.5	2	40 ¹⁾	PBSS5540Z				
50	2	5	200 / –	0.5	2	90 ²⁾		PBSS5250X			
	3	5	200 / 300	0.5	2	70			PBSS5350D		
			200 / 375	0.5	2	70		PBSS5350X			
			200 / 300	0.5	2	70	PBSS5350Z				
60	3	6	130 / 220	0.5	5	55					PBSS5360PAS
			130 / –	0.5	5	55	PBSS5360Z	PBSS5360X			
			180 / 265	0.5	2	55			PBSS303PD		
	4.2	8.4	200 / 295	0.5	2	35		PBSS304PX			
	4.5	9	200 / 295	0.5	2	35	PBSS304PZ				
	5	6	170 / 260	0.5	2	35				PBSS560PA	
	5	15	200 / 300	0.5	2	30		PBSS4041PX			
5.7	200 / 300		0.5	2	22	PBSS4041PZ					
80	3	5	155 / 225	0.5	2	55			PBSS304PD		
	180 / 265		0.5	2	40				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 mWTypes in **bold** represent new products

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
												
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)							480	350	430	250	250	750
V _{CE0} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A						
15	0.5	1	200 / 260	0.01	2	150				PBSS3515M	PBSS3515MB	
20	1	2	300 / 450	0.1	2	125 ²⁾	PBSS5120T					
	2	3	225 / –	0.5	2	80 ²⁾	PBSS5220T					
		5	220 / 420	0.5	2	50	PBSS5320T					
	3.5	8	250 / 400	0.5	2	35	PBSS4021PT					
30	1	1.5	180 / 295	0.5	2	85						PBSS5130QA
		3	260 / 350	0.5	2	110	PBSS5130T					
	300 / 450		0.1	2	70	PBSS5230T						
	180 / 295		0.5	2	70						PBSS5230QA	
	2.4	5	200 / 320	0.5	2	95	PBSS4032PT ³⁾					
40	0.5	1	200 / 380	0.01	2	220				PBSS3540M	PBSS3540MB	
	1	2	300 / 520	0.1	5	130		PBSS5140U				
			300 / 800	0.1	5	130	PMMT591A					
			300 / 510	0.1	5	130	PBSS5140T					
	2	3	300 / –	0.1	2	110 ²⁾			PBSS5240Y			
300 / 450			0.1	2	70	PBSS5240T						
50	2	3	200 / –	0.5	2	90 ²⁾	PBSS5250T					
							PBSS5250TH					
	2	3	200 / –	0.5	2	90 ²⁾	PBSS5350TH					
5		200 / 360	0.5	2	55	PBSS5350T						
60	1	2	1.5	120 / 185	0.5	2	125					PBSS5160QA
			150 / 250	0.5	5	135		PBSS5160U				
			150 / 250	0.5	5	120	PBSS5160T					
	1.7	2.5	120 / 185	0.5	2	105					PBSS5260QA	
	2.7	8	200 / 300	0.5	2	49	PBSS4041PT					
100	1	3	150 / –	0.25	5	93			PBSS9110Y			
			150 / 350	0.5	5	95	PBSS9110T					

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

Low V_{CEsat} (BISS) transistors double

Package										SOT96 (SO8)	SOT457 (SC-74)	SOT666	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)
Size (mm)										4.9 x 3.9 x 1.75	2.9 x 1.5 x 1.0	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)										2000 ²⁾	750	500	1300	1300
V_{CE0} (V)	I_C (A)	Polarity	h_{FE} min/ typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)					
15	0.5	2 x NPN	200	0.01	2	170 ¹⁾	250	0.5	0.05			PBSS2515VS		
		2 x PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05			PBSS3515VS		
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05			PBSS2515VPN		
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05					
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05					PBSS4220PANS
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05					PBSS5220PAPS
	7.5	NPN / NPN	300	0.5	2	15	150	4	0.2	PBSS4021SN				
	6.3	PNP / PNP	250	0.5	2	24	225	4	0.2	PBSS4021SP				
	7.5 / 6.3	NPN / PNP	300 / 250	0.5	2	15 / 24	150 / 225	4	0.2	PBSS4021SPN				
30	1	NPN / NPN	210	0.5	2	75	100	0.5	0.05				PBSS4130PAN	
		PNP / PNP	170	0.5	2	85	140	0.5	0.05				PBSS5130PAP	
		NPN / PNP	210 / 170	0.5	2	75 / 85	100 / 140	0.5	0.05				PBSS4130PANP	
	2	NPN / NPN	230	0.5	2	60	80	0.5	0.05				PBSS4230PAN	
		PNP / PNP	210	0.5	2	75	110	0.5	0.05				PBSS5230PAP	
		NPN / PNP	230 / 210	0.5	2	60 / 75	80 / 100	0.5	0.05				PBSS4230PANP	
	5.7	NPN / NPN	300	0.5	2	57	250	4	0.4	PBSS4032SN ³⁾				
	4.8	PNP / PNP	200	0.5	2	70	390	4	0.4	PBSS4032SP ³⁾				
	5.7 / 4.8	NPN / PNP	300 / 200	0.5	2	57 / 70	250 / 390	4	0.4	PBSS4032SPN ³⁾				
	40	1	NPN / PNP	300 / 250	0.5	5	130 / 150	500	1	0.1		PBSS4140DPN		
		2	NPN / PNP	300 / 250	0.5	5	80 / 100	400 / 530	2	0.2		PBSS4240DPN		
50	2.7	2 x NPN	300	0.5	2	50	340	2.7	0.27	PBSS4350SS				
		2 x PNP	200	0.5	2	60	370	2.7	0.27	PBSS5350SS				
		NPN / PNP	300 / 200	0.5	2	50 / 60	340 / 370	2.7	0.27	PBSS4350SPN				
60	1	2 x NPN	200	0.5	5	115	250	1	0.1		PBSS4160DS			
		2 x PNP	150	0.5	5	120	330	1	0.1		PBSS5160DS			
		NPN / PNP	200 / 150	0.5	5	115 / 120	250 / 330	1	0.1		PBSS4160DPN			
	1	NPN / NPN	150	0.5	2	90	120	0.5	0.05				PBSS4160PAN	PBSS4160PANS
		PNP / PNP	120	0.5	2	125	180	0.5	0.05				PBSS5160PAP	PBSS5160PAPS
		NPN / PNP	150 / 120	0.5	2	90 / 125	120 / 180	0.5	0.05				PBSS4160PANP	PBSS4160PANPS
	2	NPN / NPN	210	0.5	2	70	90	0.5	0.05				PBSS4260PAN	PBSS4260PANS
		PNP / PNP	140	0.5	2	100	140	0.5	0.05				PBSS5260PAP	PBSS5260PAPS
		NPN / PNP	210 / 140	0.5	2	70 / 100	90 / 140	0.5	0.05				PBSS4260PANP	PBSS4260PANPS
	6.7	NPN / NPN	300	0.5	2	20	190	4	0.2	PBSS4041SN				
	5.9	PNP / PNP	200	0.5	2	35	330	4	0.2	PBSS4041SP				
	6.7 / 5.9	NPN / PNP	300 / 200	0.5	2	20 / 35	190 / 330	4	0.2	PBSS4041SPN				
120	1	NPN / NPN	240	0.1	2	90	120	0.5	0.05				PBSS4112PAN	
		PNP / PNP	190	0.1	2	150	220	0.5	0.05				PBSS5112PAP	
		NPN / PNP	240 / 190	0.1	2	90 / 150	120 / 220	0.5	0.05				PBSS4112PANP	

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

Low V_{CEsat} (BISS) transistors load switches

Package				SOT457 (SC-74)	SOT363 (SC-88)
					
Size (mm)				2.9 x 1.5 x 1.0	
P _{tot} (mW)				750 ¹⁾	600 ¹⁾
V _{CE0} (V)	I _C (A)	V _{CEsat} max (mV); I _C = 0.5 A; I _B = 0.05 A	R1, R2 (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 footprint²⁾ Device mounted on an FR4 PCB, single-sided copper, tin-plated, and standard footprint

Low V_{CEsat} (BISS) high voltage transistors

Types in **bold** represent new products

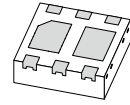
Package				SOT223 (SC-73)	SOT89 (SC-62)	SOT1215	SOT23
							
Size (mm)				6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	1.1 x 1.0 x 0.37	2.9 x 1.3 x 1.0
P_{tot} (mW)				1700	1300	750	250
Polarity	V_{CEO} [max] (V)	I_C (A)	hFE [min]				
NPN	150	0.5	100			PBHV8515QA	
		1	70				PBHV8115TLH
			100				PBHV8115T
					PBHV8115X		
				PBHV8115Z			
		2	100	PBHV8215Z			
	180	1	100				PBHV8118T
	400	0.5	100	PBHV8540Z	PBHV8540X		PBHV8540T
		1	100	PBHV8140Z			
	500	0.15	50				PMBTA45
PNP	150	0.1	70	PBHV2160Z			
		0.5	70	PBHV8560Z			
		4	100	PBHV9414Z			
		0.5	100			PBHV9515QA	
		1	70				PBHV9115TLH
			100				PBHV9115T
					PBHV9115X		
				PBHV9115Z			
		2	100	PBHV9215Z			
	400	0.25	100				PBHV9040T
					PBHV9040X		
		0.5	100	PBHV9040Z			
	500	0.15	100	PBHV9540Z	PBHV9540X		
		0.25	100				PBHV9050T
	600	0.1	70	PBHV9050Z			
		0.5	70	PBHV3160Z			
				PBHV9560Z			

Low V_{CEsat} (BISS) RETs

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

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

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

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

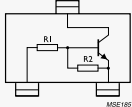
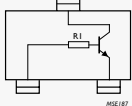
Package						LPAK56 (SOT669)
Size (mm)						5 x 6 x 1.1
P_{tot} (mW)						1250
V_{CEO} (V)	I_C (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	Polarity	
40	6	200 / 400	0.5	2	NPN	PHPT60406NY
			0.5	2	PNP	PHPT60406PY
	10	200 / 400	0.5	2	NPN	PHPT60410NY
			0.5	2	PNP	PHPT60410PY
	15	200 / 400	0.5	2	NPN	PHPT60415NY
60	3	200 / 400	0.5	2	PNP	PHPT60415PY
			0.5	2	NPN	PHPT60603NY
	6	200 / 400	0.5	2	PNP	PHPT60603PY
			0.5	2	NPN	PHPT60606NY
	10	150 / 250	0.5	2	PNP	PHPT60606PY
		200 / 400	0.5	2	NPN	PHPT60610NY
		150 / 250	0.5	2	PNP	PHPT60610PY
100	2	150 / 250	0.5	10	NPN	PHPT61002NYC
		150 / 220	0.5	10	PNP	PHPT61002PYC
		120 / 220	0.5	10	NPN	PHPT61002NYCLH
		100 / 180	0.5	10	PNP	PHPT61002PYCLH
	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

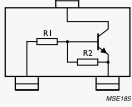
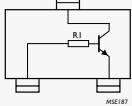
Package												LPAK56D (SOT1205)
Size (mm)												5 x 6 x 1.1
P_{tot} (mW)												1250
V_{CEO} (V)	I_C (A)	I_{CM} (A)	h_{FE} typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)	Polarity	h_{FE1}/h_{FE2}	
100	3	6	150	0.5	10	50	300	3	0.2	2XNPN	-	PHPT610030NK
						70	400	3	0.2	2XPNP	-	PHPT610030PK
						50 / 70	300 / 400	3	0.2	NPN/PNP	-	PHPT61003NPK
						50	300	3	0.2	2XNPN	0.95	PHPT610035NK
						70	400	3	0.2	2XPNP	0.9	PHPT610035PK



RETs 100 mA single - part 1

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

RETs 100 mA single - part 2

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

RETs 100 mA double

Types in **bold** represent new products

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

RETs 500mA single / double

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

3-terminal adjustable shunt regulators

Type name	Pinning configuration	Tamb(C°)	Vref		Package	Size(mm)	Ptot(mW)	VKA(V)	IK(mA)				
TLVH431NCDBZR	Normal pinning	0 to 70	1.5%	1,24	 SOT23	2.9 x 1.3 x 1.0	480	20	80				
TLVH431NIDBZR	Normal pinning	-40 to 85											
TLVH431NQDBZR	Normal pinning	-40 to 125											
TLVH431NMQDBZR	Mirrored pinning												
TLVH431NACDBZR	Normal pinning	0 to 70	1%							2,495	580	36	100
TLVH431NAIDBZR	Normal pinning	-40 to 85											
TLVH431NAQDBZR	Normal pinning	-40 to 125											
TLVH431NAMQDBZR	Mirrored pinning												
TL431CDBZR	Normal pinning	0 to 70	2%	2,495			580	36	100				
TL431IDBZR	Normal pinning	-40 to 85											
TL431QDBZR	Normal pinning	-40 to 125											
TL431FDT	Normal pinning												
TL431MFD	Mirrored pinning	-40 to 125	1%										
TL431ACDBZR	Normal pinning	0 to 70											
TL431AIDBZR	Normal pinning	-40 to 85											
TL431AQDBZR	Normal pinning	-40 to 125											
TL431AFDT	Normal pinning												
TL431AMFD	Mirrored pinning												
TL431BCDBZR	Normal pinning	0 to 70	0.5%										
TL431BIDBZR	Normal pinning	-40 to 85											
TL431BQDBZR	Normal pinning	-40 to 125											
TL431BFDT	Normal pinning												
TL431BMFD	Mirrored pinning												

Products in **bold red** are under development



- Zener diodes 36**
 - General purpose Zener diodes 36
 - Zener diodes specifications 37
- Switching diodes 38**
 - General purpose, high speed switching diodes $\leq 90V$ 38
 - General purpose, high speed switching diodes 100V 38
 - General purpose, switching diodes $\geq 100V$ 39
 - Controlled avalanche switching diodes..... 40
 - Low leakage current switching diodes..... 40
 - PN rectifiers..... 40
- PN rectifiers 41**
 - PN rectifiers - Automotive qualified 41
 - Nomenclature pn-rectifier consumer grade types..... 41
 - Nomenclature pn-rectifier automotive grade types..... 41
- Schottky rectifiers 42**
 - General purpose schottky diodes $\leq 250\text{ mA}$ 42
 - Low capacitance schottky diodes..... 43
 - Medium power low VF schottky rectifiers single $\geq 200\text{ mA}$ - leadless DSN / DFN packages 44
 - Medium power low VF schottky rectifiers single $\geq 200\text{ mA}$ 46
 - Medium power low VF schottky rectifiers single $\geq 200\text{ mA}$ - leaded packages 47
 - Medium power low VF schottky rectifiers dual $\geq 200\text{ mA}$ 48
- Nomenclatures 49**

General purpose Zener diodes

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

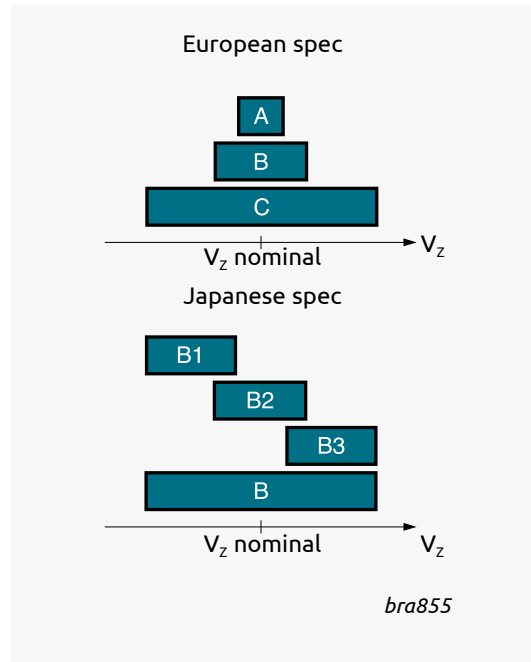
Notes:

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

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

Zener diodes specifications

Differences in Zener specifications



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

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

Japanese spec (PZU, PDZ)

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

NZX-series in SOD27

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

Switching diodes

General purpose, high speed switching diodes <= 90V

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOD80C (MiniMelf)	SOT23	SOT143B	SOT323 (SC-70)	SOT363 (SC-88)	DFN1412-6 (SOT1268)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)
														
						Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.5	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48
						P_{tot} (mW)	400	250	250	200	350	480	325	250
50	1	50	100	50	4			BAL74						
								BAV74						
70	1	50	1000	70	4			BAL99						
75	1	50	1000	75	4				BAS28					
		100	5000	75	4		BAS32L							
80	1	50	500	80	4					1PS300				
										1PS301				
										1PS302				
90	1	50	500	80	4			BAW56		BAW56W			BAW56QA	BAW56M
											BAW56S	BAW56SRA		
												BAV756S		

General purpose, high speed switching diodes 100V

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

General purpose, switching diodes $\geq 100V$ Types in **bold** represent new products

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOD80C (MiniMelf)	SOT457 (SC-74)	SOT23	SOT143B	SOD123	SOD123F	SOT323 (SC-70)	SOT353 (SC-88A)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOD523 (SC-79)	DFN1006D-2 (SOD882(D))
						Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48 (1.0 x 0.6 x 0.37)
						P_{tot} (mW)	400	250	250	250	380	375	200	255	300	300	300	250	250
100	1	100	100	100	50				BAS19										
150	1	100	100	150	50		BAV102												
									BAS20										
				150	50		BAV103				BAS21GW	BAS21H				BAS321	BAS321J		BAS21L(D)
									BAS21				BAS21W						
										BAV23									
													BAS21PG						
									BAV23A				BAS21AW						
									BAV23C										
									BAV23S				BAS21SW						
								BA-S21AVD											
								BAS21VD											
																	BAS21J	BAS521	
									BAS101										
									BAS101S										
										BAW101									
															BAW101S				
≥ 200	1	100	100	200	50														
300	1.1	100	150	250	50														

Controlled avalanche switching diodes

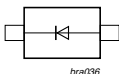
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_d max (pF)	t_{rr} max (ns)	Package	SOT23	SOT143B
										
								Size (mm)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
								P_{tot} (mW)	250	250
60	1	200	100	9	600	2.5	6			BAS56
90	1	200	100	10	600	35	50		BAS29	
	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

Low leakage current switching diodes

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

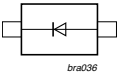
PN rectifiers

Types in **bold** represent new products

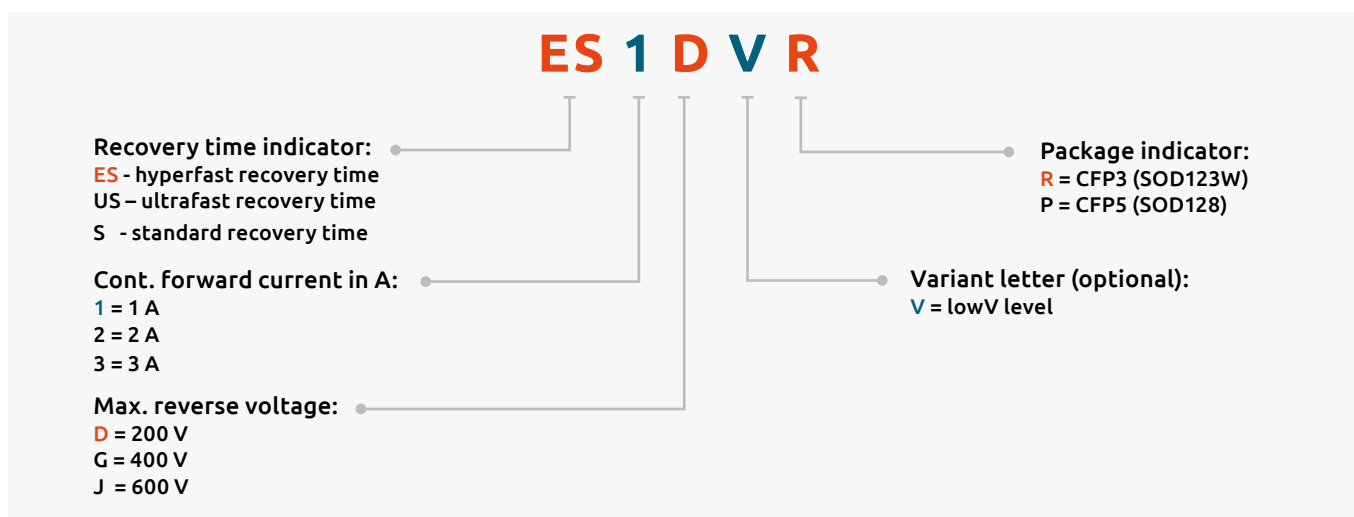
V_R max (V)	V_F max (V)	(@) I_F (A)	I_R max (μA)	(@) V_R (V)	t_{rr} max (ns)	Package	CFP5 (SOD128)	CFP3 (SOD123W)
								
						Size (mm)	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
						P_{tot} (mW) @ 1cm ²	1050	950
200	0.875	1	0.2	200	25			ES1DVR
	0.93	1	0.2	200	25			ES1DR
	0.95	2	0.2	200	25			ES2DVR
	0.98	2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

PN rectifiers - Automotive qualified

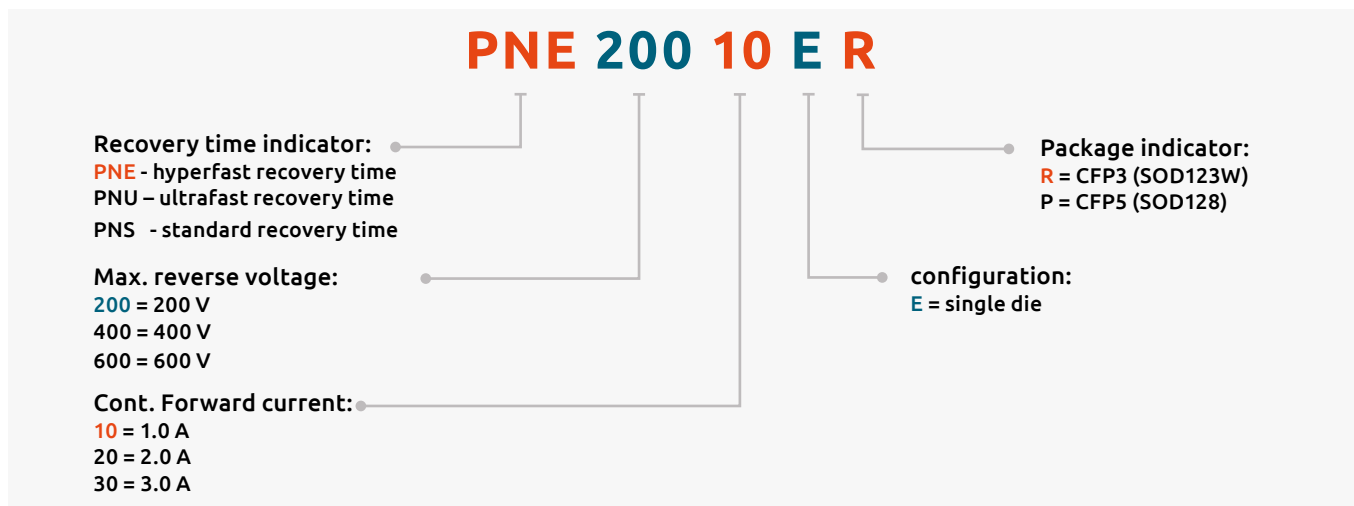
Types in **bold** represent new products

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

Nomenclature pn-rectifier consumer grade types

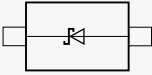
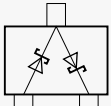
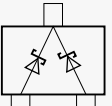
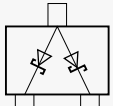
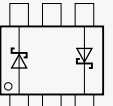
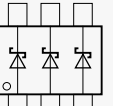
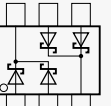
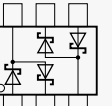
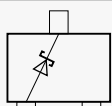
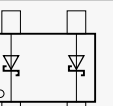
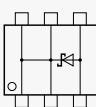


Nomenclature pn-rectifier automotive grade types



General purpose schottky diodes <= 250 mA

IF max (mA)	VR max (V)	VF max (mV)	@ IF (mA)	IR max (µA)	@ VR (V)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOT143B	SOD123	
												
						Size (mm)	3.5 x 1.5 x 1.5	3.04 x 1.6 x 0.55	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	
P _{tot} (mW)							300	500	250	250	357	
70	70	750	10	0.1	50	Single			BAS70			
						Dual series			BAS70-04			
						Dual c.c.			BAS70-05			
						Dual c.a.			BAS70-06			
						Dual isolated				BAS70-07		
						Triple isolated						
120	40	370	1	0.5	30	Quad 2x series						
						Single						
						Single			BAS40			
						Dual series			BAS40-04			
						Dual c.c.			BAS40-05			
						Dual c.a.			BAS40-06			
200	30	340	10	2	25	Dual isolated				BAS40-07		
						Quad c.c./c.c.						
						Quad 2x series						
						Single						
						Single			BAT754			
						Dual series			BAT754S			
200	40	300	10	15	30	Dual c.c.			BAT754C			
						Dual c.a.			BAT754A			
						Triple isolated						
						Single	BAS85	BAT85	BAT54			BAT54GW
						Dual series			BAT54S			
						Dual c.c.			BAT54C			
						Dual c.a.			BAT54A			
						Dual isolated				BAT74		
						Triple isolated						
						Quad c.c./c.c.						
						Quad 2x series						
						Single						
						Single						
						Single			BAT721			
						Dual series			BAT721S			
						Dual c.c.			BAT721C			
						Dual c.a .			BAT721A			
						250	100	850	250	4	75	Single
Single												
Single	BAS86	BAT86										
Single												
Single												
Single												
250	100	850	250	4	75	Single						
						Single						
						Single	BAS86	BAT86				
						Single						
						Single						
						Single						

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

SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)	DFN1006-2 (SOD882)/ DFN1006-3 (SOT883)
							
2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
375	250	300	385	400	300	275	250
BAS70H	BAS70W			1PS76SB70		1PS79SB70	BAS70L
	BAS70-04W						
	BAS70-05W						
	BAS70-06W						
		BAS70-07S			BAS70-07V		
		BAS70XY			BAS70VV		
				RB751V40		RB751S40	RB751CS40
BAS40H	BAS40W			1PS76SB40		1PS79SB40	BAS40L
	BAS40-04W						
	BAS40-05W						
	BAS40-06W						
		1PS88SB48			BAS40-07V		
		BAS40XY			BAS40-05V		
						1PS79SB31	
		BAT754L					
BAT54H	BAT54W		BAT54J	1PS76SB10		1PS79SB10	BAT54L
	BAT54SW						
	BAT54CW						BAT54CM
	BAT54AW						
		BAT74S			BAT74V		
					BAT54VV		
		BAT54XY			BAT54CV		
						RB521S30	RB521CS30L
				1PS76SB21		RB520S30	RB520CS30L
						1PS79SB30	
	BAT854W						
	BAT854SW						
	BAT854CW						
	BAT854AW						
BAT46WH			BAT46WJ				

Low capacitance schottky diodes

I_F max (mA)	V_R max (V)	V_F max (mV) @ I_F (mA)	C_j max (pF) @ $V_R = 0$ V	Package	SOT23	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)	DFN1006-2 (SOD882)
											
				Size (mm)	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
30	4	450	1	P_{tot} (mW)	250	250	300	400	300	500	250
				Single	BAT17			1PS76SB17		1PS79SB17	
				Triple isolated					1PS66SB17		
				Dual series	PMBD353 PMBD354 ¹⁾						
	15	340	1	Single		1PS70SB82					1PS10SB82
				Triple isolated			1PS88SB82		1PS66SB82		
				Dual series		1PS70SB84					
				Dual c.c.		1PS70SB85					
				Dual c.a.		1PS70SB86					

¹⁾ Diodes have matched capacitance

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

I _F max (A)	V _R max (V)	V _F max (mV) @ I _F max	I _R max (mA) @ V _R max	Package	DSN0603-2 (SOD962)	DSN0603B-2 (SOD962B)	DSN1006-2 (SOD993)		
									
					Size (mm)	0.6 x 0.3 x 0.3	0.6 x 0.3 x 0.2		1.0 x 0.6 x 0.28
					P _{tot} (mW) @ 1 cm²	525	525		1.000
					Optimization				
0.2	20	420	0.045	Low V _F	PMEG2002AESF	PMEG2002AESFB			
		490	0.0035	Low I _R	PMEG2002ESF				
	30	470	0.08	Low V _F	PMEG3002AESF				
		480	0.05	low V _F					
		535	0.009	Low I _R	PMEG3002ESF				
	40	525	0.08	Low V _F	PMEG4002AESF				
		600	0.0065	Low I _R	PMEG4002ESF				
		600	0.01	low I _R					
	60	600	0.1	low V _F					
0.5	20	390	0.2	low V _F					
		410	0.3	low V _F					
		440	1.5	low V _F					
		500	0.03	low I _R					
		550	0.045	Low V _F	PMEG2005AESF				
		620	0.0035	Low I _R	PMEG2005ESF				
	30	500	0.5	low V _F					
		630	0.08	Low V _F	PMEG3005AESF				
		720	0.009	Low I _R	PMEG3005ESF				
	40	590	0.01	low I _R					
		820	0.08	Low V _F	PMEG4005AESF				
		880	0.0065	Low I _R	PMEG4005ESF				
1	20	375	1.9	low V _F					
		415	0.6	low V _F					
		490	0.2	low V _F					
	30	480	1.25	Low V _F			PMEG3010AESB		
		565	0.045	Low I _R			PMEG3010ESB		
	40	505	0.115	Low V _F			PMEG4010AESB		
		600	0.02	low I _R					
		610	0.04	Low I _R			PMEG4010ESB		
	60	625	0.65	Low V _F			PMEG6010AESB		
730		0.03	Low I _R			PMEG6010ESB			
1.5	20	420	0.9	low V _F					
	40	610	0.03	low I _R					
2	20	420	1.9	low V _F					
		450	0.9	low V _F					
	30	470	2.5	low V _F					
		535	0.1	low V _F					
	60	530	0.2	low V _F					
		575	0.25	low V _F					

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

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

I _F max (A)	V ^R max (V)	V _F max (mV) @ I _F max	I _R max (mA) @ V _R max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)	
								
				Size (mm)	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0	
				P _{tot} (mW) @ 1 cm²	2150	1050	950	
Optimization								
1	20	340	1	Low V _F			PMEG2010ER	
		450	0.05	Low I _R			PMEG2010BER	
	30	360	1.5	Low V _F		PMEG3010EP	PMEG3010ER	
		450	0.05	Low I _R		PMEG3010BEP	PMEG3010BER	
	40	490	0.05	Low V _F		PMEG4010EP	PMEG4010ER	
			Low V _F		PMEG4010ETP	PMEG4010ETR		
		460	0.022	Low V _F /Low I _R			PMEG40T10ER¹⁾	
			Low V _F			PMEG6010EP	PMEG6010ER	
	60		Low V _F				PMEG6010ETR	
			660	0.0003	Low I _R			PMEG6010ELR
100	770	0.00015	Low I _R			PMEG10010ELR		
2	30	360	3	Low V _F		PMEG3020EP		
		420	1.5	Low V _F		PMEG3020CEP	PMEG3020ER	
		450	0.1	Low I _R		PMEG3020BEP		
		520	0.05	Low I _R		PMEG3020DEP	PMEG3020BER	
	40	490	0.1	Low V _F		PMEG4020EP	PMEG4020ER	
			Low V _F		PMEG4020ETP	PMEG4020ETR		
		515	0.022	Low V _F /Low I _R		PMEG40T20EP¹⁾	PMEG40T20ER¹⁾	
			Low V _F			PMEG6020EP	PMEG6020ER	
	60		530	0.2	Low V _F		PMEG6020ETP	PMEG6020ETR
			620	0.0012	Low V _F /Low I _R			PMEG60T20ELR¹⁾
			680	0.0007	Low I _R		PMEG6020AELP	PMEG6020AELR
			760	0.0003	Low I _R			PMEG6020ELR
	100	770	0.0003	Low I _R		PMEG10020AELP	PMEG10020AELR	
		830	0.00015	Low I _R			PMEG10020ELR	
3	30	360	5	Low V _F		PMEG3030EP		
		450	0.15	Low I _R	PMEG030V030EPD	PMEG3030BEP		
	40	490	0.12	Low V _F	PMEG040V030EPD			
			0.2	Low V _F		PMEG4030EP		
				Low V _F		PMEG4030ETP		
			525	0.028	Low V _F /Low I _R		PMEG40T30EP¹⁾	PMEG40T30ER¹⁾
		540	0.1	Low I _R			PMEG4030ER	
	45	480	0.044	Low V _F /Low I _R	PMEG045T030EPD¹⁾			
	50	530	0.1	Low V _F	PMEG050V030EPD			
	60	475	0.4	Low V _F		PMEG6030EVP		
		530	0.2	Low V _F	PMEG060V030EPD	PMEG6030EP		
				Low V _F		PMEG6030ETP		
			690	0.001	Low I _R		PMEG6030ELP	
	100	770	0.00045	Low I _R		PMEG10030ELP		
4.5	60	530	0.4	Low V _F		PMEG6045ETP		
5	30	360	8	Low V _F		PMEG3050EP		
		450	0.25	Low I _R		PMEG3050BEP		
		500	0.15	Low V _F	PMEG030V050EPD			
	40	490	0.3	Low V _F		PMEG4050EP		
			0.3	Low V _F		PMEG4050ETP		
		520	0.12	Low V _F	PMEG040V050EPD			
		525	0.041	Low V _F /Low I _R		PMEG40T50EP¹⁾		
	45	490	0.3	Low V _F	PMEG045V050EPD			
		525	0.044	Low V _F /Low I _R	PMEG045T050EPD¹⁾			
	60	560	0.4	Low V _F	PMEG060V050EPD			
6	100	840	0.00045	Low I _R	PMEG100V060ELPD			
8	100	850	0.0005	Low I _R	PMEG100V080ELPD			
10	45	490	0.6	Low V _F	PMEG045V100EPD			
		540	0.5	Low V _F	PMEG45A10EPD			
		545	0.08	Low V _F /Low I _R	PMEG045T100EPD¹⁾			
		560	0.7	Low V _F	PMEG060V100EPD			
	100	850	0.0008	Low I _R	PMEG100V100ELPD			
15	45	490	1	Low V _F	PMEG045V150EPD			
		550	0.1	Low V _F /Low I _R	PMEG045T150EPD ¹⁾			
		580		Low V _F /Low I _R	PMEG45T15EPD ¹⁾			
		570	0.098	Low V _F /Low I _R	PMEG045T150EIPD¹⁾			
	50	500	1	Low V _F	PMEG050V150EPD			
		550	0.1	Low I _R	PMEG050T150EPD ¹⁾			

¹⁾ Trench process

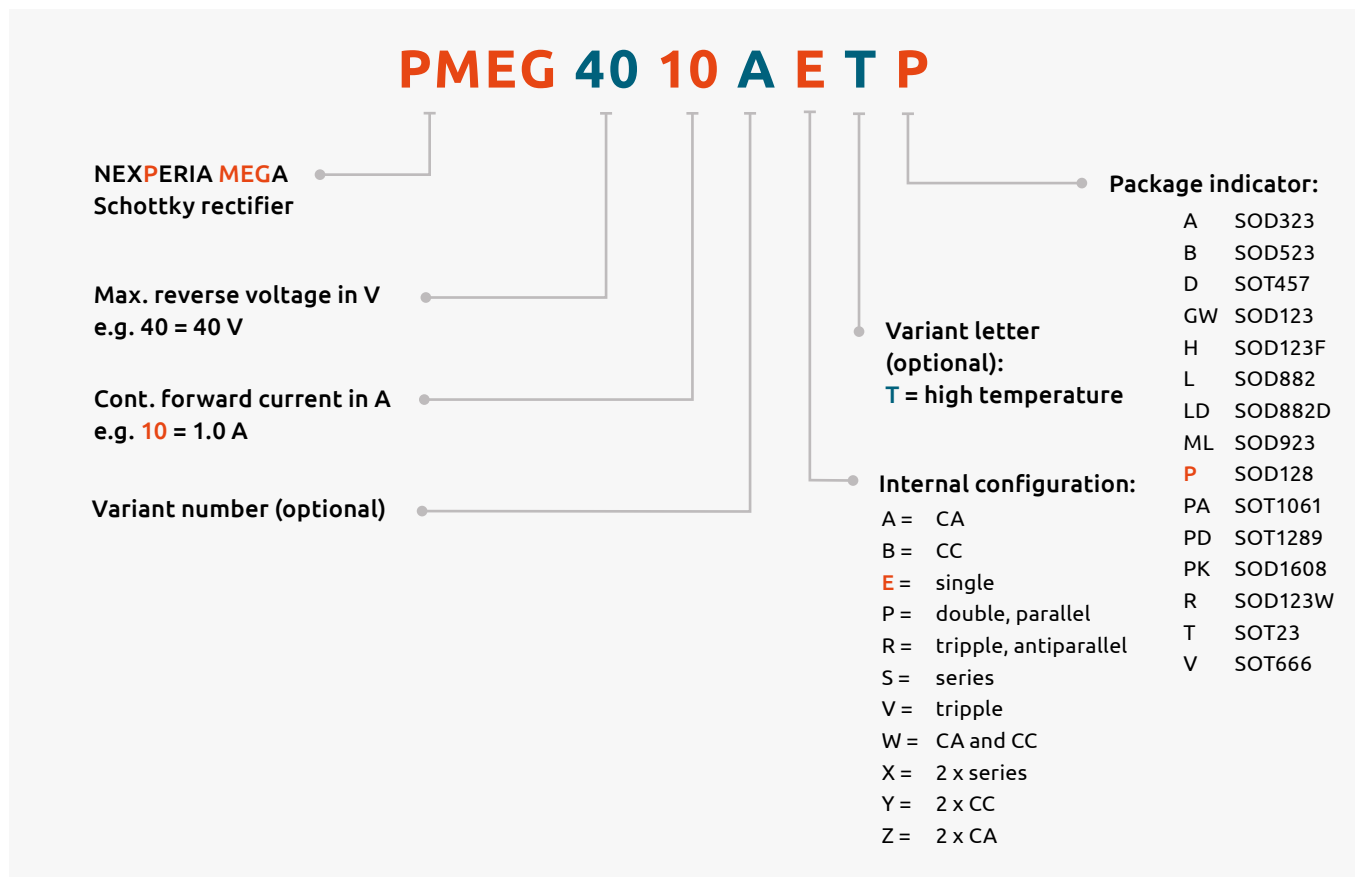
Medium power low VF schottky rectifiers single ≥ 200 mA - leaded packages

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	SOT457 (SC-74)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323F (SC-90)	SOD323 (SC-76)	SOT666	SOD523 (SC-79)
													
				Size (mm)	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.6 x 1.2 x 0.55	1.2 x 0.8 x 0.6
				P_{tot} (mW) @ 1 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	PMEG2010EA BAT760	PMEG2010EV BAT960	
		620	1.5	Low V_F									PMEG2010AEB
	30	450	1	Low V_F	1PS74SB23								
		520	0.1	Low I_r				PMEG3010CEH		PMEG3010CEJ			
		560	0.15	Low V_F		PMEG3010ET	PMEG3010EGW	PMEG3010EH		PMEG3010EJ	PMEG3010BEA	PMEG3010BEV	
		680	0.5	Low V_F									PMEG3010EB
	40	570	0.05	Low I_r			PMEG4010CEGW	PMEG4010CEH		PMEG4010CEJ			
		640	0.05	Low V_F		PMEG4010ET	PMEG4010EGW	PMEG4010EH		PMEG4010EJ	PMEG4010BEA	PMEG4010BEV	
		840	0.008	Low I_r							PMEG4010CEA		
		60	660	0.05	Low I_r			PMEG6010CEGW	PMEG6010CEH		PMEG6010CEJ		
	1.5	20	660	0.2	Low I_r				PMEG2015EH		PMEG2015EJ	PMEG2015EA	PMEG2015EV
		30	500	1	Low V_F					PMEG3015EH		PMEG3015EJ	
2	10	460	3	Low V_F					PMEG1020EH		PMEG1020EJ	PMEG1020EA	PMEG1020EV
	20	525	0.2	Low V_F					PMEG2020EH		PMEG2020EJ	PMEG2020AEA	
	30	620	1	Low V_F				PMEG3020EGW	PMEG3020EH		PMEG3020EJ		
3	10	530	3	Low V_F					PMEG1030EH		PMEG1030EJ		

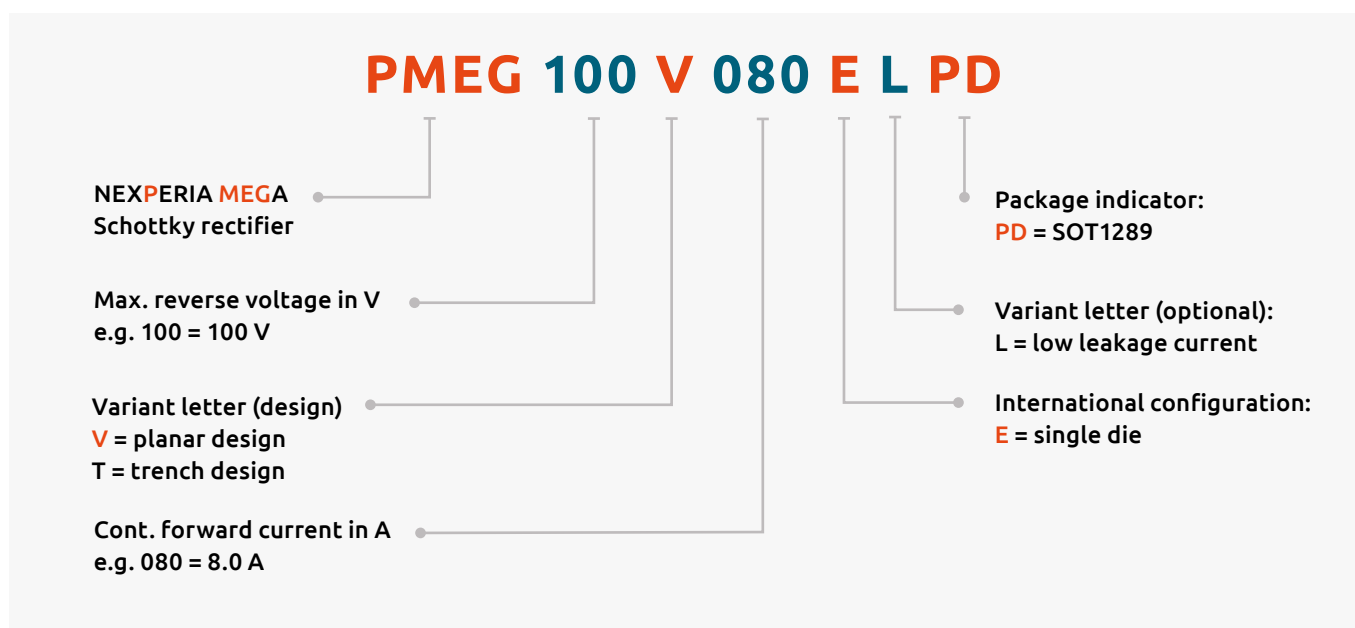
Medium power low VF schottky rectifiers dual ≥ 200 mA

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Optimization	Package	SOT223 (SC-73)	SOT23	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	SOT666
					Size (mm)					
					P_{tot} (mW) @ 1 cm ²	6.5 x 3.5 x 1.65	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.63	1.6 x 1.2 x 0.55
0.2	30	480	0.03	Low V_F	 BAT122					PMEG3002TV
	60	600	0.1	Low V_F						PMEG6002TV
0.5	20	390	0.2	Low V_F	 BAT125		PMEG2005CT			
	30	430	0.15	Low V_F			PMEG3005CT			
	40	470	0.1	Low V_F			PMEG4005CT			
1.0	25	450	1.0	Low V_F	 BAT120S	BAT120S				
				Low V_F	 BAT120C	BAT120C				
				Low V_F	 BAT120A	BAT120A				
	40	500	0.05	Low V_F	 BAT125			PMEG4010CPA	PMEG4010CPAS	
	60	540	0.06	Low V_F	 BAT125			PMEG6010CPA	PMEG6010CPAS	
		650	0.35	Low V_F	 BAT160S	BAT160S				
				Low V_F	 BAT160C	BAT160C				
				Low V_F	 BAT160A	BAT160A				
2.0	20	420	1.0	Low V_F	 BAT120S			PMEG2020CPA	PMEG2020CPAS	
	30	440	2.0	Low V_F	 BAT125			PMEG3020CPA	PMEG3020CPAS	

Nomenclature of automotive grade Schottky rectifier in medium-power packages



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

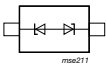




ESD protection, TVS, filtering and signal conditioning

Low capacitance ESD protection for high-speed interfaces.....	52
Low capacitance ESD protection for high-speed interfaces	52
TrEOS protection devices	55
General ESD protection devices.....	58
General purpose ESD protection devices	58
Application-specific ESD solutions	60
Audio interface protection	60
Automotive high-speed network protection	61
Automotive in-vehicle network bus line protection	61
Battery and charger port protection.....	62
HDMI and display port protection.....	62
Antenna protection (NFC, WiFi,...).....	63
USB and SATA protection.....	63
EMI solutions with integrated protection	64
Common mode filter for USB 2.0.....	64
Common mode filter for USB 3.x.....	64
Common mode filter for HDMI and MIPI.....	64
HDMI signal conditioning.....	65
LCD and camera RC filter with integrated protection.....	65
Memory and SIM card filter with integrated protection	66
USB 3.x and eSATA protection and filtering for high-speed and super-speed lines	66
Transient voltage surge suppressor (TVS).....	67
TVS diodes for mobile applications	67
TVS diodes, 24 W/40 W (automotive).....	67
TVS diodes, 400 W	68
TVS diodes, 600W	69
Nomenclatures	70

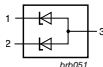
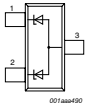
Low capacitance ESD protection for high-speed interfaces

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

Products in **bold red** are under development

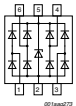
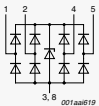
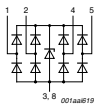
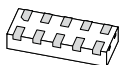
Low capacitance ESD protection for high-speed interfaces

Number of protected lines		V_{RWM} (V)	$C_{line\ typ}$ (pF)	$C_{line\ max}$ (pF)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional									
2	1	5	0.5	0.65	10		PESD5V0X2UMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37	
			0.8	0.95	15		PESD5V0X2UM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.48	
							PESD5V0X2UAMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37	
							PESD5V0X2UAM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.48	
	0	80	0.6	0.75	30		PESD5V0X1BQ	SOT663 	1.6 x 1.2 x 0.55	
							PESD5V0X1BT	SOT23 	2.9 x 1.3 x 1.0	
							NUP1301U	SOT323 	2.0 x 1.25 x 0.95	
							NUP1301	SOT23 	2.9 x 1.3 x 1.0	
3	0	5.5	1	1.5	8		PRTR5V0U2X	SOT143B 	2.9 x 1.3 x 1.0	
			1.8	-	12		PRTR5V0U2AX			
			1	1.5	8			PRTR5V0U2F	DFN1410-6 (SOT886) 	1.45 x 1.0 x 0.48

ESD protection, TVS, filtering and signal conditioning

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

Low capacitance ESD protection for high-speed interfaces

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

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

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

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	ESD rating ^[1] max (kV)	$I_R max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional									
4	0	5.5	0.5	0.6	10	-		IP4294CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
								PUSB3F96		
		3.3	0.27	0.34	15	0.1		PUSB3FR4		
								PHDMI2FR4		
0	4	3.3	0.17	0.2	15	0.1		PUSB3AB4	PHDMI2AB4	2.5 x 1.0 x 0.48
6	0	3.3	0.35	0.4	15	-		PUSB3FR6	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48
0	6	5.5	0.27	0.35	10	0.1		PUSB3TB6		
		3.3	0.15	0.2	15			PUSB3AB6		

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

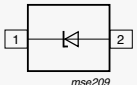
TrEOS protection devices

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

Type	device	V _{RWM} (V)	Uni- or bidirectional	C _d typ (pF)	ESD rating max (kV) (Ω)	R _{dyn} TLP (Ω)	Number of protected lines	Package	Size (mm)	
PUSB3FR4	ESD protection	3.3	uni	0.29	15	0.27	4	DFN2510A-10	2.5 x 1.0 x 0.48	
PUSB3FR6				0.35	15	0.29	6	DFN2111-7	2.1 x 1.1 x 0.48	
PUSB3AB4			bi	0.17	15	0.4	4	DFN2510A-10	2.5 x 1.0 x 0.48	
PUSB3AB6				0.15	15	0.4	6	DFN2111-7	2.1 x 1.1 x 0.48	
PCMF1USB3S	Common Mode Filter with ESD protection	5	uni	0.3	15	0.14	2	WLCSP5	0.8 x 1.2 x 0.5	
PCMF2USB3S							4	WLCSP10	1.6 x 1.2 x 0.5	
PCMF3USB3S							6	WLCSP15	2.4 x 1.2 x 0.5	
PESD1USB3S	ESD protection in PCMF footprint	5	uni	0.45	15	0.14	2	WLCSP5	0.8 x 1.2 x 0.5	
PESD2USB3S							4	WLCSP10	1.6 x 1.2 x 0.5	
PESD3USB3S							6	WLCSP15	2.4 x 1.2 x 0.5	
PESD3V3Z1BSF	ESD protection	3.3	bi	0.28	20	0.19	1	DSN0603-2	0.6 x 0.3 x 0.3	
PESD3V3W1BSF				0.45	25	0.11				
PESD3V3C1BSF				0.2	20	0.23				
PESD4V0W1BSF		4.0		0.45	25	0.11				
PESD5V0R1BSF		5		0.1	10	0.45				
PESD5V0H1BSF				0.15	15	0.25				
PESD5V0C1BSF				0.2	20	0.23				
PESD5V0C1USF			uni	0.45	20	0.1				

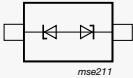
Products in **bold red** are under development

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	P_{pp} max (W) [1]	ESD rating max (kV) [2]	I_{ft} max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
1	0	5	35	42	40	30	0.1		PESD5V0S1USF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		5.5	12	15.4	10	30	0.1		PESD5V0L1USF		
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.5
			34	40	45	30	0.3		PESD3V3L1UL		
			207	300	150	30	2		PESD3V3S1UL		
		5	2	2.6	-	9	0.1		PESD5V0U1UL		
			25	30	42	26	0.1		PESD5V0L1UL		
		5	152	200	150	30	1		PESD5V0S1UL		
		12	38	75	150	30	0.05		PESD12VS1UL		
		15	32	70	150	30	0.05		PESD15VS1UL		
		24	23	50	150	23	0.05		PESD24VS1UL		
		36	18	30	150	30	0.01		PESD36VS1UL		
		5	25	30	42	26	0.1		PESD5V0L1ULD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.4
			152	200	150	30	1		PESD5V0S1ULD		
		12	38	75	150	30	0.05		PESD12VS1ULD		
		15	32	70	150	30	0.05		PESD15VS1ULD		
		24	23	50	150	23	0.05		PESD24VS1ULD		
		2.5	229	300	260	30	6		PESD5Z2.5	SOD523 (SC-79) 	1.2 x 0.8 x 0.6
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UB		
			34	40	45	30	0.3		PESD3V3L1UB		
			172	200	260	30	0.05		PESD5Z3.3		
			207	300	330	30	2		PESD3V3S1UB		
		5	2	2.6	-	9	0.1		PESD5V0U1UB		
			25	30	42	26	0.1		PESD5V0L1UB		
			89	150	180	30	0.05		PESD5Z5.0		
			152	200	260	30	1		PESD5V0S1UB		
		6	78	150	180	30	0.01		PESD5Z6.0		
		7	69	150	180	30	0.01		PESD5Z7.0		
		12	35	75	200	30	0.01		PESD5Z12		
			38	75	180	30	0.05		PESD12VS1UB		
		15	32	70	160	30	0.05		PESD15VS1UB		
		24	23	50	160	23	0.05		PESD24VS1UB		
		3.3	2.6	3.1	-	9	0.1 (@ 3 V)		PESD3V3U1UA	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
		5	2	2.6	-	9	0.1		PESD5V0U1UA		
			25	30	42	26	0.1		PESD5V0L1UA		
			480	530	890	30	4		PESD5V0S1UA		
		12	160	180	600	30	0.1		PESD12VS1UA		
		24	23	50	160	23	0.05		PESD24VS1UA	SOD323F (SC-90) 	1.7 x 1.25 x 0.7
		5	480	530	890	30	4		PESD5V0S1UJ		
		12	160	180	600	30	0.1		PESD12VS1UJ		
		36	18	30	150	30	0.01		PESD36VS1UJ		

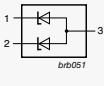
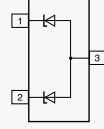
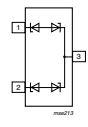
[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 [2] according to IEC 61000-4-5 (contact discharge)

General purpose ESD protection devices

Number of protected lines		V _{RWM} (V)	C _{line typ} (pF)	C _{line max} (pF)	P _{PP} max (W) [1]	ESD rating max (kV) [2]	I _R max (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)	
Unidirectional	Bidirectional											
0	1	3.3	5.5	6	-	20	0.1		PESD3V3U1BCSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3	
			8.5	10	-	30	0.1		PESD3V3V1BCSF			
		5.5	5.3	6	5.5	20	0.1		PESD5V0V1BCSF			
					20	20	0.1		PESD5V0V1BDSF			
			4.5	8	15	0.1	PESD5V0V1BSF					
				12	15.4	35	30		0.1			PESD5V0L1BSF
					35	45	100		30			0.1
				3.3	101	-	500		30			2
		5	75	-	500	30	1		PESD5V0L1BA			
		12	19	-	200	30	0.05		PESD12VL1BA			
		15	16	-	200	30	0.05		PESD15VL1BA			
		24	11	-	200	23	0.05		PESD24VL1BA			
		3.3	22	30	-	30	0.05		PESD3V3T1BL			
		4.5	65	78	-	30	0.05		PTVS4V5D1BL	DFN1006-2 (SOD882) 		
		5	11	13	45	30	0.01		PESD5V0V1BL			
			35	45	130	30	0.1		PESD5V0S1BL			
			17	25	290	15	0.01		PESD12VV1BL			
			11	13	45	30	0.01		PESD5V0V1BLD	DFN1006D-2 (SOD882D) 		
			35	45	130	30	0.1		PESD5V0S1BLD			
			11	13	45	30	0.01		PESD5V0V1BB	SOD523 (SC-79) 	1.2 x 0.8 x 0.6	
			35	45	130	30	0.1		PESD5V0S1BB			
			11	13	45	30	0.01		PESD5V0V1BA	SOD323 (SC-76) 	1.7 x 1.25 x 0.95	
			35	45		30	0.1		PESD5V0S1BA			
		2.9	3.5	-	10	0.1	PESD5V0U1BL		DFN1006-2 (SOD882) 			
							PESD5V0U1BLD		DFN1006D-2 (SOD882D) 			
							PESD5V0U1BB		SOD523 (SC-79) 			
							PESD5V0U1BA		SOD323 (SC-76) 			

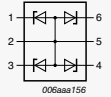
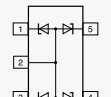
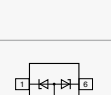
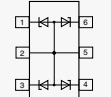
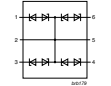
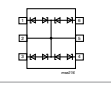
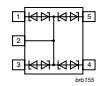
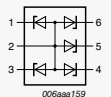
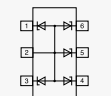
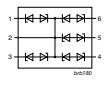
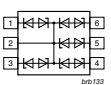
^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5^[2] according to IEC 61000-4-5 (contact discharge)

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	P_{PP} max (W) ^[1]	ESD rating max (kV) ^[2]	I_R max (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
2	1	3.3	22	28	30	15	0.3		PESD3V3L2UM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.5
		5	16	19	30	15	0.025		PESD5V0L2UM		
					-	15	0.025		PESD5V0L2UMB	DFN1006B-3 (SOT883B) 	1 x 0.6 x 0.37
		3.3	200	275	150	30	3		PESD3V3S2UQ	SOT663 	1.6 x 1.2 x 0.55
		5	150	215	150	30	0.3		PESD5V0S2UQ		
		12	38	100	150	30	0.03		PESD12VS2UQ		
		15	32	70	150	30	0.05		PESD15VS2UQ		
		24	23	50	150	23	0.05		PESD24VS2UQ		
		3.3	207	300	330	30	2		PESD3V3S2UT	SOT23 	2.9 x 1.3 x 1
		5.2	152	200	260	30	1		PESD5V2S2UT		
		12	38	75	180	30	1		PESD12VS2UT		
		15	32	70	160	30	1		PESD15VS2UT		
		24	23	50	160	23	1		PESD24VS2UT		
		36	17	35	160	30	1 (@ 30 V)		PESD36VS2UT		
		3.3	207	300	330	30	2		PESD3V3S2UAT		
		5	152	200	260	30	1		PESD5V0S2UAT		
		15	32	70	160	30	0.05		PESD15VS2UAT		
		24	23	50	160	23	0.05		PESD24VS2UAT		
		5	38	46	70	30	0.09 (@ 4 V)		PESD5V0L2UU	SOT323 (SC-70) 	2 x 1.25 x 0.95
		6	34	40	60	30	0.018 (@ 4.3 V)		PESD6V0L2UU		
0	2	3.3	101	-	350	30	2		PESD3V3L2BT	SOT23 	2.9 x 1.3 x 1
		5	75	-		30	1		PESD5V0L2BT		
		12	19	-		30	0.05		PESD12VL2BT		
		15	16	-	200	30	0.05		PESD15VL2BT		
		24	11	-		23	0.05		PESD24VL2BT		
		5	35	45	130	30	0.1		PESD5V0S2BT		
			2.9	3.5	-	10	0.1		PESD5V0U2BT		
			18	20	110	30	0.01		PESD5V0U2BM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.5
			2.9	3.5	-	10	0.1		PESD5V0V2BM		
			18	20	110	30	0.01		PESD5V0U2BMB	DFN1006B-3 (SOT883B) 	1 x 0.6 x 0.37
			35	45	130	30	0.1		PESD5V0V2BMB		
			35	45	130	30	0.1		PESD5V0S2BQA	DFN1010D-3 (SOT1215) 	1.1 x 1.0 x 0.37

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

General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	$P_{PP max}$ (W) ^[1]	ESD rating max (kV) ^[2]	$I_R max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
4	3	3.3	22	28	30	20	0.3	 006aaa156	PESD3V3L4UF	DFN1410-6 (SOT886)	 1.45 x 1 x 0.5
			110	300	110	30	1 (@ 3 V)		PESD3V3S4UF		
		5	16	19	30	20	0.025		PESD5V0L4UF		
			85	220	110	30	0.1 (@ 4.3 V)		PESD5V0S4UF		
		3.3	22	28	30	20	0.3	 ms0215	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	 ms0215	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		
		3.3	215	300	200	30	0.8	 ms0214	PESD3V3S4UD	SOT457 (SC-74)	 2.9 x 1.5 x 1
		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	 006aaa156	PESD5V0U4BF	DFN1410-6 (SOT886)	 1.45 x 1 x 0.5
			45	75	-	15	0.1	 ms0215	BZA408B	SOT457 (SC-74)	 2.9 x 1.5 x 1.0
			2.9	3.5	-	10	0.1	 006aaa156	PESD5V0U4BW	SOT665	 1.6 x 1.2 x 0.55
5	4	3.3	20	24	28	15	2	 006aaa159	PESD3V3L5UK	DFN1010-6 (SOT891)	 1 x 1 x 0.5
		5	18.5	22	30	20	0.5		PESD5V0L5UK		
		3.3	22	28	25	20	0.3		PESD3V3L5UF	DFN1410-6 (SOT886)	 1.45 x 1 x 0.5
		5	16	19	25	20	0.025		PESD5V0L5UF		
		3.3	22	28	25	20	0.3	 ms0217	PESD3V3L5UV	SOT666	 1.6 x 1.2 x 0.55
		5	16	19	25	20	0.025		PESD5V0L5UV		
		3.3	22	28	25	20	0.3		PESD3V3L5UY	SOT363 (SC-88)	 2 x 1.25 x 0.95
		5	16	19	25	20	0.025		PESD5V0L5UY		
		3.3	215	300	200	30	0.8	 ms0217	PESD3V3S5UD	SOT457 (SC-74)	 2.9 x 1.5 x 1.0
		5	165	220	200	30	0.2		PESD5V0S5UD		
		24	45	70	200	23	0.015		PESD24VS5UD		
0	5	5	2.9	3.5	-	10	0.1	 006aaa159	PESD5V0U5BF	DFN1410-6 (SOT886)	 1.45 x 1 x 0.5
								 006aaa159	PESD5V0U5BV	SOT666	 1.6 x 1.2 x 0.55

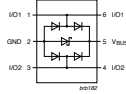
^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 ^[2] according to IEC 61000-4-5 (contact discharge)

Audio interface protection

Types in **bold** represent new products

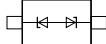
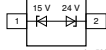
Lines	$V_{RWM}(V)$	$V_{BR\ min}(V)$	$V_{BR\ max}(V)$	$C_D\ typ(pF)$	$C_D\ max(pF)$	$I_{PPM}\ 8/20\mu s(A)$	$V_{CL}\ 8/20\mu s @ I_{PPM}(V)$	$V_{ESD}(hV)$	Configuration	Type	Package
1	3.3	4.7		22	30	-	-	30		PESD3V3T1BL	DFN1006-2 (SOD882)
	4.5	4.7		65	78	34	13.2	30		PTVS4V5D1BL	
	5	5.5	9.5	35	45	12	14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

Automotive high-speed network protection

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

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

Automotive in-vehicle network bus line protection

Number of protected lines bidirectional	V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20 μ s (A)	V_{CL} 8/20 μ s @ I_{PPM} (V)	ESD rating max (kV) [2]	I_T max [μ A] @ V_{RWM}	Configuration	Type	Package	Size (mm)
1	24	14	17	3.5	42	30	0.05	 <i>ma211</i>	PESD1IVN24-A		1.7 x 1.25 x 0.95
	27	14	17	3	45	30	0.05		PESD1IVN27-A		
2	24	14	17	3.5	42	30	0.05	 <i>ma212</i>	PESD2IVN24-T		2.0 x 1.25 x 0.95
	27	14	17	3	45	30	0.05		PESD2IVN27-T		
1	27	14	17	3	45	30	0.05	 <i>ma212F22</i>	PESD1IVN27-U	SOT323	2.0 x 1.25 x 0.95
2	24	14	17	3.5	42	30	0.05	 <i>ma212</i>	PESD2IVN24-U		
	27	14	17	3	45	30	0.05		PESD2IVN27-U		
1	15 (diode 1) 24 (diode 2)	13	17	3 (diode 1) 5 (diode 2)	70 (diode 1) 44 (diode 2)	23	0.05	 <i>ma206</i>	PESD1LIN	SOD323 (SC-76)	1.7 x 1.25 x 0.95
2	24	11	17	3	70	23	0.05	 <i>ma212</i>	PESD1CAN	SOT23	2.9 x 1.3 x 1.0
		25	30	5	41	30	0.01		PESD2CAN		2.0 x 1.25 x 0.95
		11	17	3	70	23	0.05		PESD1FLEX	SOT323	
		9.3	12	3	50	23	0.05		PESD1CAN-U		
1	26.5	8.5	11	3	53	23	0.05	 <i>ma212F22</i>	PESD1IVN-U	SOT323	2.0 x 1.25 x 0.95
2								 <i>ma212</i>	PESD2IVN-U		

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

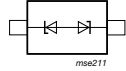
Battery and charger port protection

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

HDMI and display port protection

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

Antenna protection (NFC, WiFi,...)

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

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

USB and SATA protection

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

Common mode filter for USB 2.0

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

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

Common mode filter for USB 3.x

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

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

Common mode filter for HDMI and MIPI

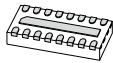
Interface	Number of protected line pairs unidirectional	Type	Differential Mode 3 dB frequency (typ.)	C_d pF typical	V_{RWM}	ESD rating ^[1] max (kV)	Channel series resistance	Package	Size (mm)
HDMI2.0	1	PCMF1HDMI2S	>6 GHz	0.3	5	15	3 Ω	WLCSP5 	0.8 x 1.2 x 0.5
	2	PCMF2HDMI2S						WLCSP10 	1.6 x 1.2 x 0.5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

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

HDMI signal conditioning

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

LCD and camera RC filter with integrated protection

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

Memory and SIM card filter with integrated protection

Types in **bold** represent new products

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

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

Types in **bold** represent new products

Baseband interface	Number of protected lines	C_d (pF)	ESD rating max (kV)	R_{dyn} (Ω)	Remark	Type	Package	Size (mm)
USB3.0 - 5 Gbps	4	0.55	8	0.3 / 0.4	ESD Protection for high-speed interfaces	IP4292CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.5	10			IP4294CZ10-TBR		
		0.5	10			PUSB3F96		
		0.5	10			PUSB3F97		
		0.5	10			PUSB3F99		
		0.5	10			PUSB3FA0		
USB3.1 - 10 Gbps	6	0.29	15	0.27	TrEOS Protection	PUSB3FR4	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48
		0.17	15	0.4		PUSB3AB4		
		0.29	15	0.27		PUSB3FR6		
		0.27	15	0.5		PUSB3TB6		
		0.15	15	0.4		PUSB3AB6		
		0.1	10	0.45		PESD5V0R1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
	1	0.15	15	0.25		PESD5V0H1BSF		
		0.2	20	0.23		PESD5V0C1BSF		
		0.2	20	0.23		PESD3V3C1BSF		
		0.28	20	0.19		PESD5V0C1USF		
		0.45	25	0.11		PESD3V3W1BSF		
		0.45	25	0.11		PESD4V0W1BSF		
		0.45	20	0.1		PESD3V3Z1BSF		
		0.1	10	0.45		PESD7V0R1BSF		
		0.15	15	0.25		PESD7V0H1BSF		
		0.2	20	0.23		PESD7V0C1BSF		
		0.45	20	0.1		PESD6V5C1USF		
	2	0.25	15	0.16		PESD1USB3S	WLCSP5 	1.2 x 0.8 x 0.6
		0.25	15	0.14	Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3S		

TVS diodes for mobile applications

Types in **bold** represent new products

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

TVS diodes for mobile applications

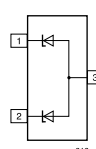
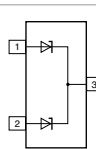
Types in **bold** represent new products

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

Types in **bold** represent new products

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

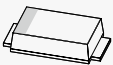
Transient voltage surge suppressor (TVS)

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	 SOD123W	2.6 x 1.7 x 1.0
400	5.0	6.40	6.70	7.00	10	9.2	43.5	5	400	PTVS5V0S1UR	PTVS5V0S1UTR		
	6.0	6.67	7.02	7.37	10	10.3	38.8	5	400	PTVS6V0S1UR	PTVS6V0S1UTR		
	6.5	7.22	7.60	7.98	10	11.2	35.7	5	250	PTVS6V5S1UR	PTVS6V5S1UTR		
	7.0	7.78	8.20	8.60	10	12.0	33.3	3	100	PTVS7V0S1UR	PTVS7V0S1UTR		
	7.5	8.33	8.77	9.21	1	12.9	31.0	0.2	50	PTVS7V5S1UR	PTVS7V5S1UTR		
	8.0	8.89	9.36	9.83	1	13.6	29.4	0.03	25	PTVS8V0S1UR	PTVS8V0S1UTR		
	8.5	9.44	9.92	10.40	1	14.4	27.8	0.01	10	PTVS8V5S1UR	PTVS8V5S1UTR		
	9.0	10.00	10.55	11.10	1	15.4	26.0	0.005	5	PTVS9V0S1UR	PTVS9V0S1UTR		
	10	11.10	11.70	12.30	1	17.0	23.5	0.005	2.5	PTVS10VS1UR	PTVS10VS1UTR		
	11	12.20	12.85	13.50	1	18.2	22.0	0.005	2.5	PTVS11VS1UR	PTVS11VS1UTR		
	12	13.30	14.00	14.70	1	19.9	20.1	0.005	2.5	PTVS12VS1UR	PTVS12VS1UTR		
	13	14.40	15.15	15.90	1	21.5	18.6	0.001	0.1	PTVS13VS1UR	PTVS13VS1UTR		
	14	15.60	16.40	17.20	1	23.2	17.2	0.001	0.1	PTVS14VS1UR	PTVS14VS1UTR		
	15	16.70	17.60	18.50	1	24.4	16.4	0.001	0.1	PTVS15VS1UR	PTVS15VS1UTR		
	16	17.80	18.75	19.70	1	26.0	15.4	0.001	0.1	PTVS16VS1UR	PTVS16VS1UTR		
	17	18.90	19.90	20.90	1	27.6	14.5	0.001	0.1	PTVS17VS1UR	PTVS17VS1UTR		
	18	20.00	21.00	22.10	1	29.2	13.7	0.001	0.1	PTVS18VS1UR	PTVS18VS1UTR		
	20	22.20	23.35	24.50	1	32.4	12.3	0.001	0.1	PTVS20VS1UR	PTVS20VS1UTR		
	22	24.40	25.60	26.90	1	35.5	11.3	0.001	0.1	PTVS22VS1UR	PTVS22VS1UTR		
	24	26.70	28.10	29.50	1	38.9	10.3	0.001	0.1	PTVS24VS1UR	PTVS24VS1UTR		
	26	28.90	30.40	31.90	1	42.1	9.5	0.001	0.1	PTVS26VS1UR	PTVS26VS1UTR		
	28	31.10	32.80	34.40	1	45.4	8.8	0.001	0.1	PTVS28VS1UR	PTVS28VS1UTR		
	30	33.30	35.10	36.80	1	48.4	8.3	0.001	0.1	PTVS30VS1UR	PTVS30VS1UTR		
	33	36.70	38.70	40.60	1	53.3	7.5	0.001	0.1	PTVS33VS1UR	PTVS33VS1UTR		
	36	40.00	42.10	44.20	1	58.1	6.9	0.001	0.1	PTVS36VS1UR	PTVS36VS1UTR		
	40	44.40	46.80	49.10	1	64.5	6.2	0.001	0.1	PTVS40VS1UR	PTVS40VS1UTR		
	43	47.80	50.30	52.80	1	69.4	5.8	0.001	0.1	PTVS43VS1UR	PTVS43VS1UTR		
	45	50.00	52.65	55.30	1	72.7	5.5	0.001	0.1	PTVS45VS1UR	PTVS45VS1UTR		
	48	53.30	56.10	58.90	1	77.4	5.2	0.001	0.1	PTVS48VS1UR	PTVS48VS1UTR		
	51	56.70	59.70	62.70	1	82.4	4.9	0.001	0.1	PTVS51VS1UR	PTVS51VS1UTR		
	54	60.00	63.15	66.30	1	87.1	4.6	0.001	0.1	PTVS54VS1UR	PTVS54VS1UTR		
	58	64.40	67.80	71.20	1	93.6	4.3	0.001	0.1	PTVS58VS1UR	PTVS58VS1UTR		
	60	66.70	70.20	73.70	1	96.8	4.1	0.001	0.1	PTVS60VS1UR	PTVS60VS1UTR		
	64	71.10	74.85	78.60	1	103.0	3.9	0.001	0.1	PTVS64VS1UR	PTVS64VS1UTR		

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

TVS diodes, 600W

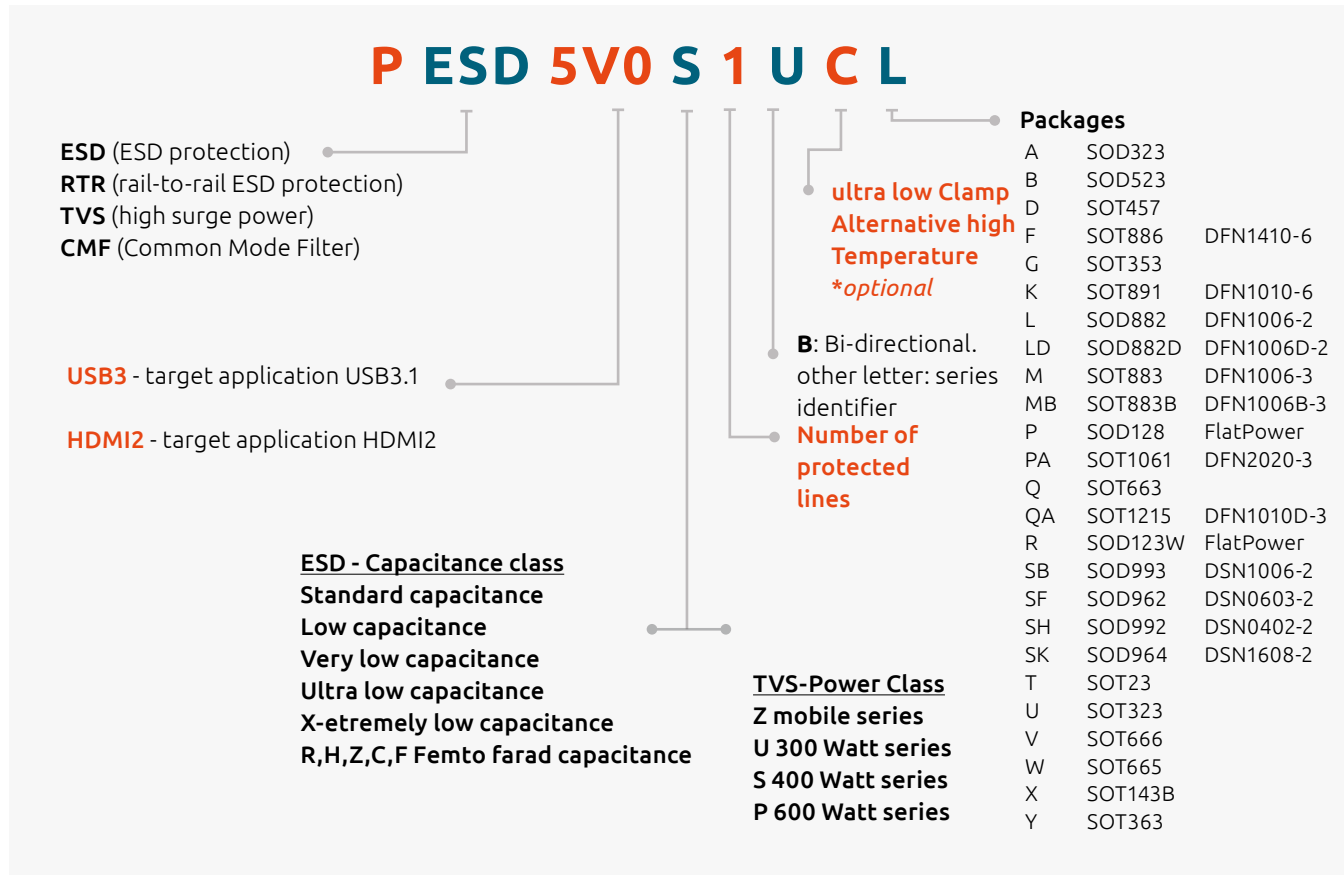
Power (W) (10 / 1000 µs waveform) ⁽¹⁾	V _{RWM} (V)	V _{BR} min (V) @ I _R	V _{BR} typ (V) @ I _R	V _{BR} max (V) @ I _R	I _R (mA)	V _{CL} max (V) @ I _{PP} ⁽¹⁾	I _{PP} (A) ⁽¹⁾	I _{RM} typ (µA) @ V _{RWM}	I _{RM} max (µA) @ V _{RWM}	Type (T _J max = 150 °C)	Type (T _J max = 185 °C)	Package	Size (mm)
600	3.5	5.20	5.60	6.00	10	8	75	5	600	PTVS3V3P1UP	PTVS3V3P1UTP		3.8 x 2.6 x 1.0
	5	6.40	6.70	7.00	10	9.2	65.2	5	400	PTVS5V0P1UP	PTVS5V0P1UTP		
	6	6.67	7.02	7.37	10	10.3	58.3	5	400	PTVS6V0P1UP	PTVS6V0P1UTP		
	6.5	7.22	7.60	7.98	10	11.2	53.6	5	250	PTVS6V5P1UP	PTVS6V5P1UTP		
	7	7.78	8.20	8.60	10	12	50	3	100	PTVS7V0P1UP	PTVS7V0P1UTP		
	7.5	8.33	8.77	9.21	1	12.9	46.5	0.2	50	PTVS7V5P1UP	PTVS7V5P1UTP		
	8	8.89	9.36	9.83	1	13.6	44.1	0.03	25	PTVS8V0P1UP	PTVS8V0P1UTP		
	8.5	9.44	9.92	10.40	1	14.4	41.7	0.01	10	PTVS8V5P1UP	PTVS8V5P1UTP		
	9	10.00	10.55	11.10	1	15.4	39	0.005	5	PTVS9V0P1UP	PTVS9V0P1UTP		
	10	11.10	11.70	12.30	1	17	35.3	0.005	2.5	PTVS10V1UP	PTVS10V1UTP		
	11	12.20	12.85	13.50	1	18.2	33	0.005	2.5	PTVS11V1UP	PTVS11V1UTP		
	12	13.30	14.00	14.70	1	19.9	30.2	0.005	2.5	PTVS12V1UP	PTVS12V1UTP		
	13	14.40	15.15	15.90	1	21.5	27.9	0.001	0.1	PTVS13V1UP	PTVS13V1UTP		
	14	15.60	16.40	17.20	1	23.2	25.9	0.001	0.1	PTVS14V1UP	PTVS14V1UTP		
	15	16.70	17.60	18.50	1	24.4	24.6	0.001	0.1	PTVS15V1UP	PTVS15V1UTP		
	16	17.80	18.75	19.70	1	26	23.1	0.001	0.1	PTVS16V1UP	PTVS16V1UTP		
	17	18.90	19.90	20.90	1	27.6	21.7	0.001	0.1	PTVS17V1UP	PTVS17V1UTP		
	18	20.00	21.00	22.10	1	29.2	20.5	0.001	0.1	PTVS18V1UP	PTVS18V1UTP		
	20	22.20	23.35	24.50	1	32.4	18.5	0.001	0.1	PTVS20V1UP	PTVS20V1UTP		
	22	24.40	25.60	26.90	1	35.5	16.9	0.001	0.1	PTVS22V1UP	PTVS22V1UTP		
	24	26.70	28.10	29.50	1	38.9	15.4	0.001	0.1	PTVS24V1UP	PTVS24V1UTP		
	26	28.90	30.40	31.90	1	42.1	14.2	0.001	0.1	PTVS26V1UP	PTVS26V1UTP		
	28	31.10	32.80	34.40	1	45.4	13.2	0.001	0.1	PTVS28V1UP	PTVS28V1UTP		
	30	33.30	35.10	36.80	1	48.4	12.4	0.001	0.1	PTVS30V1UP	PTVS30V1UTP		
	33	36.70	38.70	40.60	1	53.3	11.3	0.001	0.1	PTVS33V1UP	PTVS33V1UTP		
	36	40.00	42.10	44.20	1	58.1	10.3	0.001	0.1	PTVS36V1UP	PTVS36V1UTP		
	40	44.40	46.80	49.10	1	64.5	9.3	0.001	0.1	PTVS40V1UP	PTVS40V1UTP		
	43	47.80	50.30	52.80	1	69.4	8.6	0.001	0.1	PTVS43V1UP	PTVS43V1UTP		
	45	50.00	52.65	55.30	1	72.7	8.3	0.001	0.1	PTVS45V1UP	PTVS45V1UTP		
	48	53.30	56.10	58.90	1	77.4	7.8	0.001	0.1	PTVS48V1UP	PTVS48V1UTP		
	51	56.70	59.70	62.70	1	82.4	7.3	0.001	0.1	PTVS51V1UP	PTVS51V1UTP		
	54	60.00	63.15	66.30	1	87.1	6.9	0.001	0.1	PTVS54V1UP	PTVS54V1UTP		
	58	64.40	67.80	71.20	1	93.6	6.4	0.001	0.1	PTVS58V1UP	PTVS58V1UTP		
	60	66.70	70.20	73.70	1	96.8	6.2	0.001	0.1	PTVS60V1UP	PTVS60V1UTP		
	64	71.10	74.85	78.60	1	103	5.8	0.001	0.1	PTVS64V1UP	PTVS64V1UTP		

ESD protection, TVS, filtering
and signal conditioning

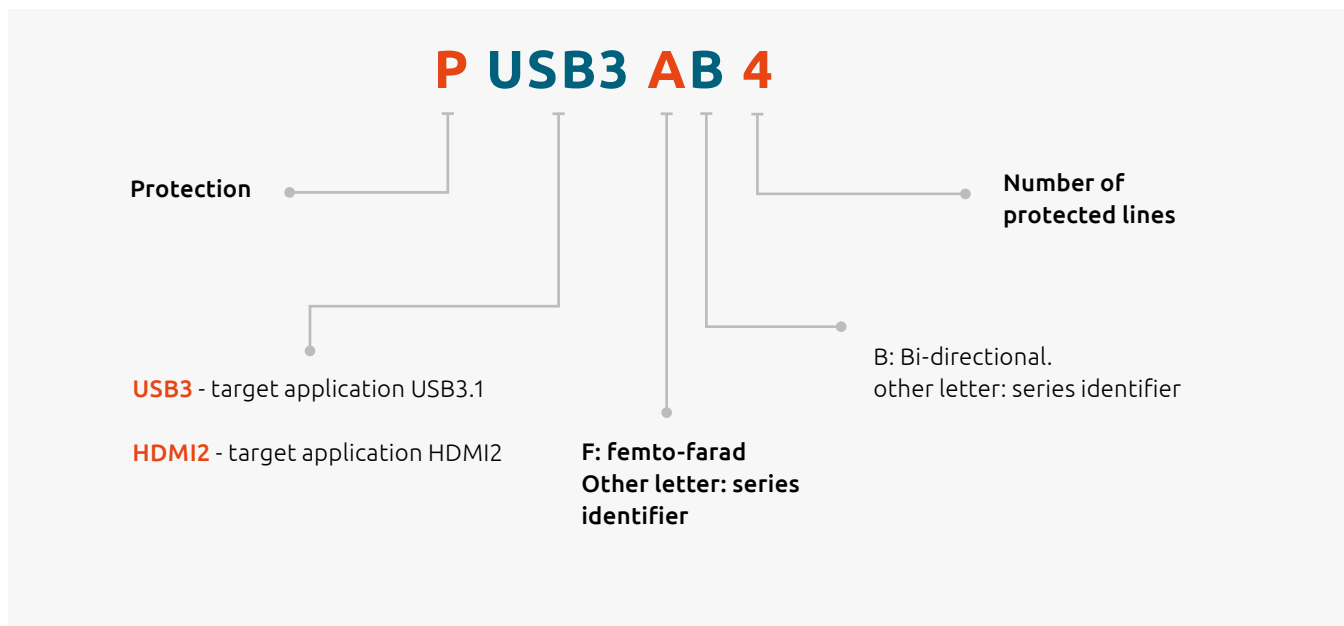
⁽¹⁾ 10 / 1000 µs according to IEC 61643-321

Nomenclatures

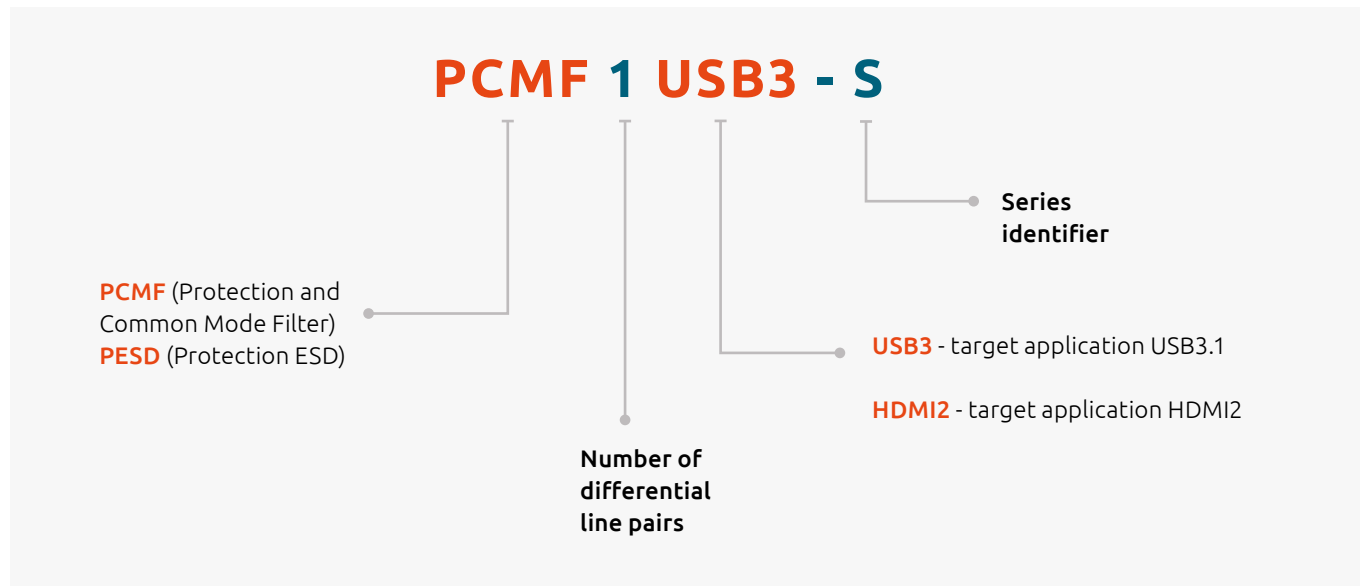
Nomenclature - protection devices



Nomenclature - application specific ESD protection



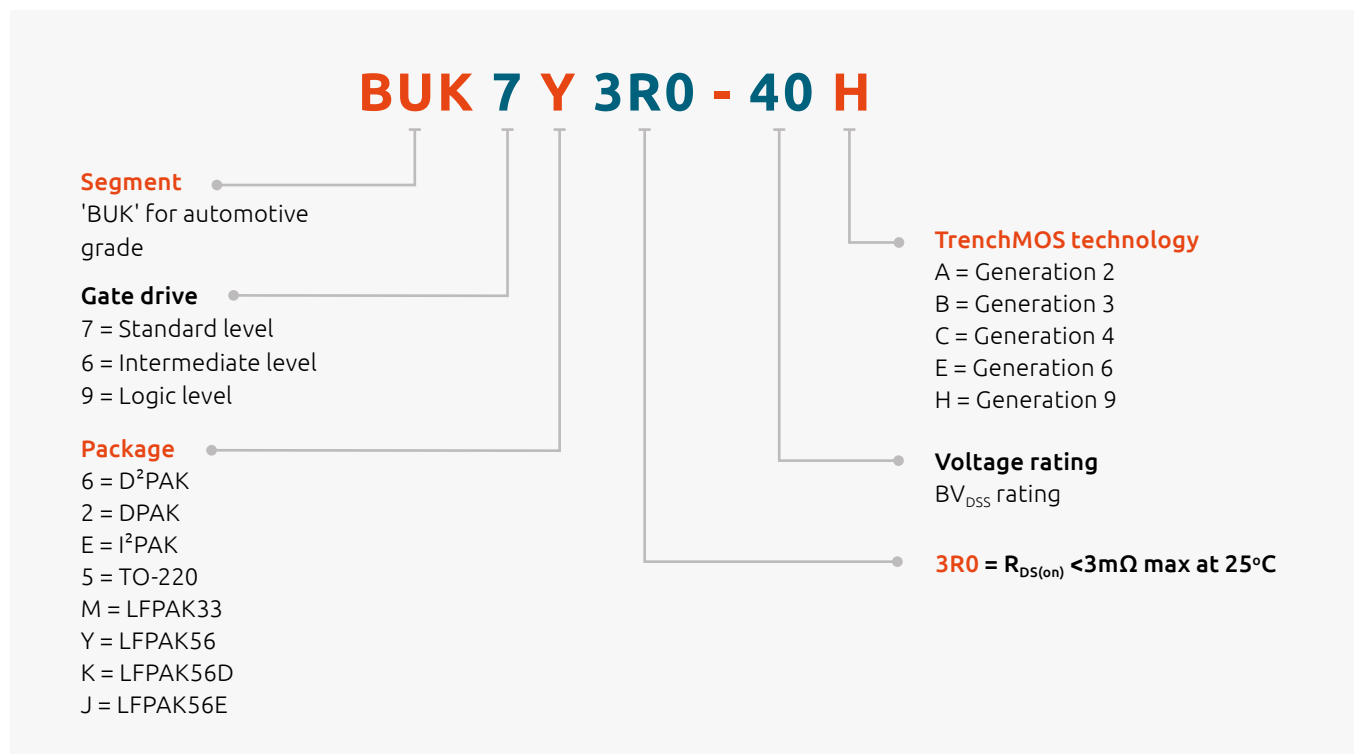
Nomenclature - common mode filter with ESD protection





Automotive MOSFETs.....	74
Automotive grade MOSFETs nomenclature.....	74
N-channel 30V automotive power MOSFETs.....	74
N-channel 40V automotive power MOSFETs.....	75
N-channel 55V-60V automotive power MOSFETs.....	76
N-channel 75V-80V automotive power MOSFETs.....	79
N-channel 100V automotive power MOSFETs.....	80
Small-signal automotive MOSFETs – Low $R_{DS(on)}$	82
Small-signal automotive MOSFETs – High $R_{DS(on)}$	84
Small-signal automotive MOSFETs – Dual.....	84
Power MOSFETs	86
N-channel 25V-30V MOSFETs.....	86
N-channel 40V-60V MOSFETs.....	88
N-channel 75V-200V MOSFETs	90
P-channel MOSFETs	92
Power MOSFETs nomenclature	93
Small-signal MOSFETs	94
Small-signal MOSFETs in DFN1006 and DFN1006B packages	94
Small-signal MOSFETs in DFN1010D-3 single and DFN1010B-3 dual packages	95
Small-signal low-leakage MOSFETs.....	95
Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages	96
Small-signal MOSFETs in WLCSP4 and WLCSP6 packages	97
Small-signal MOSFETs single (N-channel)	98
Small-signal MOSFETs single (P-channel)	100
Small-signal MOSFET–Schottky combination.....	100
Small-signal MOSFETs dual.....	102
Small-signal MOSFETs complementary	102

Automotive grade MOSFETs nomenclature



N-channel 30V automotive power MOSFETs

Package name	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ 10 V (mΩ)	R _{DS(on)} [max] @ 5 V (mΩ)	I _D [max] @ 25 °C (A)	R _{th(j-mb)} [max] (K/W)
D ² PAK (SOT404)	BUK962R8-30B	30	2.4	2.8	75	0.5
	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
	BUK9607-30B	30	5	7	75	0.95
	BUK7607-30B	30	7		75	0.95
LFPAK56; Power-SO8 (SOT669)	BUK9Y07-30B	30	6	7	75	1.42
	BUK7Y07-30B	30	7		75	1.42
	BUK9Y11-30B	30	9	11	59	2
	BUK7Y10-30B	30	10		67	1.76
	BUK9Y22-30B	30	19	22	37.7	2.53
	BUK7Y20-30B	30	20		39.5	2.53
LFPAK56D (SOT1205)	BUK9K5R1-30E	30	4.4	5.3	40	2.21
	BUK9K5R6-30E	30	4.7	5.8	40	2.36
	BUK7K5R1-30E	30	5.1		40	2.21
	BUK7K5R6-30E	30	5.6		40	2.36
LFPAK33 (SOT1210)	BUK9M5R2-30E	30	4.1	5.2	70	1.89
	BUK9M6R6-30E	30	5.3	6.6	70	2
	BUK9M10-30E	30	7.8	10	54	2.75
	BUK9M17-30E	30	14	17	37	3.4

N-channel 40V automotive power MOSFETs

Types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)		BUK751R8-40E	40	1.8	120	0.43
		BUK752R3-40E	40	2.3	120	0.51
		BUK753R1-40E	40	3.1	100	0.64
		BUK758R3-40E	40	7.4	75	1.56
D ² PAK (SOT404)		BUK961R6-40E	40	1.4	120	0.43
		BUK761R6-40E	40	1.6	120	0.43
		BUK761R7-40E	40	1.6	120	0.46
		BUK762R0-40E	40	2	120	0.51
		BUK962R6-40E	40	2.4	100	0.57
		BUK762R6-40E	40	2.6	100	0.57
		BUK963R1-40E	40	2.7	100	0.64
		BUK762R9-40E	40	2.9	100	0.64
		BUK964R1-40E	40	3.5	75	0.82
		BUK764R0-40E	40	4	75	0.82
		BUK965R4-40E	40	4.4	75	1.09
		BUK765R3-40E	40	4.9	75	1.09
		BUK768R1-40E	40	7.2	75	1.56
DPAK (SOT428)		BUK9209-40B	40	7	75	0.95
		BUK7208-40B	40	8	75	0.95
I ² PAK (SOT226)		BUK7E1R8-40E	40	1.8	120	0.43
		BUK7E1R9-40E	40	1.9	120	0.46
		BUK7E2R3-40E	40	2.3	120	0.51
		BUK7E3R1-40E	40	3.1	100	0.64
		BUK7E8R3-40E	40	7.4	75	1.56
LFPAK56E (SOT1023)		BUK7J1R4-40H	40	1.4	120	0.38
LFPAK56; Power-SO8 (SOT669)		BUK7Y1R7-40H	40	1.7	120	0.51
		BUK7Y2R0-40H	40	2	120	0.69
		BUK7Y2R5-40H	40	2.5	120	0.79
		BUK7Y3R0-40H	40	3	120	0.87
		BUK9Y3R0-40E	40	2.5	100	0.77
		BUK7Y3R5-40E	40	3.5	100	0.9
		BUK9Y3R5-40E	40	3.6	100	0.9
		BUK9Y4R4-40E	40	3.7	100	1.02
		BUK7Y4R4-40E	40	4.4	100	1.02
		BUK9Y7R6-40E	40	6	79	1.58
		BUK7Y7R6-40E	40	7.6	79	1.58
		BUK9Y12-40E	40	10	52	2.31
		BUK7Y12-40E	40	12	52	2.31
		BUK9Y21-40E	40	17	33	3.33
		BUK7Y21-40E	40	21	33	3.33
		BUK9Y29-40E	40	25	25	4.03
		BUK7Y29-40E	40	29	26	4.03
LFPAK56D (SOT1205)		BUK7K6R2-40E	40	5.8	40	2.21
		BUK9K6R2-40E	40	6	40	2.21
		BUK9K6R8-40E	40	6.1	40	2.36
		BUK7K6R8-40E	40	6.8		2.36
		BUK9K8R7-40E	40	8	30	2.84
		BUK7K8R7-40E	40	8.5		2.84
		BUK9K18-40E	40	16	30	3.96
		BUK7K18-40E	40	19	24.2	3.96
		BUK9K25-40E	40	24	18.2	4.68
		BUK7K25-40E	40	25		4.68

N-channel 40V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFP3K33 (SOT1210)	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M8R0-40E	40	8		69	2
	BUK7M10-40E	40	10		56	2.43
	BUK7M12-40E	40	12		48	2.75
	BUK7M21-40E	40	21		33	3.4
	BUK7M45-40E	40	45		19	4.8
	BUK9M14-40E	40	11	14	44	2.75
	BUK9M24-40E	40	20	24	30	3.4
	BUK9M52-40E	40	40	52	17.6	4.8
	BUK9M7R2-40E	40	5.8	7.2	70	1.89
	BUK9M9R1-40E	40	7.3	9.1	64	2
	BUK9M11-40E	40	9	11	53	2.43

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	BUK953R5-60E	60	3.4	3.7	120	0.51
	BUK954R8-60E	60	4.5	4.9	100	0.64
D2PAK (SOT404)	BUK7610-55AL	55	10		75	0.5
	BUK9620-55A	55	18	20	54	1.2
	BUK7620-55A	55	20		54	1.2
	BUK9624-55A	55	22	24	46	1.4
	BUK7624-55A	55	24		47	1.4
	BUK9628-55A	55	25	28	42	1.5
	BUK7628-55A	55	28		42	1.5
	BUK9635-55A	55	32	35	34	1.8
	BUK7635-55A	55	35		35	1.7
	BUK9675-55A	55	68	75	20	2.4
	BUK7675-55A	55	75		20.3	2.4
D ² PAK (SOT404)	BUK962R5-60E	60	2.3	2.5	120	0.43
	BUK762R4-60E	60	2.4		120	0.43
	BUK962R8-60E	60	2.5	2.8	120	0.46
	BUK762R6-60E	60	2.6		120	0.46
	BUK963R3-60E	60	3	3.3	120	0.51
	BUK763R1-60E	60	3.1		120	0.51
	BUK964R2-60E	60	3.9	4.2	100	0.57
	BUK763R9-60E	60	3.9		100	0.57
	BUK964R8-60E	60	4.4	4.8	100	0.64
	BUK764R4-60E	60	4.5		100	0.64
	BUK966R5-60E	60	5.9	6.5	75	0.82
	BUK766R0-60E	60	6		75	0.82
	BUK969R0-60E	60	8	9	75	1.09
	BUK768R3-60E	60	8.3		75	1.09
	BUK9614-60E	60	13	14	56	1.56
	BUK7613-60E	60	13		58	1.56

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (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
	BUK7277-55A	55	77		18	2.9
	BUK92150-55A	55	125	140	11	4.1
	BUK72150-55A	55	150		11	4.1
I ² PAK (SOT226)	BUK7E2R6-60E	60	2.6		120	0.43
	BUK7E3R5-60E	60	3.5		120	0.51
	BUK7E4R6-60E	60	4.6		100	0.64
	BUK7E13-60E	60	13		58	1.56
LFPAK56; Power-SO8 (SOT669)	BUK9Y4R8-60E	60	4.1	4.8	100	0.63
	BUK7Y4R8-60E	60	4.8		100	0.63
	BUK9Y6R0-60E	60	5.2	6	100	0.77
	BUK9Y7R2-60E	60	5.6	7.2	100	0.9
	BUK7Y6R0-60E	60	6		100	0.77
	BUK7Y7R2-60E	60	7.2		100	0.9
	BUK9Y8R7-60E	60	7.5	8.7	86	1.02
	BUK7Y8R7-60E	60	8.7		87	1.02
	BUK9Y15-60E	60	13	15	53	1.58
	BUK7Y15-60E	60	15		53	1.59
	BUK9Y25-60E	60	22	25	34	2.31
	BUK7Y25-60E	60	25		34	2.31
	BUK9Y43-60E	60	38	43	22	3.33
	BUK7Y43-60E	60	43		22	3.33
	BUK9Y59-60E	60	52	59	16.7	4.03
	BUK7Y59-60E	60	59		17	4.03

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205)	BUK7K12-60E	60	9.3			2.21
	BUK7K13-60E	60	10		40	2.36
	BUK9K12-60E	60	11	12	35	2.21
	BUK9K13-60E	60	12	13	40	2.36
	BUK7K17-60E	60	14		30	2.84
	BUK9K17-60E	60	16	17	26	2.84
	BUK7K35-60E	60	30		20.7	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK7K52-60E	60	45		15.4	4.68
	BUK9K52-60E	60	49	55	16	4.68
LFPAK33 (SOT1210)	BUK7M9R9-60E	60	9.9		60	1.89
	BUK9M12-60E	60	11	12	54	1.89
	BUK7M12-60E	60	12		53	2
	BUK9M15-60E	60	13	15	47	2
	BUK7M15-60E	60	15		43	2.43
	BUK9M19-60E	60	17	19	38	2.43
	BUK7M19-60E	60	19		36	2.75
	BUK9M24-60E	60	21	24	32	2.75
	BUK7M33-60E	60	33			3.4
	BUK9M42-60E	60	37	42	22	3.4
	BUK7M42-60E	60	42		20	4.17
	BUK9M53-60E	60	46	53	17	4.17
	BUK7M67-60E	60	67		14	4.8
	BUK9M85-60E	60	73	85	12.8	4.8
SOT223	BUK9832-55A/CU	55	29	32		
	BUK9880-55A/CU	55	73	80		
	BUK7880-55A/CU	55	80			
	BUK98150-55A/CU	55	137	150		
	BUK78150-55A/CU	55	150			

N-channel 75V-80V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	BUK753R8-80E	80	4		120	0.43
D ² PAK (SOT404)	BUK7613-75B	75	13		75	0.95
	BUK9616-75B	75	14	16	67	0.95
	BUK7623-75A	75	23		53	1.1
	BUK763R8-80E	80	3.8		120	0.43
	BUK964R2-80E	80	4	4.2	120	0.43
	BUK764R2-80E	80	4.2		120	0.46
	BUK964R7-80E	80	4.5	4.7	120	0.46
	BUK769R6-80E	80	9.6		75	0.82
	BUK9611-80E	80	10	11	75	0.82
DPAK (SOT428)	BUK7214-75B	75	14		69	0.95
	BUK9217-75B	75	15	17	64	0.95
	BUK9226-75A	75	25	26	45	1.3
	BUK7226-75A	75	26		45	1
LFPAK56; Power-SO8 (SOT669)	BUK7Y7R8-80E	80	7.8		100	0.63
	BUK9Y8R5-80E	80	8	8.5	100	0.63
	BUK7Y9R9-80E	80	9.9		89	0.77
	BUK9Y11-80E	80	10	11	84	0.77
	BUK9Y14-80E	80	14	15	62	1.02
	BUK7Y14-80E	80	14		65	1.02
	BUK9Y25-80E	80	25	27	37	1.58
	BUK7Y25-80E	80	25		39	1.58
	BUK9Y41-80E	80	41	45	24	2.33
	BUK7Y41-80E	80	41		25	2.31
	BUK9Y72-80E	80	72	78	15	3.33
	BUK7Y72-80E	80	72		16	3.33
	BUK9Y107-80E	80	98	107	11.8	4.03
	BUK7Y98-80E	80	98		12.3	4.03
LFPAK56D (SOT1205)	BUK7K15-80E	80	15		23	2.21
	BUK7K17-80E	80	17		21	2.36
	BUK7K23-80E	80	23		17	2.21
	BUK9K20-80E	80	17	19	23	2.84
	BUK9K22-80E	80	19	22	21	2.36
	BUK9K30-80E	80	26	30	17	2.84
LFPAK33 (SOT1210)	BUK7M17-80E	80	17		43	1.89
	BUK9M23-80E	80	20	23	37	1.89
	BUK7M22-80E	80	22		37	2
	BUK7M27-80E	80	27		30	2.43
	BUK9M28-80E	80	28	28	33	2
	BUK9M35-80E	80	35	35	26	2.43

N-channel 100V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78) 	BUK755R4-100E	100	5.2		120	0.43
D ² PAK (SOT404) 	BUK765R0-100E	100	5		120	0.43
	BUK965R8-100E	100	5.6	5.8	120	0.43
	BUK768R1-100E	100	8.1		100	0.57
	BUK969R3-100E	100	8.9	9.3	100	0.57
	BUK7613-100E	100	13		72	0.82
	BUK9615-100E	100	14	15	66	0.82
	BUK7631-100E	100	31		34	1.56
	BUK9637-100E	100	36	37	31	1.56
	BUK9660-100A	100	58	60	26	1.4
	BUK7660-100A	100	60		26	1.4
	BUK9675-100A	100	72	75	23	1.5
	BUK7675-100A	100	75		23	1.5
	BUK96180-100A	100	173	180	11	2.8
DPAK (SOT428) 	BUK7227-100B	100	27		48	0.95
	BUK9230-100B	100	28	30	47	0.95
	BUK9240-100A	100	39	40	33	1.3
	BUK7240-100A	100	40		34	1.3
	BUK9275-100A	100	72	75	21.7	1.7
	BUK7275-100A	100	75		21.7	1.7
I ² PAK (SOT226) 	BUK7E5R2-100E	100	5.2		120	0.43
LFPAK56; Power-SO8 (SOT669) 	BUK9Y12-100E	100	12	12	85	0.63
	BUK7Y12-100E	100	12		85	0.63
	BUK9Y15-100E	100	15	15	69	0.77
	BUK7Y15-100E	100	15		68	0.77
	BUK9Y19-100E	100	18	19	56	0.9
	BUK7Y19-100E	100	19		56	0.9
	BUK9Y22-100E	100	22	22	49	1.02
	BUK7Y22-100E	100	22		49	1.02
	BUK9Y38-100E	100	38	38	30	1.58
	BUK7Y38-100E	100	38		30	1.58
	BUK9Y65-100E	100	64	65	19	2.31
	BUK7Y65-100E	100	65		19	2.31
	BUK9Y113-100E	100	110	113	12	3.33
	BUK7Y113-100E	100	113		12	3.33
	BUK9Y153-100E	100	146	153	9.4	4.03
	BUK7Y153-100E	100	153		9.4	4.03

N-channel 100V automotive power MOSFETs

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

P-channel 30V-60V automotive power MOSFETs

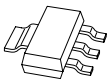
Types in **bold red** are in development

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56	BUK6Y12-30P	30	12	67.3	1.4
	BUK6Y20-30P	30	20	41.1	2.3
	BUK6Y15-40P	40	15	63.1	1.4
	BUK6Y25-40P	40	25	39.4	2.3
	BUK6Y32-60P	60	32	38.7	1.4
	BUK6Y57-60P	60	57	22.7	2.3

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

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N-channel	20	8	4.7	0.45	1	2	-	24	29	40	
			2	0.45	1	2	-	57	64	78	
			2.8	0.4	1	2	-	64	78	110	
		12	12.9	0.4	0.9	2	-	10	12	16	
			11.4	0.4	0.9	2	-	12	15	20	
			6.3	0.75	1.25	2	-	16	24	-	
	30	12	11.3	0.4	0.9	2	-	13	14	17	
			5	0.4	0.9	2	-	28	32	37	
			4	0.75	1.25	2	-	55	72	-	
			0.9	0.75	1.25	2	-	212	269	-	
		20	5.5	1	2.5	2	17	22	-	-	
			3.9	1	2.5	2	30	39	-	-	
			3.7	1	2.5	2	54	70	-	-	
	40	15	7	1.4	2.1	0.5	-	18	22	-	
			19	1	2	-	-	23	-	-	
		20	7	2.4	4	0.5	19	-	-	-	
			2.7	1	2.5	1	64	79	-	-	
			2.5	1	2.5	1	95	120	-	-	
			19	1.3	2.7	-	23	30			
			19	2.4	4	-	25	-			
	60	20	5	1.3	2.7	0.5	32	38	-	-	
			4	1.3	2.7	2	42	49	-	-	
			3.1	1.3	2.7	2	46	52	-	-	
			3	1.3	2.7	2	72	85	-	-	
			2.1	1.3	2.7	2	96	108	-	-	
			1.5	1.3	2.7	2	176	196	-	-	
			0.8	1.3	2.7	2	300	332	-	-	
			13	1.3	2.7	-	43	53	-	-	
		80	2.8	1.3	2.7	2	80	92	-	-	
			1.9	1.3	2.7	2	175	195	-	-	
	100	20	1.1	1.3	2.7	2	345	390	-	-	
			1.5	1.3	2.7	2	285	301	-	-	
			1.1	1.3	2.7	2	527	555	-	-	
P-channel	12	12	11.8	0.47	0.9	-	-	15	17	21	
	20	8	5.6	0.45	0.95	2	-	27	38	50	
			6	0.45	0.95	2	-	37	45	59	
			2	0.5	1.1	-	-	100	155	210	
			2.3	0.45	0.95	-	-	120	150	200	
		12	10.3	0.47	0.9	2	-	19	22	28	
			5.7	0.75	1.25	2	-	27	39	-	
			5	0.47	0.9	2,3	-	28	31	36	
			5.3	0.75	1.25	2	-	28	42	-	
			5	0.47	0.9	2	-	39	45	56	
			5.7	0.75	1.25	2	-	41	56	-	
			3.5	0.75	1.25	-	-	48	71	-	
			3.3	0.75	1.25	2	-	67	99	-	
			4.1	0.75	1.25	2	-	70	101	-	
			2.4	1	2.5	2	-	97	147	-	
	30	20	8.8	1	2.5	-	24	32	-	-	
			4.2	1	3	2	35	47	-	-	
	40	20	1.5	1	2.5	1	180	220	-	-	
			5	1.5	3	1	32	42	-	-	
	70	20	14	1.4	2.7	-	43	70			
			2.3	1	3	2	156	177	-	-	

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	DFN2020MD-6 (SOT1220)	DFN2020D-6 (SOT1118D)	DFN1010D-3 (SOT1215)
							
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65	1.1 x 1.0 x 0.37
	1700	600	250	200	1250	1250	1000
			PMV28UNEA				
				PMF63UNEA			
			PMV65UNEA				
					PMPB10XNEA		
					PMPB12XNEA		
			PMV20XNEA		PMPB20XNEA		
					PMPB13XNEA		
					PMPB29XNEA		
						PMDPB56XNEA	
				PMF250XNEA			
			PMV25ENEA				
			PMV50ENEA				
			PMV100ENEA				
					BUK9D23-40E		
			PMV65ENEA				
			PMV130ENEA				
					BUK6D23-40E		
					BUK7D25-40E		
					PMPB55ENEA		
			PMV55ENEA				
					PMPB85ENEA		
			PMV120ENEA				
			PMV230ENEA				
			PMV450ENEA				
					BUK6D43-60E		
					PMPB95ENEA		
					PMPB215ENEA		
							PMXB360ENEA
	PMT280ENEA PMT560ENEA		PMV280ENEA				
					PMPB15XPA		
			PMV27UPEA				
		PMN40UPEA					
			NX2301P				
			BSH205G2				
					PMPB20XPEA		
		PMN27XPEA					
					PMPB29XPEA		
			PMV30XPEA				
					PMPB43XPEA		
		PMN42XPEA					
			PMV48XPA				
			PMV65XPEA				
		PMN70XPEA					
			PMV100XPEA				
					PMPB27EPA		
			PMV50EPEA		PMPB50EPEA		
			PMV250EPEA				
					PMPB45EPA		
					BUK6D43-40P		
	PMT200EPEA						

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

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

Small-signal automotive MOSFETs – Dual

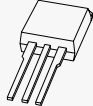
Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	20	8	0.8	0.5	0.95	2	-	380	620	1100	
	30	12	4	0.75	1.25	2	-	55	72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

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

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

N-channel 25V-30V MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN1R1-30PL	30	1.3	1.6	120	118
	PSMN1R6-30PL	30	1.7	2.1	100	101
	PSMN1R8-30PL	30	1.8	2.3	100	83
	PSMN2R0-30PL	30	2.1	2.8	100	55
	PSMN2R7-30PL	30	2.7	3.6	100	32
	PSMN3R4-30PL	30	3.4	4.1	100	31
	PSMN4R3-30PL	30	4.3	6.2	100	19
	PSMN017-30PL	30	17	23	32	5.1
	PSMN022-30PL	30	22	34	30	4.4
D ² PAK (SOT404) 	PSMNR90-30BL	30	1	1.4	120	118
	PSMN1R5-30BLE	30	1.5	1.85	120	108
	PSMN1R8-30BL	30	1.8	2.1	100	83
	PSMN1R6-30BL	30	1.9	2.2	100	101
	PSMN2R0-30BL	30	2.1	2.9	100	55
	PSMN2R7-30BL	30	3	3.7	100	32
	PSMN3R4-30BL	30	3.3	3.8	100	31
	PSMN3R4-30BLE	30	3.4	5	120	37
	PSMN4R3-30BL	30	4.1	5.2	100	19
	PSMN017-30BL	30	17	23	32	5.1
	PSMN022-30BL	30	22	30	30	4.4
IPAK (SOT226) 	PSMN1R1-30EL	30	1.3	1.6	120	118
	PSMN017-30EL	30	17	23	32	5.1
LFPAK56 (Power-SO8) 	PSMNR51-25YLH	25	0.51	0.75	300	52
	PSMNR60-25YLH	25	0.6	0.89	300	40.9
	PSMN0R7-25YLD	25	0.74	0.92	300	50.9
	PSMN0R9-25YLD	25	0.86	1.2	300	41.5
	PSMN1R0-25YLD	25	1.02	1.4	100	33.2
	PSMN1R1-25YLC	25	1.15	1.5	100	39
	PSMN1R2-25YLD	25	1.15	1.7	100	28
	PSMN1R2-25YL	25	1.2	1.9	100	50.6
	PSMN1R2-25YLC	25	1.3	1.7	100	31
	PSMN1R5-25YL	25	1.5	2.2	100	36
	PSMN1R7-25YLD	25	1.68	2.4	100	21.5
	PSMN2R0-25YLD	25	2	2.9	100	15.7
	PSMN2R9-25YLC	25	3.15	4.1	100	16
	PSMN4R0-25YLC	25	4.5	5.8	84	10.9
	PSMN5R4-25YLD	25	5.4	8.4	70	5.7
	PSMN6R0-25YLD	25	6.03	10	61	4.9
	PSMN6R0-25YLB	25	6.1	7.9	73	9

N-channel 25V-30V MOSFETs

Types in **bold red** are in development

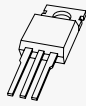
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(boot)}$ [typ] (nC)
LFPAK56 (Power-SO8) 	PSMNR58-30YLH	30	0.58	0.86	300	48
	PSMNR70-30YLH	30	0.7	0.98	300	40
	PSMN0R9-30YLD	30	0.87	1.1	300	51
	PSMN1R0-30YLD	30	1.02	1.3	300	38.2
	PSMN1R0-30YLC	30	1.15	1.4	100	50
	PSMN1R2-30YLD	30	1.24	1.6	100	32
	PSMN1R2-30YLC	30	1.25	1.7	100	38
	PSMN1R3-30YL	30	1.3	2	100	46.6
	PSMN1R4-30YLD	30	1.42	1.9	100	27.6
	PSMN1R5-30YL	30	1.5	1.9	100	36.2
	PSMN1R5-30YLC	30	1.55	2.1	100	30
	PSMN1R7-30YL	30	1.7	2.1	100	36.2
	PSMN2R0-30YLD	30	2	2.5	100	21.8
	PSMN2R0-30YL	30	2	2.6	100	30
	PSMN2R0-30YLE	30	2	3.5	100	41
	PSMN2R2-30YLC	30	2.15	2.8	100	26
	PSMN2R4-30YLD	30	2.4	3.1	100	18
	PSMN2R5-30YL	30	2.4	3.2	100	27
	PSMN2R6-30YLC	30	2.8	3.7	100	18
	PSMN3R0-30YL	30	3	4	100	21
	PSMN3R0-30YLD	30	3	4	100	14.5
	PSMN3R5-30YL	30	3.5	4.6	100	19
	PSMN4R0-30YL	30	4	5.3	100	17.6
	PSMN4R0-30YLD	30	4	5.5	95	9.6
	PSMN4R1-30YLC	30	4.35	5.7	92	11
	PSMN5R0-30YL	30	5	6.7	91	14.1
	PSMN6R0-30YL	30	6	7.9	79	11
	PSMN6R0-30YLD	30	6	8.4	66	6.7
	PSMN6R1-30YLD	30	6.1	8.4	66	6.4
	PSMN6R0-30YLB	30	6.5	8.1	71	9
	PSMN7R0-30YL	30	7	9.1	76	10
	PSMN7R0-30YLC	30	7.1	8.9	61	7.9
	PSMN7R5-30YLD	30	7.5	10	51	5.8
	PSMN9R1-30YL	30	9.1	14	57	8.4
	PSMN9R5-30YLC	30	9.8	12	44	5
	PSMN013-30YLC	30	13	17	32	4
	PSMN011-30YLC	30	11.6	15	37	4.9
	PSMN3R2-30YLC	30	3.5	4.6	100	14.2
	PSMN4R5-30YLC	30	4.8	6.1	84	9.6

N-channel 25V-30V MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK33 (SOT1210) 	PSMN2R0-25MLD	25	2	3.1	70	15.9
	PSMN2R8-25MLC	25	2.8	3.8	70	16.3
	PSMN3R5-25MLD	25	3.51	5.4	70	8.7
	PSMN3R9-25MLC	25	4.15	5.6	70	9.7
	PSMN5R3-25MLD	25	5.3	8.4	70	5.9
	PSMN6R1-25MLD	25	6.13	10	60	4.9
	PSMN9R0-25MLC	25	8.65	11	55	5.4
	PSMN1R6-30MLH	30	1.6	2.2	100	16
	PSMN2R4-30MLD	30	2.4	3.2	70	16
	PSMN3R0-30MLC	30	3.15	4.1	70	16.1
	PSMN4R2-30MLD	30	4.3	5.7	70	9.2
	PSMN4R4-30MLC	30	4.65	6	70	10.6
	PSMN6R4-30MLD	30	6.4	8.3	66	6.5
	PSMN6R5-30MLD	30	6.5	8.6	65	6.4
	PSMN7R0-30MLC	30	7	9	67	8.2
	PSMN7R5-30MLD	30	7.6	10	57	5.8
	PSMN9R8-30MLC	30	9.8	12	50	5
	PSMN013-30MLC	30	13	17	39	3.7
	PSMN020-30MLC	30	18	27	31.8	4.6

N-channel 40V-60V MOSFETs

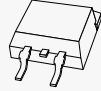
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN1R5-40PS	40	1.6		150	136
	PSMN1R9-40PL	40	1.7	1.9	150	230
	PSMN2R2-40PS	40	2.1		100	110
	PSMN2R1-40PL	40	2.2	2.6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

N-channel 40V-60V MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	PSMN1R1-40BS	40	1.3		120	136
	PSMN2R2-40BS	40	2.2		100	130
	PSMN2R8-40BS	40	2.9		100	71
	PSMN4R5-40BS	40	4.5		100	35
	PSMN8R0-40BS	40	7.6		77	21
	PSMN1R7-60BS	60	2		120	137
	PSMN3R0-60BS	60	3.2		100	130
	PSMN4R6-60BS	60	4.4		100	70.8
	PSMN7R6-60BS	60	7.8		92	38.7
	PSMN015-60BS	60	15		50	20.9
I ² PAK (SOT226) 	PSMN1R5-40ES	40	1.6		120	136
	PSMN2R0-60ES	60	2.2		120	137
	PSMN3R0-60ES	60	3		100	130
LFPAK56 (Power-SO8) 	PSMN1R0-40YLD	40	1.1	1.4	280	127
	PSMN1R4-40YLD	40	1.4	1.9	240	96
	PSMN1R8-40YLC	40	1.8	2.1	100	96
	PSMN2R6-40YS	40	2.8		100	63
	PSMN3R3-40YS	40	3.3		100	49
	PSMN4R0-40YS	40	4.2		100	38
	PSMN5R8-40YS	40	5.7		90	28.8
	PSMN8R3-40YS	40	8.6		70	20
	PSMN014-40YS	40	14		46	12
	PSMN4R0-60YS	60	4		100	56
	PSMN4R1-60YL	60	4.1	4.8	100	103
	PSMN5R2-60YL	60	5.2	6	100	78.4
	PSMN5R5-60YS	60	5.2		100	56
	PSMN5R6-60YL	60	5.6	7.2	100	66.8
	PSMN7R0-60YS	60	6.4		89	45
	PSMN7R5-60YL	60	7.5	8.7	86	60.6
	PSMN8R5-60YS	60	8		76	39
	PSMN012-60YS	60	11		59	28.4
	PSMN013-60YL	60	13	15	53	33.2
	PSMN030-60YS	60	15		29	13
LFPAK33 (SOT1210) 	PSMN011-60ML	60	11	13	61	37.2
	PSMN011-60MS	60	11		61	23

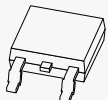
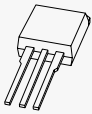
N-channel 75V-200V MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN3R3-80PS	80	3.3		120	139
	PSMN3R5-80PS	80	3.5		120	139
	PSMN4R4-80PS	80	4.1		100	112
	PSMN4R3-80PS	80	4.3		120	111
	PSMN5R0-80PS	80	4.7		100	87
	PSMN6R5-80PS	80	6.9		100	71
	PSMN8R7-80PS	80	8.7		90	52
	PSMN012-80PS	80	11		74	36
	PSMN017-80PS	80	17		50	26
	PSMN4R3-100PS	100	4.3		120	170
	PSMN4R8-100PSE	100	4.8		120	196
	PSMN5R0-100PS	100	5		120	170
	PSMN5R6-100PS	100	5.6		100	141
	PSMN7R0-100PS	100	6.8		100	125
	PSMN7R8-100PSE	100	7.8		100	128
	PSMN8R5-100PS	100	8.5		100	111
	PSMN8R5-100PSF	100	8.5		98	44.5
	PSMN9R5-100PS	100	9.6		98	45
	PSMN013-100PS	100	13		68	59
	PSMN016-100PS	100	16		57	49
	PSMN018-100PSF	100	18		57	21.3
	PSMN027-100PS	100	27		53	21
	PSMN034-100PS	100	35		32	23.8
	PSMN015-110P	110	15		75	90
	PHP27NQ11T	110	50		27.6	30
	PHP23NQ11T	110	70		23	22
	PHP18NQ11T	110	90		18	21
	PSMN6R3-120PS	120	6.7		70	207.1
	PSMN7R8-120PS	120	7.9		70	167
	PSMN030-150P	150	30		55.5	98
	PHP30NQ15T	150	63		29	55
	PHP28NQ15T	150	65		28.5	24
	PSMN057-200P	200	57		39	96
	PHP33NQ20T	200	77		32.7	32.2
	PHP20NQ20T	200	130		20	65
	PHP9NQ20T	200	400		8.7	24
D ² PAK (SOT404) 	PSMN2R8-80BS	80	3		120	139
	PSMN3R3-80BS	80	3.5		120	111
	PSMN4R4-80BS	80	4.5		100	125
	PSMN5R0-80BS	80	5.1		100	101

N-channel 75V-200V MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	PSMN6R5-80BS	80	6.9		100	71
	PSMN8R7-80BS	80	8.7		90	52
	PSMN012-80BS	80	11		74	36
	PSMN017-80BS	80	17		50	26
	PSMN050-80BS	80	46		22	11
	PSMN3R8-100BS	100	3.9		120	170
	PSMN4R8-100BSE	100	4.8		120	196
	PSMN5R6-100BS	100	5.6		100	141
	PSMN7R0-100BS	100	6.8		100	125
	PSMN7R0-100BSF	100	7			
	PSMN7R6-100BSE	100	7.6		75	128
	PSMN9R5-100BS	100	9.6		89	82
	PSMN013-100BS	100	14		68	59
	PSMN016-100BS	100	16		57	49
	PSMN018-100BSF	100	18			
	PSMN027-100BS	100	27		37	30
	PSMN034-100BS	100	35		32	23.8
	PHB45NQ15T	150	42		45.1	32
	PSMN057-200B	200	57		39	96
	PHB33NQ20T	200	77		32.7	32.2
	PHB20NQ20T	200	130		20	65
DPAK (SOT428) 	PSMN063-150D	150	63		29	55
	PSMN130-200D	200	130		20	65
	PHD9NQ20T	200	400		8.7	24
I ² PAK (SOT226) 	PSMN3R3-80ES	80	3.3		120	139
	PSMN3R5-80ES	80	3.5		120	139
	PSMN4R3-80ES	80	4.3		120	111
	PSMN4R3-100ES	100	4.3		120	170
	PSMN5R0-100ES	100	5		120	170
	PSMN7R0-100ES	100	6.8		100	125
	PSMN8R5-100ES	100	8.5		100	111
	PSMN8R5-100ESF	100	8.5		97	45
	PSMN013-100ES	100	14		68	59
	PSMN018-100ESF	100	18		53	21
	PSMN6R3-120ES	120	6.7		70	207.1
	PSMN7R8-120ES	120	7.9		70	167

Types in **bold red** are in development

N-channel 75V-200V MOSFETs

Types in **bold** represent new products

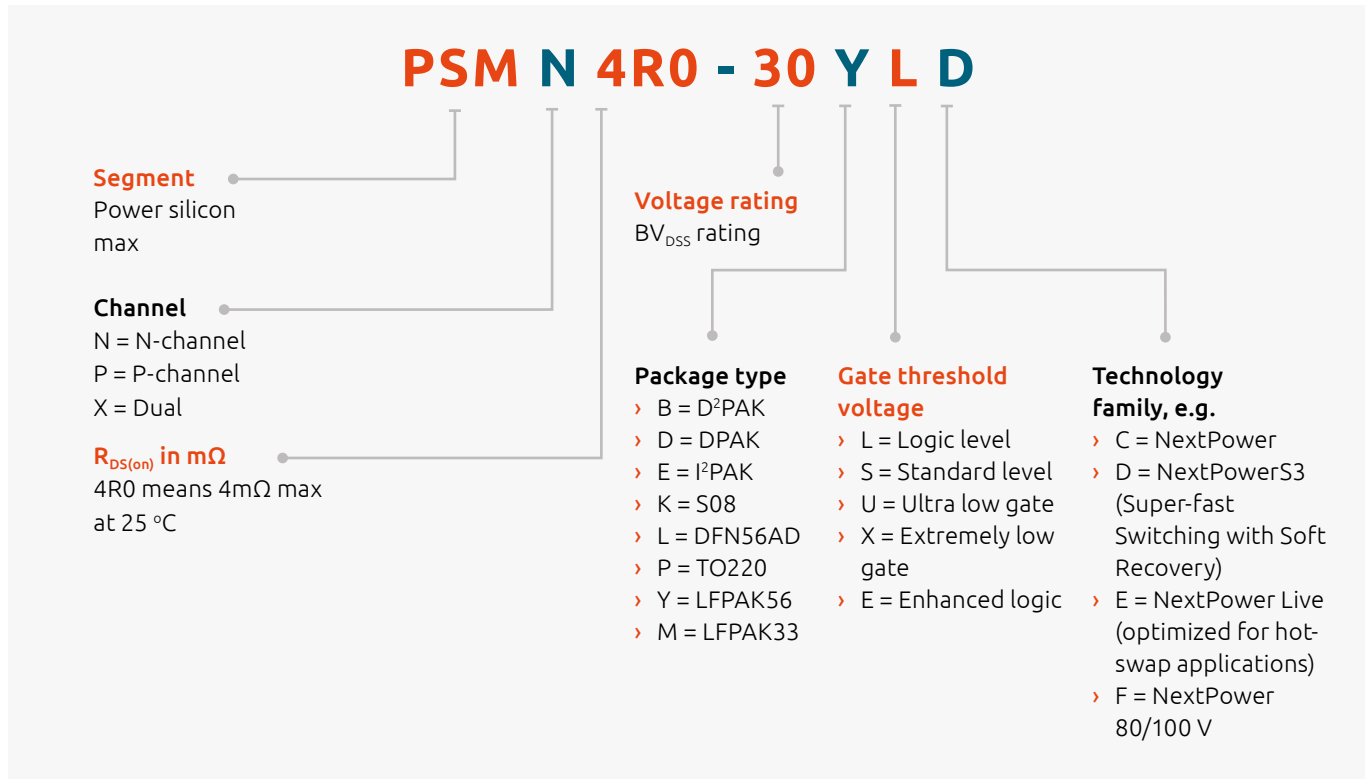
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56 (Power-SO8)	PSMN8R0-80YL	80	8	8.5	100	104
	PSMN8R2-80YS	80	8.5		82	55
	PSMN010-80YL	80	10	11	84	84.7
	PSMN011-80YS	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] @ $V_{GS} = 10\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56	PSMP012-30YE	30	12	67.3	52
	PSMP020-30YE	30	20	41.1	24
	PSMP015-40YE	40	15	63.1	43.5
	PSMP025-40YE	40	25	39.4	28
	PSMP032-60YE	60	32	38.7	46
	PSMP057-60YE	60	57	22.7	21

Types in **bold red** are in development

Power MOSFETs nomenclature



Small-signal MOSFETs in DFN1006 and DFN1006B packages

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

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

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

Small-signal low-leakage MOSFETs

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

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

Package															DFN2020MD-6 (SOT1220)	DFN2020-6 (SOT1118)
Size (mm)															2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65
P _{tot} (mW)															1250	1250
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protec- tion (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
											10 V	4.5 V	2.5 V	1.8 V		
Single	N-channel	20	8	11.3	0.4	1	9	26	8.8	2	-	14	17	21	PMPB12UNE	
			12	12.9	0.4	0.9	13	54	23	2.2	-	10	12	16	PMPB10XNE	
				5.9	0.75	1.25	16	49	31	2	-	14	20	-	PMPB20XNEA	
				10.4	0.4	0.9	9	31	13.4	-	-	18	21	23	PMPB15XN	
				10.1	0.4	0.9	9	31	11.6	2.1	-	19	23	31	PMPB23XNE	
		30	12	11.3	0.4	0.9	12	54	24	2.2	-	13	14	17	PMPB13XNE	
				5	0.4	0.9	8	33	12.4	2.1	-	28	32	37	PMPB29XNE	
				5.5	0.45	1.2	6	21	5.1	-	-	37	55	-	PMPB33XN	
			20	13	1	2	9	17	13.7	-	12	14	-	-	PMPB11EN	
				10.4	1	2	9	9	7.2	-	16.5	20.5	-	-	PMPB20EN	
		60	20	4	1.3	2.7	4.5	13.5	7.5	1	42	48	-	-	PMPB55ENEAE	
				3	1.3	2.7	4	10.5	6.2	2.7	72	85	-	-	PMPB85ENEAE	
	P-channel	80	20	2.8	1.3	2.7	5	15	9.9	2.8	80	92	-	-	PMPB95ENEAE	
				1.9	1.3	2.7	3.5	9.5	4.8	2	175	195	-	-	PMPB215ENEAE	
		12	12	11.8	0.47	0.9	18	85	67	-	-	15	17	21	PMPB15XP	
				10.3	0.47	0.9	16	43	28.8	-	-	19	21	27	PMPB19XP	
							13	92	30	2.4	-	19	22	28	PMPB20XPE	
							12	91	30	2.3	-	28	31	36	PMPB29XPE	
							12	62	15	-	-	30	35	45	PMPB33XP	
				5	0.47	0.9	9	57	15.6	2.3	-	39	45	56	PMPB43XPE	
		30	12	5	0.47	0.9	15	28	14	-	-	47	54	74	PMPB47XP	
				8.8	1	2.5	10	28	30	-	24	32	-	-	PMPB27EP	
				6.8	1	2.5	7.4	27	17	-	40	55	-	-	PMPB48EP	
Dual	Nch	20	12	5.3	0.4	0.9	4	40	14.4	-	-	32	40	60		PMDBP30XN
		30	12	3.1	0.75	1.25	9	19	2.9	2	-	55	72	-		PMDBP56XNEA
				3.1	0.5	1.5	6	18	1.65	1.8	-	95	130	-		PMDBP95XNE2
	P-channel	20	8	4.5	0.45	0.95	7	41	6.3	2	-	58	74	97		PMDBP58UPE
				3.7	0.45	0.95	6	47	5.4	2	-	82	107	142		PMDBP85UPE
			12	4.5	0.47	0.9	4	135	16.5	-	-	55	75	110		PMDBP55XP
				4.2	0.75	1.25	7	33	5	2	-	66	98			PMDBP70XPE
				3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMDBP80XP
		30	12	3.8	0.45	1	3	112	5.2	-	-	70	89	-		PMDBP70XP
MOSFET-Schottky	P-channel	20	12	3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMFBP8032XP
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

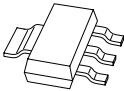
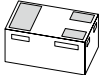
Types in **bold** represent new products

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 _G typ (nC)	ESD protec- tion (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
											4.5 V	2.5 V	1.8 V	1.5 V		
	N	12	8	6	0.4	0.9	6.3	30	6	2	36	46	60	86	PMCM4401VNE	
		20	8	5.4	0.4	0.9	4	27	6	2	43	55	65	75	PMCM4401UNE	
	P	12	8	4.9	0.4	0.9	4.8	25.1	6.8	2	55	77	110	-	PMCM4401VPE	
		20	8	4	0.4	0.9	4	31	5.9	2	75	95	130	-	PMCM4401UPE	
				4.2	0.4	0.9	4	26	6	2	65	88	120	-	PMCM4402UPE	
	N	12	8	9.6	0.4	0.9	10.8	97.5	16.1	2	15	18	22	30		PMCM6501VNE
		20	8	8.7	0.4	0.9	7	100	19	2	17	20	22	30		PMCM6501UNE
	P	12	8	8.2	0.4	0.9	8	72	19.6	2	19	25	37	-		PMCM6501VPE
		20	8	7.3	0.4	0.9	6	105	19	2	22	28	38	-		PMCM6501UPE
Common drain	N	20	8	4.1	0.4	0.9	6	39	9	2	40	50	63	-		PMCM6501CUNE

Small-signal MOSFETs single (N-channel)

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

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	DFN1006 (SOT883)	DFN1006B (SOT883B)
						
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
	1700	600	250	200	250	250
			PMV28UNE _A			
				PMF63UNE		
			PMV65UNE			
					PMZ130UNE	
						PMZB150UNE
					PMZ290UNE ₂	PMZB290UNE ₂
					PMZ600UNE	PMZB600UNE
			PMV20XNE _A			
			PMV16XN			
		PMN16XNE				
			PMV30UN ₂			
		PMN30UNE				
					PMZ200UNE	PMZB200UNE
					PMZ390UNE	PMZB390UNE
					PMZ550UNE	PMZB550UNE
			NX3008NBK	NX3008NBKW		
			PMV20XNE			
		PMN30UN				
			PMV40UN ₂			
				PMF250XNE		
			PMV20EN			
			PMV25ENE _A			
			PMV50ENE _A			
			PMV37EN ₂			
		PMN40ENE	PMV42ENE			
			PMV45EN ₂			
			PMV90ENE			
			NX3020NAK	NX3020NAKW		
			PMV65ENE _A			
			PMV130ENE _A			
			B5H111BK			
			PMV55ENE _A			
			PMV120ENE _A			
			PMV230ENE _A			
			PMV450ENE _A			
			NX138AK	NX138AKW		
			NX138BK	NX138BKW		
			B5N20BK			
			NX7002AK	NX7002AKW		
			NX7002BK	NX7002BKW	NX7002BKM	NX7002BKMB
	PMT280ENE _A		PMV280ENE_A			
	PMT560ENE _A					

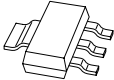
Small-signal MOSFETs single (P-channel)

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

Small-signal MOSFET-Schottky combination

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

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
							
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
	1700	600	250	300	200	250	250
			PMV27UPE				
			PMV33UPE				
			PMV32UP				
			PMV50UPE				
			NX2301P				
			PMV160UP				
			B5H205G2				
						PMZ350UPE	PMZB350UPE
						PMZ950UPE	PMZB950UPE
			PMV30XPEA				
		PMN30XP					
		PMN48XP	PMV48XP				
			PMV50XP				
		PMN52XP					
			PMV65XP				
			PMV65XPE				
		PMN70XPE					
		PMN70XP					
			PMV75UP				
				PMG85XP			
			PMV100XPEA				
					PMF170XP		
						PMZ320UPE	PMZB320UPE
						PMZ1200UPE	PMZB1200UPE
			NX3008PBK		NX3008PBKW		
			PMV35EPE				
		PMN70EPE					
			PMV250EPEA				
			B5S84AK		B5S84AKW	B5S84AKM	B5S84AKMB
	PMT200EPEA						

Small-signal MOSFETs dual

Package										
Size (mm)										
P _{tot} (mW)										
Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protection (kV)	
N-channel	20	8	0.8	0.5	0.95	10	117	0.45	2	
			0.6	0.45	0.95	5.6	19	0.4	1	
		12	5.3	0.4	0.9	4	40	14.4	-	
	30	8	0.59	0.45	0.95	4	12	0.6	2	
			0.35	0.6	1.1	26	88	0.52	2	
		12	3.1	0.75	1.25	9	19	2.9	2	
			3.1	0.5	1.5	6	18	1.65	1.8	
			1	0.5	1.5	6.5	14	0.7	2	
		20	0.18	0.8	1.5	10	51	0.34	yes	
	60	20	0.18	0.8	1.5	6	11	0.33	yes	
			0.26	0.5	1.5	7.9	12.5	0.49	2	
			0.17	1.1	2.1	12	34	0.33	yes	
			0.26	1.1	2.1	4.7	6.9	1	2	
P-channel	20	8	0.55	0.5	1.3	48	152	0.76	2	
			4.5	0.45	0.95	7	41	6.3	2	
			0.5	0.45	0.95	2.3	13.5	1.19	1	
			3.7	0.45	0.95	6	47	5.4	2	
		12	4.5	0.47	0.9	4	135	16.5	-	
			4.2	0.75	1	7	33	5	2	
			3.7	0.4	1	6	120	5.7	-	
	30	8	0.41	0.45	0.95	3	14	0.7	2	
			0.2	0.6	1.1	49	103	0.55	2	
		12	3.8	0.45	1	3	112	5.2	-	
	50	20	0.16	1.1	2.1	24	73	0.26	1	

Small-signal MOSFETs complementary

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

					SOT363 (SC-88)	SOT666	DFN2020-6 (SOT1118)	DFN1010B-6 (SOT1216)
								
					2.0 x 1.25 x 0.95	1.6 x 1.2 x 0.55	2.0 x 2.0 x 0.65	1.0 x 1.0 x 0.37
					300	300	1250	350
	$R_{DS(on)}$ typ (mΩ) @ $V_{GS} =$							
	10 V	4.5 V	2.5 V	1.8 V				
	-	290	420	600		PMDT290UNE		
	-	470	620	845				PMDXB600UNE
	-	32	40	60			PMDPB30XN	
	-	550	660	770				PMDXB550UNE
	-	1000	1400	2000	NX3008NBKS	NX3008NBKV		
	-	55	72	-			PMDPB56XNEA	
	-	95	130	-			PMDPB95XNE2	
	-	170	240	-	PMGD175XNE			
	2700	3000	4000	-	NX3020NAKS	NX3020NAKV		
	2800	3500	4500	-	NX138AKS			
	2100	2200	2600	-	NX138BKS			
	3000	3700	-	-	NX7002AKS			
	2200	2500	-	-	NX7002BKS			NX7002BKXB
	-	670	1200	1800		PMDT670UPE		
	-	58	74	97			PMDPB58UPE	
	-	1020	1270	1700				PMDXB950UPE
	-	82	107	142			PMDPB85UPE	
	-	55	75	110			PMDPB55XP	
	-	66	98	-			PMDPB70XPE	
	-	80	95	120			PMDPB80XP	
	-	1200	1700	2100				PMDXB1200UPE
	-	2800	5300	-	NX3008PBKS	NX3008PBKV		
	-	70	89	-			PMDPB70XP	
	4500	5700	-	-	BSS84AKS	BSS84AKV		

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

AIRBAG



Automotive logic.....	106
Buffers, Drivers, Transceivers	129
Buffers/Inverters/Drivers.....	129
Transceivers.....	137
Schmitt-triggers.....	138
Counters/Frequency dividers	141
Flip-flops, Latches, Registers	143
FIFO registers.....	143
Flip-flops	143
Latches/Registered drivers.....	146
Gates.....	148
AND Gates	148
Combination Gates	149
Configurable Gates	149
EXCLUSIVE-NOR Gates	150
EXCLUSIVE-OR Gates	150
NAND Gates.....	150
NOR Gates	152
OR Gates	153
Logic voltage translators	154
Level shifters/Translators	154
Specialty logic	155
Digital comparators	155
Multivibrators.....	155
Parity generators-checkers	155
Phase-locked loops	156
Printer interfaces.....	156
Switches, Multiplexers, Demultiplexers	157
Bus Switches.....	157
Decoders/Demultiplexers.....	158
Digital Multiplexers.....	159
Analog Switches	160
Nomenclatures	161

Q100 Standard logic functions and packages

Analog switches

Type number	Description	Features					Package (suffix)								
		Configuration	V _{CC} (V)	R _{ON} (Ω)	R _{ON} (FLAT) (Ω)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT137-1 (D)	SOT355-1 (PW)	SOT815-1 (BQ)
74HC4051-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4051-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	225	20	-40~125				•	•	•			
74HC4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4052-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	200	20	-40~125				•	•	•			
74HC4053-Q100	Triple single-pole, double-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4053-Q100	Triple single-pole, double-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	200	20	-40~125				•	•	•			
74HC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	2.0 - 10.0	105	23	-40~125	•	•	•						
74HCT4066-Q100	Quad single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125	•	•	•						
74HC4067-Q100	Single-pole, 16-throw analog switch	SP16T-Z	2.0 - 10.0	200	25	-40~125							•	•	•
74HCT4067-Q100	Single-pole, 16-throw analog switch; TTL-enabled	SP16T-Z	4.5 - 5.5	225	25	-40~125							•	•	•
74HC4851-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	220	-	-40~125				•	•	•			
74HCT4851-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	240	-	-40~125				•	•	•			
74HC4852-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	220	-	-40~125				•	•	•			
74HCT4852-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	240	-	-40~125				•	•	•			
74LV4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	1.0 - 6.0	125	15	-40~125				•	•				
74LV4053-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	1.0 - 6.0	150	30	-40~125				•	•	•			
74LVC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125	•	•	•						
HEF4051B-Q100	Single-pole, octal-throw analog switch	SP8T-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4052B-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4053B-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4066B-Q100	Quad single-pole, single-throw analog switch	SPST-NO	3.0 - 15	175	20	-40~85	•								
HEF4067B-Q100	Single-pole, 16-throw analog switch	SP16T-Z	3.0 - 15	175	20	-40~85							•		

Buffers/Inverters

Type number	Description	Features				Package (suffix)								
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74AHC04-Q100	Hex inverter	2.0 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC125-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74AHC126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC240-Q100	Octal inverter/line driver (3-state)	2.0 - 5.5	± 8	2.8	-40~125						•	•	•	
74AHC240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125						•	•	•	
74AHC244-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC04-Q100	Hex inverter; unbuffered	2.0 - 5.5	± 8	2.4	-40~125	•	•	•						
74ALVC125-Q100	Quad buffer/line driver (3-state)	1.65 - 3.6	± 24	1.8	-40~85	•	•	•						
74ALVC541-Q100	Octal buffer/line driver (3-state)	1.65 - 3.6	± 24	2.3	-40~85						•	•	•	
74HC05-Q100	Hex inverter; open-drain	2.0 - 6.0	5.2	11	-40~125	•	•	•						
74HC04-Q100	Hex inverter	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•						
74HCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 4.0	8.0	-40~125	•	•	•						
74HC125-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125	•	•							
74HC126-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125	•	•							
74HC240-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	9.0	-40~125						•	•	•	
74HC244-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•	•	•	
74HC365-Q100	Hex buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125				•	•				
74HCT365-Q100	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HC366-Q100	Hex inverter/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125				•	•				
74HCT366-Q100	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HC540-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•			
74HCT540-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•			
74HC541-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125						•	•		

Buffers/Inverters

Type number	Description	Features				Package (suffix)								
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74HCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125						•	•		
74HCU04-Q100	Hex inverter; unbuffered	2.0 - 6.0	± 5.2	5.0	-40~125	•	•	•						
74LV244-Q100	Octal buffer/line driver (3-state)	1.0 - 5.5	± 16	8.0	-40~125						•	•		
74LVC04A-Q100	Hex inverter	1.65 - 5.5	± 24	2.0	-40~125	•	•	•						
74LVC06A-Q100	Hex inverter; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•	•						
74LVC07A-Q100	Hex buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•	•						
74LVC125A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40~125	•	•	•						
74LVC126A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40~125	•	•	•						
74LVC541A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	3.3	-40~125						•	•	•	
74LVC16240A-Q100	16-bit inverter/line driver (3-state)	1.2 - 3.6	± 24	2.7	-40~125									•
74LVC244A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	2.8	-40~125						•	•	•	
74LVCH244A-Q100	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	2.8	-40~125						•	•	•	
74LVC16244A-Q100	16-bit buffer/line driver (3-state)	1.2 - 3.6	± 24	3.0	-40~125									•
74LVCH16244A-Q100	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	3.0	-40~125									•
74LCU04A-Q100	Hex inverter; unbuffered	1.2 - 3.6	± 24	2.0	-40~125	•	•							
74LVT04-Q100	Hex inverter	2.7 - 3.6	-20 / +32	2.6	-40~85	•	•							
74LVT244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74LVTH244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74VHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74VHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74VHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74VHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
HEF4049B-Q100	Hex inverter/line driver	3.0 - 15.0	-3 / +20	20	-40~85				•					
HEF4050B-Q100	Hex buffer/line driver	3.0 - 15.0	-3 / +20	40	-40~85				•					
HEF4069UB-Q100	Hex inverter; unbuffered	3.0 - 15.0	± 3.4	15	-40~85	•	•							

Counters/Frequency dividers

Types in **bold** represent new products

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

Bus switches

Types in **bold** represent new products

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} ($^{\circ}$ C)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)
74CBTLV3125-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40~125	•							
74CBTLV3126-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40~125	•	•						
74CBTLV3253-Q100	Dual 4:1 mux/demux	2.3 - 3.6	3.3	7	-40~125			•	•	•			
74CBTLV3257-Q100	Quad 2:1 mux/demux	2.3 - 3.6	3.3	7	-40~125			•	•	•			
74CBTLV3245-Q100	Octal bus switch	2.3 - 3.6	3.3	7	-40~125							•	•
74CBTLVD3245-Q100	Octal bus switch level translator	3.0 - 3.6	1.8	7	-40~125							•	•
CBT3245A-Q100	Octal bus switch	4.5 - 5.5	3.9	7	-40~85						•	•	•

Digital decoders/Demultiplexers

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

Digital multiplexers

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74AHC157-Q100	Quad 2-input multiplexer	2.0 - 5.5	± 8	3.2	-40~125	•	•	•
74AHCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 8	3.2	-40~125	•	•	•
74AHC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 5.5	± 8	2.9	-40~125	•	•	
74AHCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 8	3.7	-40~125	•	•	
74HC151-Q100	8-input multiplexer	2.0 - 6.0	± 5.2	17	-40~125	•	•	
74HCT151-Q100	8-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	
74HC153-Q100	Dual 4-input multiplexer	2.0 - 6.0	± 5.2	17	-40~125	•	•	
74HCT153-Q100	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	
74HC157-Q100	Quad 2-input multiplexer	2.0 - 6.0	± 5.2	11	-40~125	•	•	•
74HCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	13	-40~125	•	•	•
74HC251-Q100	8-input multiplexer (3-State)	2.0 - 6.0	± 5.2	18	-40~125	•	•	
74HCT251-Q100	8-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 4	22	-40~125	•	•	
74HC253-Q100	Dual 4-input multiplexer (3-State)	2.0 - 6.0	± 7.8	17	-40~125	•		
74HCT253-Q100	Dual 4-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	17	-40~125	•		
74HC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 6.0	± 7.8	11	-40~125	•	•	
74HCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	13	-40~125	•	•	
74LVC157A-Q100	Quad 2-input multiplexer	1.2 - 3.6	± 24	2.5	-40~125	•	•	•

Flip-flops

Type number	Description	Features				Package (suffix)									
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74AHC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	± 8	3.7	-40~125	•	•	•							
74AHCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•							
74AHC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	± 8	4.2	-40~125						•	•	•		
74AHCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125						•	•	•		
74AHC374-Q100	Octal D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	4.4	-40~125						•	•			
74AHCT374-Q100	Octal D-type flip-flop; positive-edge trigger (3-state); TTL-enabled (3-state)	4.5 - 5.5	± 8	4.3	-40~125						•	•			
74AHC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 5.5	± 8	3.9	-40~125							•			
74AHCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125						•	•			
74AVC16374-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 12	1.5	-40~85										•

Flip-flops

Type number	Description	Features				Package (suffix)									
		V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74HC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	14	-40~125	•	•	•							
74HCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40~125	•	•	•							
74HC107-Q100	Dual J-K flip-flop with reset; negative-edge trigger	2.0 - 6.0	± 5.2	16	-40~125	•	•								
74HCT107-Q100	Dual J-K flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40~125	•									
74HC109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40~125				•						
74HCT109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125				•						
74HC174-Q100	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40~125				•	•					
74HCT174-Q100	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	18	-40~125				•	•					
74HC175-Q100	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40~125				•	•					
74HCT175-Q100	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40~125				•	•					
74HC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40~125						•	•	•		
74HCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40~125						•	•	•		
74HC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	± 7.8	13	-40~125						•	•			
74HCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 6	14	-40~125						•	•			
74HC574-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	± 7.8	14	-40~125						•	•			
74HCT574-Q100	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	± 6	15	-40~125						•	•			
74LV74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	± 12	11	-40~125	•	•								
74LVC74A-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	± 24	2.5	-40~125	•	•	•							
74LVC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	± 24	6.0	-40~125						•	•	•		
74LVC374A-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	2.7	-40~125						•	•	•		

Flip-flops

Type number	Description	Features				Package (suffix)									
		V _{cc} (V)	I _O (mA)	t _{pjd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74LVC573A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.4	-40~125						•	•	•		
74LVC823A-Q100	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	5.4	-40~125									•	
74LVC16374A-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40~125										•
74LVCH16374A-Q100	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40~125										•
HEF4013B-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15	± 2.4	30	-40~85	•	•								
HEF4027B-Q100	Dual J-K flip-flop	3.0 - 15	± 2.4	30	-40~85				•						

Gates

Type number	Description	Features				Package (suffix)		
		V_{cc} (V)	I_o (mA)	t_{pjd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
74AHC00-Q100	Quad 2-input NAND gate	2.0 - 5.5	± 8	3.2	-40~125	•	•	•
74AHCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•
74AHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74AHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•
74AHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	•
74AHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74AHC30-Q100	8-input NAND gate	2.0 - 5.5	± 8	3.6	-40~125	•	•	•
74AHCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•
74AHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	•
74AHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74AHC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40~125	•	•	•
74AHCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.4	-40~125	•	•	•
74ALVC00-Q100	Quad 2-input NAND gate	1.65 - 3.6	± 24	2.1	-40~85	•	•	•

Gates

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
74ALVC32-Q100	Quad 2-input OR gate	1.65 - 3.6	± 24	2.0	-40~125	•	•	•
74HC00-Q100	Quad 2-input NAND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	•
74HC02-Q100	Quad 2-input NOR gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	9.0	-40~125	•	•	•
74HC03-Q100	Quad 2-input NAND gate; open-drain	2.0 - 6.0	5.2	8.0	-40~125	•	•	
74HCT03-Q100	Quad 2-input NAND gate; open-drain; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	
74HC08-Q100	Quad 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	•
74HC10-Q100	Triple 3-input NAND gate	2.0 - 6.0	± 5.2	9.0	-40~125	•	•	
74HCT10-Q100	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	
74HC11-Q100	Triple 3-input AND gate	2.0 - 6.0	± 5.2	10	-40~125	•	•	
74HCT11-Q100	Triple 3-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	
74HC20-Q100	Dual 4-input NAND gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	
74HCT20-Q100	Dual 4-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	13	-40~125	•		•
74HC27-Q100	Triple 3-input NOR gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	•
74HCT27-Q100	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	•
74HC30-Q100	8-input NAND gate	2.0 - 6.0	± 5.2	12	-40~125	•	•	
74HCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125	•	•	
74HC32-Q100	Quad 2-input OR gate	2.0 - 6.0	± 5.2	6.0	-40~125	•	•	•
74HCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	9.0	-40~125	•	•	•
74HC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	11	-40~125	•	•	
74HCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4	14	-40~125	•	•	
74HC4002-Q100	Dual 4-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40~125	•	•	
74HC4075-Q100	Triple 3-input OR gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	
74HCT4075-Q100	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	
74LV08-Q100	Quad 2-input AND gate	1.0 - 5.5	± 12	7.0	-40~125	•	•	
74LVC00A-Q100	Quad 2-input NAND gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC02A-Q100	Quad 2-input NOR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC08A-Q100	Quad 2-input AND gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC32A-Q100	Quad 2-input OR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74VHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74VHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•
74VHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	

Gates

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

Latches/Registered drivers

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

Level shifters/Translators

Types in **bold** represent new products

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

Multivibrators

Types in **bold** represent new products

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

Schmitt-triggers

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

Shift registers

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

Shift registers

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

Transceivers

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

Q100 mini logic functions and packages

Analog switches

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

Bus switches

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

Buffers/Inverters

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

Buffers/Inverters

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

Digital decoders/Demultiplexers

Types in **bold** represent new products

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

Digital multiplexers

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

Flip-flops

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

Gates

Type number	Description	Features				Package (suffix)					
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G09-Q100	Single 2-input AND gate; open-drain	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•				
74AHC1G02-Q100	Single 2-input NOR gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AHC1G08-Q100	Single 2-input AND gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•				
74AHC1G32-Q100	Single 2-input OR gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•				
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AHC2G00-Q100	Dual 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125					•	•
74AHC2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125					•	•
74AHC2G08-Q100	Dual 2-input AND gate	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC2G08-Q100	Dual 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125					•	•
74AHC2G32-Q100	Dual 2-input OR gate	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125					•	•
74AUP1G02-Q100	Single 2-input NOR gate	1.1 - 3.6	± 1.9	8.2	-40~125	•					
74AUP1G08-Q100	Single 2-input AND gate	1.1 - 3.6	± 1.9	8.2	-40~125	•					
74AUP1G32-Q100	Single 2-input OR gate	1.1 - 3.6	± 1.9	7.9	-40~125	•					
74AUP1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	3.3	-40~125	•					
74AUP1T98-Q100	Configurable gate with voltage level translation	2.3-3.6 V	± 1.9	8.7	-40~125			•			
74HC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 2.6	9.0	-40~125	•	•				
74HC1G00-Q100	Single 2-input NAND gate	2.0 - 6.0	± 2.6	7.0	-40~125	•					
74HCT1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 2	10	-40~125	•	•				
74HC1G02-Q100	Single 2-input NOR gate	2.0 - 6.0	± 2.6	7.0	-40~125	•	•				
74HCT1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 2.0	9.0	-40~125	•	•				
74HC1G08-Q100	Single 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•				
74HCT1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 2	11	-40~125	•	•				
74HC1G32-Q100	Single 2-input OR gate	2.0 - 6.0	± 2.6	8.0	-40~125	•	•				
74HCT1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40~125	•	•				
74HC2G00-Q100	Dual 2-input NAND gate	2.0 - 6.0	± 5.6	9.0	-40~125					•	•
74HCT2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125					•	•
74HC2G02-Q100	Dual 2-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G02-Q100	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125					•	•
74HC2G08-Q100	Dual 2-input AND gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•

Gates

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74HCT2G08-Q100	Dual 2-input AND gate; TTL-enabled	4.5 - 5.5	± 4	14	-40~125					•	•
74HC2G32-Q100	Dual 2-input OR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	13	-40~125					•	•
74HC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G86-Q100	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4.0	11	-40~125					•	•
74HCT1G86-Q100	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40~125	•	•				
74LVC1G00-Q100	Single 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125	•	•				
74LVC1G02-Q100	Single 2-input NOR gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G08-Q100	Single 2-input AND gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G10-Q100	Single 3-input NAND gate	1.65 - 5.5	± 32	2.6	-40~125			•			
74LVC1G11-Q100	Single 3-input AND gate	1.65 - 5.5	± 32	2.6	-40~125			•	•		
74LVC1G32-Q100	Single 2-input OR gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G38-Q100	Single 2-input NAND gate; open-drain	1.65 - 5.5	32	2.3	-40~125	•	•				
74LVC1G57-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40~125			•	•		
74LVC1G58-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40~125			•	•		
74LVC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.4	-40~125	•	•				
74LVC1G332-Q100	Single 3-input OR gate	1.65 - 5.5	± 32	2.6	-40~125			•	•		
74LVC1GX04-Q100	Crystal driver	1.65 - 5.5	± 24	2.8	-40~125			•	•		
74LVC2G00-Q100	Dual 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125						•
74LVC2G02-Q100	Dual 2-input NOR gate	1.65 - 5.5	± 32	2.4	-40~125					•	•
74LVC2G08-Q100	Dual 2-input AND gate	1.65 - 5.5	± 24	2.1	-40~125					•	•
74LVC2G32-Q100	Dual 2-input OR gate	1.65 - 5.5	± 32	2.2	-40~125					•	•
74LVC2G34-Q100	Dual buffer	1.65 - 5.5	± 32	2.2	-40~125			•	•		
74LVC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.3	-40~125					•	•

Latches/Registered drivers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)	
74AUP1G373-Q100	Single D-type transparent latch (3-state)	1.1 - 3.6	±1.9	8.5	-40~125	•	

Multivibrators

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

Schmitt-triggers

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125	•	•				
74AHC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125					•	•
74HC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 6.0	± 2.6	10	-40~125	•	•				
74HCT1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 2.0	15	-40~125	•	•				
74HC2G14-Q100	Dual inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40~125			•	•		
74HCT2G14-Q100	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125			•	•		
74HC2G17-Q100	Dual buffer Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40~125			•	•		
74HCT2G17-Q100	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125			•	•		
74HC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40~125					•	•
74HCT3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125					•	•
74LVC1G14-Q100	Single inverter Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40~125	•	•				
74LVC1G17-Q100	Single buffer Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40~125	•	•				
74LVC2G14-Q100	Dual inverter Schmitt-trigger	1.65 - 5.5	± 32	3.9	-40~125			•	•		
74LVC2G17-Q100	Dual buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125			•	•		
74LVC3G17-Q100	Triple buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125					•	•

Level shifters/Translators

Type number	Description	Features				Package (suffix)				
		$V_{CC}(A)$ (V)	$V_{CC}(B)$ (V)	I_O (mA)	T_{amb} (°C)	SOT353-1 (GW)	SOT363 (GW)	SOT505-2 (DP)	SOT765-1 (DC)	SOT552-1 (DP)
74AUP1T34-Q100	Single dual supply translating buffer	1.1 - 3.6	1.1 - 3.6	± 1.9	-40~125	•				
74AVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•			
74AVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125			•	•	
74AVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•			
74AXP1T57-Q100	Dual-supply translating configurable multiple function gate, Schmitt-trigger inputs	0.7 - 2.75	1.2 - 5.5	± 12	-40~125				•	
74AXP2T08-Q100	Dual-supply 2-input AND gate	0.7 - 2.75	1.2 - 5.5	± 12	-40~125					•
74LVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125		•			
74LVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125		•			
74LVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125				•	
74LVCH2T45-Q100	Dual-bit dual-supply voltage level translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125				•	

Buffers/Inverters/Drivers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74ABT04	Hex inverter	4.5 - 5.5	TTL	-15 / 20	50	2.2	100	-40~85
74ABT125	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.1	100	-40~85
74ABT126	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.0	100	-40~85
74ABT162244	16-bit buffer/line driver with 30 Ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	50	3.2	100	-40~85
74ABT16240A	16-bit inverter/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.0	150	-40~85
74ABT16244A	16-bit buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.1	150	-40~85
74ABT244	Octal buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.9	100	-40~85
74AHC04	Hex inverter	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74AHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74AHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40~125
74AHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1G04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40~125
74AHC1G125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC1G126	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC1G14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1G17	Single buffer with Schmitt-trigger inputs	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1GU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.6	60	-40~125
74AHC244	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74AHC2G125	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC2G126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC2G241	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC3G04	Triple inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40~125
74AHC3G14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC3GU04	Triple inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.5	60	-40~125
74AHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74AHC9541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±8	15	3.4	60	-40~125
74AHCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT04A	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.1	60	-40~125
74AHCT07A	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	±8	15	4.0	60	-40~125
74AHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT14	Hex inverting; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT14A	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.7	60	-40~125
74AHCT17A	Hex buffer; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.2	60	-40~125
74AHCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT1G17	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74AHCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
74AHCT244A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40~125
74AHCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT2G126	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT2G241	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT3G14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
74AHCT541A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40~125
74AHCU04	Hex inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.4	60	-40~125
74AHCV07A	Hex buffer; Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	15	3.8	60	-40~125
74AHCV14A	Hex inverter; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40~125
74AHCV17A	Hex buffer; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40~125
74AHCV244A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40~125
74AHCV541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40~125
74ALVC04	Hex inverter	1.65 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVC125	Quad buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	1.8	145	-40~85
74ALVC14	Hex inverter; Schmitt-trigger	1.65 - 3.6	TTL	±24	30	2.4	150	-40~85
74ALVC16244	16-bit buffer/line driver (3-state)	1.2 - 3.6	TTL	±24	50	1.9	150	-40~85
74ALVC244	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.9	130	-40~85
74ALVC541	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.3	130	-40~85
74ALVCH162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	30	2.7	150	-40~85
74ALVCH16244	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	TTL	±24	30	1.9	150	-40~85
74ALVCH162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	30	2.9	150	-40~85
74ALVCH16825	18-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVCH16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVT16244	16-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTL	-32 / 64	50	1.5	200	-40~85
74ALVT162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	LVTTL	±12	50	2.2	75	-40~85
74ALVT16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTL	-32 / 64	50	1.3	200	-40~85
74AUP1G04	Single inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40~125
74AUP1G06	Single inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40~125
74AUP1G07	Single buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40~125
74AUP1G125	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40~125
74AUP1G126	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40~125
74AUP1G14	Single inverter; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40~125
74AUP1G16	Single buffer	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40~125
74AUP1G240	Single inverter/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.2	70	-40~125
74AUP1G34	Single buffer	1.1 - 3.6	CMOS	±1.9	30	3.9	70	-40~125
74AUP1GU04	Single inverter; unbuffered	1.1 - 3.6	CMOS	±1.9	30	2.3	70	-40~125

Buffers/Inverters/Drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74AUP2G04	Dual inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40~125
74AUP2G06	Dual inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40~125
74AUP2G07	Dual buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40~125
74AUP2G125	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.3	70	-40~125
74AUP2G126	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.3	70	-40~125
74AUP2G14	Dual inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP2G16	Dual buffer	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP2G17	Dual buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	7.8	70	-40~125
74AUP2G240	Dual inverter/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.2	70	-40~125
74AUP2G241	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+ 1.9	30	4.3	70	-40~125
74AUP2G34	Dual buffer	1.1 - 3.6	CMOS	+1.9	30	3.9	70	-40~125
74AUP2GU04	Dual inverter; unbuffered	1.1 - 3.6	CMOS	+1.9	30	2.3	70	-40~125
74AUP3G04	Triple inverter	1.1 - 3.6	CMOS	+1.9	30	4.0	70	-40~125
74AUP3G14	Triple inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP3G16	Triple buffer	1.1 - 3.6	CMOS	+1.9	30	4.0	70	-40~125
74AUP3G17	Triple buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AVC16244	16-bit buffer/line driver (3-state)	0.8 - 3.6	CMOS/LVTTL	+12	30	2.0	200	-40~85
74AVCH16244	16-bit buffer/line driver with bus hold (3-state)	0.8 - 3.6	CMOS/LVTTL	+12	30	2.0	200	-40~85
74AXP1G04	Single inverter	0.7 - 2.75	CMOS	+4.5	5	2.6	70	-40~85
74AXP1G06	Single inverter; open drain	0.7 - 2.75	CMOS	4.5	5	3.5	70	-40~85
74AXP1G07	Single buffer; open-drain	0.7 - 2.75	CMOS	4.5	5	3.5	70	-40~85
74AXP1G125	Single buffer/line driver (3-state)	0.7 - 2.75	CMOS	+4.5	5	2.7	70	-40~85
74AXP1G14	Single inverter; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.9	70	-40~85
74AXP1G17	Single buffer; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.8	70	-40~85
74AXP2G17	Dual buffer; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.8	70	-40~85
74AXP2G34	Dual buffer	0.7 to 2.75	CMOS	+4.5	5	2.5	70	-40~85
74AXP2G3404	Single buffer and Single inverter	0.7 to 2.75	CMOS	+4.5	5	2.5	70	-40~85
74HC04	Hex inverter	2.0 - 6.0	CMOS	+5.2	50	7.0	36	-40~125
74HC05	Hex inverter; open drain	2.0 - 6.0	CMOS	5.2	50	11	36	-40~125
74HC125	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC126	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC14	Hex inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+5.2	50	12	36	-40~125
74HC1G04	Single inverter	2.0 - 6.0	CMOS	+2.6	50	7.0	36	-40~125
74HC1G125	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+2.6	50	9.0	36	-40~125
74HC1G126	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+2.6	50	9.0	36	-40~125
74HC1G14	Single inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+2.6	50	10	36	-40~125
74HC1GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	+ 2.6	50	5.0	36	-40~125
74HC240	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC241	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	7.0	36	-40~125
74HC244	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125

Buffers/Inverters/Drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74HC2G04	Dual inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40~125
74HC2G125	Dual buffer/line driver (3-state)	2.0 - 6.0	CMOS	±5.2	50	10	36	-40~125
74HC2G14	Dual inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40~125
74HC2G17	Dual buffer; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	12	36	-40~125
74HC2G34	Dual buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC2GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	±2.6	50	5.0	36	-40~125
74HC365	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC366	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40~125
74HC367	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	8.0	36	-40~125
74HC368	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC3G04	Triple inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40~125
74HC3G06	Triple inverter; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40~125
74HC3G07	Triple buffer; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40~125
74HC3G14	Triple inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40~125
74HC3G16	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC3G34	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC3GU04	Triple inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	6.0	36	-40~125
74HC540	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC541	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40~125
74HC7014	Hex buffer; precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	27	36	-40~125
74HC7540	Octal inverter/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	11	36	-40~125
74HC7541	Octal buffer/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	10	36	-40~125
74HC9114	9-bit inverter; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40~125
74HC9115	9-bit buffer; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40~125
74HCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	8.0	36	-40~125
74HCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40~125
74HCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	17	36	-40~125
74HCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±2	50	8.0	36	-40~125
74HCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40~125
74HCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40~125
74HCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2	50	15	36	-40~125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	9.0	36	-40~125
74HCT241	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT2G04	Dual inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	12	36	-40~125
74HCT2G14	Dual inverter; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40~125
74HCT2G17	Dual buffer; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74HCT2G34	Dual buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	32	-40~125
74HCT365	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT366	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT367	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT368	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT3G06	Triple inverter; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40~125
74HCT3G07	Triple buffer; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40~125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	21	36	-40~125
74HCT3G16	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT3G34	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT540	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40~125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40~125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40~125
74HCT9114	9-bit inverter Schmitt-trigger; open-drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	15	13	36	-40~125
74HCU04	Hex inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	5.0	36	-40~125
74LV04	Hex inverter	1.0 - 5.5	CMOS	±12	50	6.0	30	-40~125
74LV04AT	Hex buffer	4.5 - 5.5	TTL	±12	15	3.3	60	-40~125
74LV05A	Hex inverter; open-drain	2.0 - 5.5	CMOS	12	15	2.9	60	-40~125
74LV07A	Hex buffer; open-drain	2.0 - 5.5	CMOS	16	15	3.6	60	-40~125
74LV07AT	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	16	15	3.5	60	-40~125
74LV14	Hex inverter; Schmitt-trigger	1.0 - 5.5	TTL	±12	50	13	30	-40~125
74LV14A	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40~125
74LV17A	Hex buffer; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40~125
74LV244	Octal buffer/line driver (3-state)	1.0 - 5.5	CMOS	±16	50	8.0	30	-40~125
74LV244A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40~125
74LV244AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40~125
74LV365	Hex buffer/line driver (3-state)	1.0 - 3.6	CMOS	±8	50	9.0	30	-40~125
74LV540A	Octal buffer/line driver (3-state); inverting	1.65 - 5.5	CMOS/LVTTL	±16	15	3.1	60	-40~125
74LV541A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40~125
74LV541AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40~125
74LVC04A	Hex inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC06A	Hex inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC07A	Hex buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC125A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40~125
74LVC126A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40~125
74LVC14A	Hex inverter; Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	50	3.2	175	-40~125
74LVC162244A	16-bit buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40~125

Buffers/Inverters/Drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74LVC16240A	16-bit inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVC16241A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40~125
74LVC16244A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40~125
74LVC1G04	Single inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40~125
74LVC1G06	Single inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40~125
74LVC1G07	Single buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC1G125	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.1	175	-40~125
74LVC1G126	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40~125
74LVC1G14	Single inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40~125
74LVC1G16	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC1G17	Single buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40~125
74LVC1G34	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC1GU04	Single inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	1.6	175	-40~125
74LVC2244A	Octal buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	3.1	175	-40~125
74LVC240A	Octal inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.5	175	-40~125
74LVC244A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40~125
74LVC2G04	Dual inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVC2G06	Dual inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40~125
74LVC2G07	Dual buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.6	175	-40~125
74LVC2G125	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC2G126	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.4	175	-40~125
74LVC2G14	Dual inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.9	175	-40~125
74LVC2G16	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC2G17	Dual buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40~125
74LVC2G240	Dual inverter/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.5	175	-40~125
74LVC2G241	Dual buffer/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.6	175	-40~125
74LVC2G34	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40~125
74LVC2GU04	Dual inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC3G04	Triple inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.7	175	-40~125
74LVC3G06	Triple inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.0	175	-40~125
74LVC3G07	Triple buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.1	175	-40~125
74LVC3G14	Triple inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.2	175	-40~125
74LVC3G16	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC3G17	Triple buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40~125
74LVC3G34	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40~125
74LVC3GU04	Triple inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC541A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.3	175	-40~125
74LVC827A	10-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	4.0	175	-40~125
74LVCH162244A	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	2.9	175	-40~125

Buffers/Inverters/Drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74LVCH16244A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40~125
74LVCH16541A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVCH244A	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40~125
74LCU04A	Hex inverter; unbuffered	1.2 - 3.6	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVT04	Hex inverter	2.7 - 3.6	TTL	-20 / 32	50	2.6	150	-40~85
74LVT125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40~85
74LVT126	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.4	150	-40~85
74LVT14	Hex inverter; Schmitt-trigger	2.7 - 3.6	TTL	-32 / 64	50	3.8	150	-40~85
74LVT162240A	16-bit inverter/line driver with bus hold and 30 Ω termination (3-state)	2.7 - 3.6	TTL	±12	50	2.6	150	-40~85
74LVT162244B	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	2.8	150	-40~85
74LVT16240A	16-bit inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVT16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74LVT2241	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	3.3	150	-40~85
74LVT2244	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	2.9	150	-40~85
74LVT240	Octal inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.5	150	-40~85
74LVT241	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.8	150	-40~85
74LVT244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40~85
74LVT244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVTH125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40~85
74LVTH16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74LVTH244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40~85
74LVTH244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVTN16244B	16-bit buffer/line driver (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74VHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74VHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40~125
74VHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74VHC244	Octal inverter/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74VHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74VHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74VHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74VHCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74VHCT244	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	5.0	60	-40~125
74VHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
HEF40098B	Hex inverter	3.0 - 15.0	CMOS	-10 / 20	50	25	10	-40~125
HEF40244B	Octal buffer/line driver (3-state)	3.0 - 15.0	CMOS	-62 / 45	50	30	10	-40~125
HEF4049B	Hex inverter/line driver	3.0 - 15.0	CMOS	-3 / 20	50	20	10	-40~125
HEF4050B	Hex buffer/line driver	3.0 - 15.0	CMOS	-3 / 20	50	40	10	-40~125
HEF4069UB	Hex inverter; unbuffered	3.0 - 15.0	CMOS	±3.4	50	15	10	-40~125
XC7SET04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125

Buffers/inverters/drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
XC7SET125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
XC7SET14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
XC7SH04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
XC7SH125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
XC7SH14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
XC7SHU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
XC7WH126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
XC7WH14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
XC7WT14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125

Transceivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _v (°C)
74ABT162245A	16-bit transceiver with 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	100	-40~85
74ABT16245B	16-bit transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.3	16	150	-40~85
74ABT245	Octal transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.9	8	100	-40~85
74ABTH162245A	16-bit transceiver with bus hold and 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	80	-40~85
74AHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40~125
74AHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40~125
74AHCT245A	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.0	8	60	-40~125
74AHCV245A	Octal transceiver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	8	60	-40~125
74ALVC16245	16-bit transceiver (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40~85
74ALVC245	Octal transceiver (3-state)	1.65 - 3.6	TTL	±24	2.3	8	130	-40~85
74ALVCH162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±12	2.4	16	150	-40~85
74ALVCH16245	16-bit transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40~85
74ALVCH162601	18-bit universal bus transceiver with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±12	3.1	18	150	-40~85
74ALVCH16500	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.9	18	150	-40~85
74ALVCH16501	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16543	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.8	16	150	-40~85
74ALVCH16600	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16601	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16646	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40~85
74ALVCH16652	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40~85
74ALVCH16952	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.2	16	150	-40~85
74ALVT162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	2.3	16	75	-40~85
74AVC16245	16-bit transceiver (3-state)	1.2 - 3.6	CMOS	±12	2.0	16	200	-40~85
74AVCH16245	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS	±12	2.0	16	200	-40~85
74HC245	Octal transceiver (3-state)	2.0 - 6.0	CMOS	±7.8	7.0	8	36	-40~125
74HCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	10	8	36	-40~125
74LV245	Octal transceiver (3-state)	1.0 - 5.5	TTL	±16	7.0	8	30	-40~125
74LV245A	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±16	3	8	60	-40~125
74LV245AT	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	3	8	60	-40~125
74LVC162245A	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.3	16	175	-40~125
74LVC16245A	16-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	16	175	-40~125
74LVC2245A	Octal transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.3	8	175	-40~125
74LVC245A	Octal transceiver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	2.9	8	175	-40~125
74LVC32245A	32-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	2.2	32	175	-40~125
74LVCH162245A	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.3	16	175	-40~125
74LVCH16245A	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	16	175	-40~125
74LVCH245A	Octal transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	2.9	8	175	-40~125

Transceivers

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

Schmitt-triggers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40~125
74AHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40~125
74AHC1G14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC1G17	Single buffer Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC3G14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40~125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40~125
74AHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	60	6	-40~125
74AHCT17A	Hex buffer Schmitt-trigger	4.5 - 5.5	TTL	±8	3.2	50	60	8	-40~125
74AHCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
74AHCT1G17	Single buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
74AHCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40~125
74AHCV07A	Hex buffer Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	3.8	15	60	6	-40~125
74AHCV14A	Hex inverter Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40~125
74AHCV17A	Hex buffer Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40~125
74AHCV244A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40~125
74AHCV245A	Octal transceiver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	15	60	8	-40~125
74AHCV541A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40~125
74ALVC14	Hex inverter Schmitt-trigger	1.65 - 3.6	TTL	±24	2.4	50	150	6	-40~85
74AUP1G132	Single 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10.0	30	70	1	-40~125
74AUP1G14	Single inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40~125
74AUP1G17	Single buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	1	-40~125

Schmitt-triggers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40~125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40~125
74AUP2G14	Dual inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	2	-40~125
74AUP2G17	Dual buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	2	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	2	-40~125
74AUP3G14	Triple inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40~125
74AUP3G17	Triple Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40~125
74AXP1G14	Single inverter Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.9	5	70	1	-40~85
74AXP1G17	Single buffer Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.8	5	70	1	-40~85
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1T14	Dual-supply Schmitt-trigger inverter	0.75 - 2.75	CMOS	±12	4.9	5	45	1	-40~125
74AXP1T57	Single dual-supply translating configurable gate; Schmitt-trigger inputs	0.75 - 2.75	CMOS	±12	4.8	5	45	1	-40~125
74AXP2G14	Dual inverter Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.9	5	70	2	-40~85
74AXP2G17	Dual buffer Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.8	5	70	1	-40~85
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HC14	Hex inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	6	-40~125
74HC1G14	Single inverter Schmitt-trigger	2.0 - 6.0	CMOS	±2.6	10	50	36	1	-40~125
74HC2G14	Dual inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	2	-40~125
74HC2G17	Dual buffer Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	2	-40~125
74HC3G14	Triple inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	3	-40~125
74HC7014	Hex buffer precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	27	50	36	6	-40~125
74HC7540	Octal inverter/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40~125
74HC7541	Octal buffer/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40~125
74HC9114	9-bit inverter Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5,2	12	50	36	9	-40~125
74HC9115	9-bit buffer Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5,2	12	50	36	9	-40~125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40~125
74HCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	6	-40~125
74HCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2.0	15	50	36	1	-40~125
74HCT2G14	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40~125
74HCT2G17	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40~125

Schmitt-triggers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	3	-40~125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40~125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40~125
74HCT9114	9-bit inverter Schmitt-trigger; open drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	13	50	36	9	-40~125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40~125
74LV14	Hex inverter Schmitt-trigger	1.0 - 5.5	TTL	±12	13	50	30	6	-40~125
74LV14A	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±12	3.4	15	60	6	-40~125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	175	4	-40~125
74LVC14A	Hex inverter Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	175	6	-40~125
74LVC1G14	Single inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40~125
74LVC1G17	Single buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40~125
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	8.4	50	150	1	-40~125
74LVC2G14	Dual inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.9	50	175	2	-40~125
74LVC2G17	Dual buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	2	-40~125
74LVC3G14	Triple inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.2	50	175	3	-40~125
74LVC3G17	Triple buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	3	-40~125
74LVT14	Hex inverter Schmitt-trigger	2.7 - 3.6	TTL	±32	3.8	50	150	6	-40~125
74VHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40~125
74VHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	6	-40~125
HEF40106B	Hex inverter Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	6	-40~85
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~125
XC7SET14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
XC7SH14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
XC7WH14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40~125
XC7WT14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40~125

Counters/Frequency dividers

Type number	Description	V _{CC} (V)	Output drive capability (mA)	Logic switching levels	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74AHC1G4210	10-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	17	15	125	-40~125
74AHC1G4212	12-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	20	15	125	-40~125
74AHC1G4214	14-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	23	15	125	-40~125
74HC160	Presetable synchronous BCD decade counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	18	50	55	-40~125
74HC161	Presetable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	19	50	48	-40~125
74HCT161	Presetable synchronous 4-bit binary counter; asynchronous reset; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	41	-40~125
74HCT163	Presetable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	50	-40~125
74HC191	Presetable synchronous 4-bit binary up/down counter	2.0 - 6.0	±5.2	CMOS	22	50	36	-40~125
74HC193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks	2.0 - 6.0	±5.2	CMOS	20	50	49	-40~125
74HCT193	Presetable synchronous 4-bit binary up/down counter; separate up/down clocks; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	43	-40~125
74HC390	Dual decade ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	60	-40~125
74HCT390	Dual decade ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	18	50	55	-40~125
74HC393	Dual 4-bit binary ripple counter	2.0 - 6.0	±5.2	CMOS	12	50	107	-40~125
74HCT393	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	53	-40~125
74HC4017	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	±5.2	CMOS	18	50	77	-40~125
74HCT4017	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	±4.0	TTL	21	50	67	-40~125
74HC4020	14-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	11	50	52	-40~125
74HCT4020	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	15	50	52	-40~125
74HC4040	12-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40~125
74HCT4040	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	16	50	79	-40~125
74HC4060	14-stage binary ripple counter with oscillator	2.0 - 6.0	±5.2	CMOS	31	50	95	-40~125
74HCT4060	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	±4.0	TTL	31	50	88	-40~125
74HC4520	Dual 4-bit synchronous binary counter	2.0 - 6.0	±5.2	CMOS	24	50	64	-40~125
74HCT4520	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	24	50	64	-40~125
74HC555	Programmable delay timer with oscillator	2.0 - 6.0	-0,8	CMOS	89	50	24	-40~125
74HC6323	Programmable ripple counter with oscillator (3-state)	2.0 - 6.0	±7.8	CMOS	17	50	100	-40~125
74HCT6323	Programmable ripple counter with oscillator (3-state); TTL-enabled	4.5 - 5.5	±4.0	TTL	17	50	85	-40~125
74HC40103	8-bit synchronous binary down counter	2.0 - 6.0	±5.2	CMOS	15	50	14	-40~125
74HC4024	7-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40~125
74HC590	8-bit binary counter with output register (3-state)	2.0 - 6.0	±5.2	CMOS	19	50	61	-40~125
74LV393	Dual 4-bit binary ripple counter	1.0 - 3.6	±6	TTL	12	50	90	-40~125
74LV4020	14-stage binary ripple counter	1.0 - 5.5	±6	TTL	16	50	100	-40~125
74LV4060	14-stage binary ripple counter with oscillator	1.0 - 5.5	±6	TTL	29	50	100	-40~125
74LVC161	Presetable synchronous 4-bit binary counter; asynchronous reset	1.2 - 3.6	±24	CMOS/ LVTTTL	4.9	50	200	-40~125

Counters/Frequency dividers

Type number	Description	V _{CC} (V)	Output drive capability (mA)	Logic switching levels	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74LVC163	Presetable synchronous 4-bit binary counter; synchronous reset	1.2 - 3.6	±24	CMOS/ LVTTTL	4.9	50	200	-40~125
HEF4017B	Johnson decade counter with 10 decoded outputs	3.0 - 15	±2.4	CMOS	40	50	30	-40~85
HEF4020B	14-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	35	-40~85
HEF4024B	7-stage binary ripple counter	3.0 - 15	±2.4	CMOS	30	50	35	-40~85
HEF4040B	12-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	50	-40~85
HEF4060B	14-stage binary ripple counter with oscillator	3.0 - 15	±2.4	CMOS	50	50	30	-40~85
HEF4518B	Dual BCD counter	3.0 - 15	±2.4	CMOS	40	50	40	-40~85
HEF4520B	Dual 4-bit synchronous binary counter	3.0 - 15	±2.4	CMOS	15	50	40	-40~85
HEF4521B	24-stage frequency divider and oscillator	3.0 - 15	±2.4	CMOS	220	50	35	-40~85
HEF4541B	Programmable timer	3.0 - 15	- 4/ 2.7	CMOS	38	50	150	-40~85

FIFO registers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74HC40105	4-bit x 16-word FIFO register	2.0 - 6.0	CMOS	±5.2	15	50	30	-40~125

Flip-flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74AHC1G79	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.5	50	90	-40~125
74AHC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	4.2	50	165	-40~125
74AHC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	185	-40~125
74AHC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.9	50	175	-40~125
74AHC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	130	-40~125
74AHC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.7	50	170	-40~125
74AHCT1G79	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	90	-40~125
74AHCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	120	-40~125
74AHCT374	Octal D-type flip-flop; positive-edge trigger (3-state)	4.5 - 5.5	TTL	±8	4.3	50	140	-40~125
74AHCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	140	-40~125
74AHCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	4.4	50	130	-40~125
74AHCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	160	-40~125
74ALVC374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40~85
74ALVC574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40~85
74ALVC74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.65 - 3.6	TTL	±24	2.3	50	425	-40~85
74ALVCH16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	TTL	±24	2.3	50	350	-40~85
74ALVCH16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±24	2.5	50	350	-40~85
74ALVCH16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	TTL	±24	2.1	50	350	-40~85
74ALVT162821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±12	3.2	50	150	-40~85
74ALVT162823	18-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	3.0	50	150	-40~85
74ALVT16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	150	-40~85
74ALVT16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.9	50	250	-40~85
74AUP1G175	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	7.4	30	70	-40~125
74AUP1G374	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	CMOS	±1.9	7.9	30	400	-40~125
74AUP1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.2	30	400	-40~125
74AUP1G79	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AUP1G80	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AUP2G79	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	8.5	30	400	-40~125
74AUP2G80	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AVC16374	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS	±12	1.5	30	350	-40~85
74HC107	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	78	-40~125

Flip-flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74HC109	Dual JK-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	75	-40~125
74HC112	Dual JK-type flip-flop with set and reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	66	-40~125
74HC173	Quad D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	17	50	88	-40~125
74HC174	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	99	-40~125
74HC175	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	83	-40~125
74HC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	122	-40~125
74HC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	83	-40~125
74HC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	CMOS	±7.8	13	50	83	-40~125
74HC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	133	-40~125
74HC73	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	77	-40~125
74HC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	14	50	82	-40~125
74HCT107	Dual JK-type flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	73	-40~125
74HCT109	Dual JK-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	61	-40~125
74HCT112	Dual JK-type flip-flop with set and reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	70	-40~125
74HCT173	Quad D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	88	-40~125
74HCT174	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	69	-40~125
74HCT175	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	54	-40~125
74HCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	36	-40~125
74HCT374	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	13	50	48	-40~125
74HCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±6	14	50	53	-40~125
74HCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	15	50	76	-40~125
74HCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	59	-40~125
74LV74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	TTL	±12	11	50	75	-40~125
74LVC16374A	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
74LVC1G175	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.1	50	300	-40~125
74LVC1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.5	50	280	-40~125
74LVC1G79	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	450	-40~125
74LVC1G80	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	450	-40~125
74LVC273	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	6.0	50	230	-40~125
74LVC2G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.5	50	280	-40~125
74LVC374A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	2.7	50	100	-40~125
74LVC377	Octal D-type flip-flop with data enable; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	6.0	50	230	-40~125
74LVC574A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.2	50	150	-40~125
74LVC74A	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	2.5	50	250	-40~125
74LVC823A	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	5.4	50	150	-40~125
74LVCH162374A	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
74LVCH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125

Flip-flops

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	f_{max} (MHz)	T_{amb} (°C)
74LVT162374	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	2.7 - 3.6	TTL	± 12	3.0	50	150	-40~85
74LVT16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 - 3.6	TTL	-32 / 64	3.0	50	150	-40~85
74LVTH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 - 3.6	TTL	-32 / 64	3.0	50	150	-40~85
HEF4013B	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15.0	CMOS	± 2.4	30	50	40	-40~85
HEF40175B	Quad D-type flip-flop with reset; positive-edge trigger	3.0 - 15.0	CMOS	± 2.4	25	50	45	-40~85
HEF4027B	Dual JK-type flip-flop	3.0 - 15.0	CMOS	± 2.4	30	50	30	-40~85

Latches/Registered drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	Number of bits	T _{amb} (°C)
74AHC373	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.3	50	8	-40~125
74AHC573	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.2	50	8	-40~125
74AHCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.9	50	8	-40~125
74ALVC162334A	16-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	16	-40~85
74ALVC162834A	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	18	-40~85
74ALVC162835A	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	18	-40~85
74ALVC162836A	20-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	20	-40~85
74ALVC16834A	18-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	18	-40~85
74ALVC16835A	18-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	18	-40~85
74ALVC16836A	20-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	20	-40~85
74ALVC373	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40~85
74ALVC573	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40~85
74ALVCH16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	16	-40~85
74ALVCH16841	20-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.4	50	20	-40~85
74ALVCH16843	18-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	18	-40~85
74ALVCH32973	16-bit transceiver and transparent D-type latch with 8 independent buffers	1.8 - 3.6	TTL	±24	2.5	50	16	-40~85
74ALVT16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	16	-40~85
74AUP1G373	Single D-type transparent latch (3-state)	1.1 - 3.6	CMOS	±1.9	8.5	30	1	-40~125
74AVC16334A	16-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	16	-40~85
74AVC16373	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	16	-40~85
74AVC16834A	18-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	18	-40~85
74AVC16835A	18-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	18	-40~85
74AVC16836A	20-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	20	-40~85
74HC259	8-bit addressable latch	2.0 - 6.0	CMOS	±5.2	18	50	8	-40~125
74HC373	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	12	50	8	-40~125
74HC573	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	8	-40~125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40~125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40~125
74HCT259	8-bit addressable latch; TTL-enabled	4.5 - 5.5	TTL	±4	20	50	8	-40~125
74HCT373	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	14	50	8	-40~125
74HCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	8	-40~125
74LVC162373A	16-bit D-type transparent latch with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.2	50	16	-40~125
74LVC16373A	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40~125
74LVC373A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	8	-40~125
74LVC573A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	8	-40~125
74LVCH162373A	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	16	-40~125
74LVCH16373A	16-bit D-type transparent latch with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40~125

Latches/Registered drivers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
74LVT162373	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	± 12	2.5	50	16	-40~85
74LVT16373A	16-bit D-type transparent latch with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	50	16	-40~85
74LVT573	Octal D-type transparent latch (3-state)	2.7 - 3.6	TTL	-32 / 64	2.7	50	8	-40~85
HEF40373B	Octal D-type transparent latch (3-state)	3.0 - 15.0	CMOS	-50 / 62	40	50	8	-40~85
HEF4043B	Quad R/S latch with set and reset (3-state)	3.0 - 15.0	CMOS	± 2.4	25	50	4	-40~85

AND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74ABT08	Quad 2-input AND gate	4.5 - 5.5	TTL	-15 / 20	2.4	50	100	4	-40~85
74AHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74AHC1G08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHC1G09	Single 2-input AND gate; open drain	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHC2G08	Dual 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	2	-40~125
74AHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
74AHCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50 pF	60	1	-40~125
74AHCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50 pF	60	2	-40~125
74ALVC08	Quad 2-input AND gate	1.65 - 3.6	CMOS / LVTTTL	±24	2.0	50 pF	145	4	-40~85
74AUP1G08	Single 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30 pF	70	1	-40~125
74AUP1G09	Single 2-input AND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30 pF	70	1	-40~125
74AUP1G11	Single 3-input AND gate	1.1 - 3.6	CMOS	±1.9	6.9	30 pF	70	1	-40~125
74AUP2G08	Dual 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30 pF	70	2	-40~125
74AXP1G08	Single 2-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5 pF	70	1	-40~85
74AXP1G09	Single 2-input AND gate with open-drain output	0.7 - 2.75	CMOS	±4.5	2.6	5 pF	70	1	-40~85
74AXP1G11	Single 3-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5 pF	70	1	-40~85
74HC08	Quad 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50 pF	36	4	-40~125
74HC11	Triple 3-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50 pF	36	3	-40~125
74HC1G08	Single 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50 pF	36	1	-40~125
74HC21	Dual 4-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50 pF	36	2	-40~125
74HC2G08	Dual 2-input AND gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50 pF	36	4	-40~125
74HCT11	Triple 3-input AND gate	4.5 - 5.5	TTL	±4	11	50 pF	36	3	-40~125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±2	11	50 pF	36	1	-40~125
74HCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50 pF	36	2	-40~125
74LV08	Quad 2-input AND gate	1.0 - 5.5	TTL	±12	7.0	50 pF	30	4	-40~125
74LVC08A	Quad 2-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	2.1	50 pF	150	4	-40~125
74LVC11	Triple 3-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	3.7	50 pF	150	3	-40~125
74LVC1G08	Single 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50 pF	150	1	-40~125
74LVC1G11	Single 3-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.6	50 pF	150	1	-40~125
74LVC2G08	Dual 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50 pF	150	2	-40~125
74LVT08	Quad 2-input AND gate	2.7 - 3.6	TTL	-20 / 32	3.4	50 pF	150	4	-40~85
74VHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74VHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
HEF4073B	Triple 3-input AND gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	3	-40~85
HEF4081B	Quad 2-input AND gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~85
HEF4082B	Dual 4-input AND gate	3.0 - 15	CMOS	±2.4	25	50 pF	10	2	-40~85
XC7SET08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50 pF	60	1	-40~125
XC7SH08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125

Combination Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G0832	Single 3-input AND-OR gate	1.1 - 3.6	CMOS	±1.9	6.7	30 pF	70	1	-40~125
74AUP1G3208	Single 3-input OR-AND gate	1.1 - 3.6	CMOS	±1.9	7.4	30 pF	70	1	-40~125
74AUP1G885	Dual function gate	1.1 - 3.6	CMOS	±1.9	7.6	30 pF	70	1	-40~125
74AUP1Z04	Crystal driver with enable and internal resistor	1.1 - 3.6	CMOS	±1.9	5.6	30 pF	70	1	-40~125
74AUP1Z125	Crystal driver with enable and internal resistor (3-state)	1.1 - 3.6	CMOS	±1.9	4.7	30 pF	70	1	-40~125
74AUP2G0604	Inverter with open drain and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	2	-40~125
74AUP2G3404	Buffer and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	2	-40~125
74AUP2G3407	Buffer and buffer with open drain	1.1 - 3.6	CMOS	±1.9	4.1	30 pF	70	2	-40~125
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 - 3.6	CMOS	±1.9	3.8	30 pF	70	2	-40~125
74AUP3G0434	Dual inverter and single buffer	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	3	-40~125
74AUP3G3404	Dual buffer and single inverter	1.1 - 3.6	CMOS	±1.9	4.0	30 pF	70	3	-40~125
74LVC1GX04	Crystal driver	1.65 - 5.5	CMOS / LVTTTL	±24	2.8	50 pF	150	1	-40~125
HEF4007UB	Dual complementary pair and inverter	3.0 - 15	CMOS	±3.4	15	50 pF	10	2	-40~85

Configurable Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30 pF	70	1	-40~125
74AUP1G3208	Configurable multiple function gate	0.8 - 3.6	CMOS	±4	6.6	30 pF	70	1	-40~125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±1.9	8.7	30 pF	70	1	-40~125
74AUP2G57	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30pF	70	1	-40~125
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5pF	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5pF	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5pF	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5pF	70	1	-40~85
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	6.3	50 pF	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	8.4	50 pF	150	1	-40~125

EXCLUSIVE-NOR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	T _{amb} (°C)
HEF4077	Quad 2-input EXCLUSIVE-NOR gate	3.0 - 15	CMOS	±2.4	30	50 pF	10	-40~85

EXCLUSIVE-OR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC1G86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50 pF	60	1	-40~125
74AHC1G86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50 pF	60	4	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.4	50 pF	60	4	-40~125
74AUP1G386	Single 3-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	8.6	30 pF	70	1	-40~125
74AUP1G86	Single 2-input Exclusive-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	1	-40 ~125
74AUP2G86	Dual 2-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30 pF	70	2	-40~125
74AXP1G86	Single 2-input Exclusive-OR gates	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40 ~85
74HC1G86	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±2.6	9.0	50 pF	36	1	-40~125
74HCT1G86	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50 pF	36	1	-40~125
74HC2G86	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT2G86	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	11	50 pF	36	2	-40~125
74HC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	11	50 pF	36	4	-40~125
74HCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50 pF	36	4	-40~125
74LVC1G386	Single 3-Input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	4.5	50 pF	150	1	-40~125
74LVC1G86	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50 pF	150	1	-40~125
74LVC2G86	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.3	50 pF	150	2	-40~125
74LVC86	Quad 2-input EXCLUSIVE-OR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.0	50 pF	150	4	-40~125
HEF4030B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50 pF	10	4	-40~85
HEF4070B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50 pF	10	4	-40~85
XC7SET86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
XC7SH86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50 pF	60	1	-40~125

NAND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74ABT00	Quad 2-input NAND gate	4.5 - 5.5	TTL	-15 / 20	2.5	50	100	4	-40~85
74ABT20	Dual 4-input NAND gate	4.5 - 5.5	TTL	-15 / 20	2.7	50	100	2	-40~85
74AHC00	Quad 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	4	-40~125
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40~125
74AHC1G00	Single 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	1	-40~125
74AHC2G00	Dual 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	2	-40~125
74AHC00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	4	-40~125
74AHC132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40~125

NAND Gates

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
74AHT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40~125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40~125
74AXP1G00	Single 2-input NAND gate	0.7 - 2.75	CMOS	±4.5	2.7	5	70	1	-40~85
74AXP1G10	Single 3-input NAND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40~125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40~125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	3.4	50	175	4	-40~125
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	3.0	50	10	4	-40~85
74AHC30	8-input NAND gate	2.0 - 5.5	CMOS	±8	3.6	50	60	1	-40~125
74AHT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
74ALVC00	Quad 2-input NAND gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.1	50	145	4	-40~85
74AUP1G00	Single 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40~125
74AUP1G132	Single 2-input NAND gate Schmitt trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	1	-40~125
74AUP1G38	Single 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	1	-40~125
74AUP2G00	Dual 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40~125
74AUP2G38	Dual 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	2	-40~125
74HC00	Quad 2-input NAND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HC03	Quad 2-input NAND gate; open drain	2.0 - 6.0	CMOS	5.2	8.0	50	36	4	-40~125
74HC10	Triple 3-input NAND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	3	-40~125
74HC1G00	Single 2-input NAND gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40~125
74HC20	Dual 4-input NAND gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	2	-40~125
74HC2G00	Dual 2-input NAND gate	2.0 - 6.0	CMOS	±5.6	9.0	50	36	2	-40~125
74HC30	8-input NAND gate	2.0 - 6.0	CMOS	±5.2	12	50	36	1	-40~125
74HCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	4	-40~125
74HCT03	Quad 2-input NAND gate; TTL-enabled; open drain	4.5 - 5.5	TTL	±4	10	50	36	4	-40~125
74HCT10	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	3	-40~125
74HCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±2	10	50	36	1	-40~125
74HCT20	Dual 4-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	36	2	-40~125
74HCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40~125
74HCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	1	-40~125
74LV00	Quad 2-input NAND gate	1.0 - 5.5	TTL	±12	7	50	30	4	-40~125
74LV03	Quad 2-input NAND gate; TTL-enabled; open drain	1.0 - 5.5	TTL	±12	8.0	50	30	4	-40~125
74LVC00A	Quad 2-input NAND gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50	150	4	-40~125
74LVC10A	Triple 3-input NAND gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.9	50	150	3	-40~125
74LVC1G00	Single 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	175	1	-40~125
74LVC1G10	Single 3-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50	175	1	-40~125
74LVC1G38	Single 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTTL	32	2.3	50	175	1	-40~125
74LVC2G00	Dual 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	175	2	-40~125
74LVC2G38	Dual 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTTL	32	2.1	50	175	2	-40~125
74LVC30A	8-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	24	3.6	50	175	1	-40~125
HEF4011B	Quad 2-input NAND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85

NOR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50	60	4	-40~125
74AHC02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50 pF	60	4	-40~125
74AHC1G02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHC1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
74ALVC02	Quad 2-input NOR gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.2	50 pF	150	4	-40~85
74AUP1G02	Single 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30 pF	70	1	-40~125
74AUP2G02	Dual 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30 pF	70	2	-40~125
74AXP1G02	Single 2-input NOR gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC02	Quad 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	7.0	50 pF	36	4	-40~125
74HCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	9.0	50 pF	36	4	-40~125
74HC1G02	Single 2-input NOR gate	2.0 - 6.0	CMOS	±2.6	7.0	50 pF	36	1	-40~125
74HCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	9.0	50 pF	36	1	-40~125
74HC27	Triple 3-input NOR gate	2.0 - 6.0	CMOS	±5.2	8.0	50 pF	36	3	-40~125
74HCT27	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50 pF	36	3	-40~125
74HC2G02	Dual 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50 pF	36	2	-40~125
74HC4002	Dual 4-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT4002	Dual 4-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50 pF	36	2	-40~125
74LV02	Quad 2-input NOR gate	1.0 - 5.5	TTL	±12	6.0	50 pF	30	4	-40~125
74LVC02A	Quad 2-input NOR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50 pF	150	4	-40~125
74LVC1G02	Single 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.1	50 pF	150	1	-40~125
74LVC1G27	Single 3-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50 pF	150	1	-40~125
74LVC2G02	Dual 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50 pF	150	2	-40~125
74LVT02	Quad 2-input NOR gate	2.7 - 3.6	TTL	-20 / 32	2.8	50 pF	150	4	-40~85
74VHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50 pF	60	4	-40~125
74VHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50 pF	60	4	-40~125
HEF4001B	Quad 2-input NOR gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~85
HEF4002B	Dual 4-input NOR gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~85
XC7SET02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50 pF	60	1	-40~125
XC7SH02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125

OR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (Typ)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74ABT32	Quad 2-input OR gate	4.5 - 5.5	TTL	-15 / 20	2.3	50	100	4	-40~85
74AHC1G32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125
74AHCT1G32	Single 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50 pF	60	1	-40~125
74AHC2G32	Dual 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	2	-40~125
74AHCT2G32	Dual 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50 pF	60	2	-40~125
74AHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74AHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
74ALVC32	Quad 2-input OR gate	1.65 - 3.6	CMOS/LVTTL	±24	2.0	50 pF	150	4	-40~125
74AUP1G32	Single 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30 pF	70	1	-40~125
74AUP1G332	Single 3-input OR gate	1.1 - 3.6	CMOS	±1.9	6.8	30 pF	70	1	-40~125
74AUP2G32	Dual 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30 pF	70	2	-40~125
74AXP1G32	Single 2-input OR gate	0.7 - 2.75	CMOS	±4.5	2.5	5	70	1	-40~85
74HC1G32	Single 2-input OR gate	2.0 - 6.0	CMOS	±2.6	8.0	50 pF	36	1	-40~125
74HCT1G32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50 pF	36	1	-40~125
74HC2G32	Dual 2-input OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50 pF	36	2	-40~125
74HCT2G32	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	13	50 pF	36	2	-40~125
74HC32	Quad 2-input OR gate	2.0 - 6.0	CMOS	±5.2	6.0	50 pF	36	4	-40~125
74HCT32	Quad 2-input OR gate	4.5 - 5.5	TTL	±4.0	9.0	50 pF	36	4	-40~125
74HC4075	Triple 3-input OR gate	2.0 - 6.0	CMOS	±5.2	8.0	50 pF	36	3	-40~125
74HCT4075	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50 pF	36	3	-40~125
74LVC1G32	Single 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.1	50 pF	150	1	-40~125
74LVC1G332	Single 3-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32		50 pF	150	1	-40~125
74LVC2G32	Dual 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.2	50 pF	150	2	-40~125
74LVC32A	Quad 2-input OR gate	1.2 - 3.6	CMOS/LVTTL	±24	2.1	50 pF	150	4	-40~125
74VHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50 pF	60	4	-40~125
74VHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50 pF	60	4	-40~125
HEF4071B	Quad 2-input OR gate	3.0 - 15	CMOS	±2.4	20	50 pF	10	4	-40~125
XC7SET32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50 pF	60	1	-40~125
XC7SH32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50 pF	60	1	-40~125

Level shifters/Translators

Types in **bold** represent new products

Type number	Description	V _{CC(A)} (V)	V _{CC(B)} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	Number of bits	T _{amb} (°C)
74ALVC164245	16-bit dual-supply voltage-translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	CMOS/LVTTL	±24	2.9	50	16	-40~85
74AUP1T34	Single dual-supply translating buffer	1.1 - 3.6	1.1 - 3.6	CMOS	±1.9	15.2	30	1	-40~125
74AUP1T45	Single dual-supply voltage-translating transceiver (3-state)	1.1 - 3.6	1.1 - 3.6	CMOS	±1.9	15.6	30	1	-40~125
74AVC16T245	16-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	16	-40~125
74AVC1T1022	1-to-4 fan out buffer	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	1	-40~125
74AVC1T45	Single dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	1	-40~125
74AVC20T245	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	3.5	30	20	-40~125
74AVC2T245	2-bit dual-supply voltage-translating transceiver	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	2	-40~125
74AVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	2	-40~125
74AVC32T245	32-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	32	-40~125
74AVC4T245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	4	-40~125
74AVC4TD245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	4	-40~125
74AVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	8	-40~125
74AVCH16T245	16-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	16	-40~125
74AVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	1	-40~125
74AVCH20T245	20-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	3.5	30	20	-40~125
74AVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	2	-40~125
74AVCH4T245	4-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/LVTTL	±12	2.1	30	4	-40~125
74AVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS	±12	2.1	15	8	-40~125
74AXP1T125	Dual-supply buffer/line driver (3-state)	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74AXP1T14	Dual-supply schmitt-trigger inverter	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T32	Dual-supply 2-input or gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T34	Single dual-supply voltage-translating buffer	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T57	Schmitt-trigger inputs, Dual supply configurable multiple function gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~85
74AXP2T08	Dual-supply 2-input AND gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74AXP2T3407	Dual-supply single buffer and single buffer with open drain	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74HC4049	Hex inverter with 15 V-tolerant inputs	2.0 - 6.0	n.a.	CMOS	±5.2	8.0	50	6	-40~125
74HC4050	Hex buffer with 15 V-tolerant inputs	2.0 - 6.0	n.a.	CMOS	±5.2	7.0	50	6	-40~125
74LVC1T45	Single dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	1	-40~125
74LVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	2	-40~125
74LVC4245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
74LVC4245A	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
74LVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
74LVC8T595	Dual supply 8-bit serial-in/serial-out or parallel-out shift register; 3-state	1.1 - 5.5	1.1 - 5.5	CMOS/LVTTL	±24	4.1	15	8	-40~125
74LVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	1	-40~125
74LVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	2.5	50	2	-40~125
74LVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/LVTTL	±24	3.5	50	8	-40~125
HEF4104B	Quad low-to-high voltage translator (3-state)	3.0 - 15	3.0 - 15	CMOS	±2.4	3.4	50	16	-40~85

Digital comparators

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

Multivibrators

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74AHC123A	Dual retriggerable monostable multivibrator with reset	2.0 - 5.5	CMOS	±8	5.1	50	-40~125
74AHC123A	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	-40~125
74HC123	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±7.8	9.0	50	-40~125
74HCT123	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125
74HCT221	dual non-retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	32	50	-40~125
74HC423	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±5.2	23	50	-40~125
74HCT423	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125
74HC4538	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	CMOS	±5.2	27	50	-40~125
74HCT4538	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40~125
74LV123	Dual retriggerable monostable multivibrator with reset	1.0 - 5.5	TTL	±12	20	50	-40~125
74LVC1G123	Single retriggerable monostable multivibrator	1.65 - 5.5	CMOS/LVTTL	±32	3.5	50	-40~125
HEF4047B	Monostable/astable multivibrator	3.0 - 15	CMOS	±2.4	50	50	-40~85
HEF4528B	Dual retriggerable monostable multivibrator with reset	3.0 - 15	CMOS	±2.4	40	50	-40~85
HEF4538B	Dual retriggerable precision monostable multivibrator	3.0 - 15	CMOS	±2.4	60	50	-40~85

Parity generators-checkers

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

Phase-locked loops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	F _{max} (MHz)	T _{amb} (°C)
74HC4046A	Phase-locked loop with VCO	3.0 - 6.0	CMOS	±5.2	18	50	21	-40~125
74HCT4046A	Phase-locked loop with VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40~125
74HCT9046A	Phase-locked loop with bandgap controlled VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40~125
HEF4046B	Phase-locked loop with VCO	3.0 - 15.0	CMOS	±2.4		50	2.7	-40~125

Printer interfaces

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

Bus Switches

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	V _{PASS} (V)	Logic switching levels	R _{ON} (Ω)	f _(-3dB) (MHz)	Number of bits	t _{pd} (ns)	T _{amb} (°C)
74CB3Q3253	Dual 1-of-4 FET multiplexer/demultiplexer with charge pump	2.3 - 3.6	V _{CC}	CMOS/LVTTL	4	500	2	0.2	-40~85
74CB3Q3257	Quad 1-of-2 FET multiplexer/demultiplexer with charge pump	2.3 - 3.6	V _{CC}	CMOS/LVTTL	4	500	4	0.2	-40~85
74CBTLV16211	24-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLV1G125	Single bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	1	0.2	-40~125
74CBTLV3125	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3126	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3244	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLV3245	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLV3253	Dual 4:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	2	0.2	-40~125
74CBTLV3257	Quad 2:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3306	2-bit bus switch	2.3 - 3.6	5.0	CMOS/LVTTL	7	400	2	0.2	-40~125
74CBTLV3384	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLV3861	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLVD3244	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLVD3245	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLVD3384	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLVD3861	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40~125
CBT16210	20-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	20	0.25	-40~85
CBT3125	Quad bus switch	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40~85
CBT3244A	Octal bus switch	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3245A	Octal bus switch	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3251	8:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3253	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3253A	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3257A	Quad 2:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40~85
CBT3306	Dual bus switch	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3861	10-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	10	0.25	-40~85
CBTD16210	20-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	20	0.25	-40~85
CBTD3306	Dual bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	2	0.25	-40~85
CBTD3384	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40~85
CBTD3861	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40~85

Decoders/Demultiplexers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74AHC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 5.5	CMOS	±8	4.4	50	-40~125
74AHC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 5.5	CMOS	±8	3.9	50	-40~125
74AHCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	TTL	±8	4.4	50	-40~125
74AHCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	-40~125
74AUP1G18	1-to-2 demultiplexer (3-state)	1.1 - 3.6	CMOS	±1.9	3.2	30	-40~125
74AUP1G19	1-to-2 decoder/demultiplexer	1.1 - 3.6	CMOS	±1.9	3.0	30	-40~125
74HC137	3-to-8 line decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	18	50	-40~125
74HC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 6.0	CMOS	±5.2	12	50	-40~125
74HC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40~125
74HC154	4-to-16 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	11	50	-40~125
74HC237	3-to-8 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	18	50	-40~125
74HC238	3-to-8 decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40~125
74HC42	BCD to decimal decoder (1-of-10)	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HC4511	BCD to 7-segment latch/decoder/driver with lamp test input	2.0 - 6.0	CMOS	-10	28	50	-40~125
74HC4514	4-to-16 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	27	50	-40~125
74HC4515	4-to-16 decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	29	50	-40~125
74HCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	-40~125
74HCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	-40~125
74HCT154	4-to-16 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	-40~125
74HCT238	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	-40~125
74HCT4511	BCD to 7-segment latch/decoder/driver with lamp test input; TTL-enabled	4.5 - 5.5	TTL	-10	28	50	-40~125
74HCT4514	4-to-16 decoder/demultiplexer with address latches; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40~125
74LV138	3-to-8 line decoder/demultiplexer; inverting	1.0 - 5.5	TTL	±12	12	50	-40~125
74LVC138A	3-to-8 line decoder/demultiplexer; inverting	1.2 - 3.6	CMOS/LVTTL	±24	2.7	50	-40~125
74LVC139	Dual 2-to-4 line decoder/demultiplexer	1.2 - 3.6	CMOS/LVTTL	±24	2.5	50	-40~125
74LVC1G18	1-to-2 demultiplexer (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	2.3	50	-40~125
74LVC1G19	1-to-2 decoder/demultiplexer	1.65 - 5.5	CMOS/LVTTL	±32	1.8	50	-40~125
HEF4028B	1-of-10 decoder	3.0 - 15.0	CMOS	±2.4	30	50	-40~85
HEF4543B	BCD to 7-segment latch/decoder/driver with phase input	3.0 - 15.0	CMOS	±2.4	55	50	-40~85
HEF4555B	Dual 1-to-4 line decoder/demultiplexer	3.0 - 15.0	CMOS	±2.4	30	50	-40~85

Digital Multiplexers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (pF)	t _{pd} (ns)	T _{amb} (°C)
74AHC157	Quad 2-input multiplexer	2.0 - 5.5	CMOS	±8	50	3.2	-40~125
74AHC257	Quad 2-input multiplexer (3-state)	2.0 - 5.5	CMOS	±8	50	2.9	-40~125
74AHCT157	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.2	-40~125
74AHCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.7	-40~125
74AUP1G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.2	-40~125
74AUP1G158	Single 2-input multiplexer; inverting	1.1 - 3.6	CMOS	±1.9	30	3.2	-40~125
74AUP2G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.4	-40~125
74AXP1G157	Single 2-input multiplexer	0.7 - 2.75	CMOS	±4.5	5	2.7	-40~85
74HC151	8-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40~125
74HC153	Dual 4-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40~125
74HC157	Quad 2-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	11	-40~125
74HC158	Quad 2-input multiplexer; inverting	2.0 - 6.0	CMOS	±5.2	50	12	-40~125
74HC251	8-input multiplexer (3-state)	2.0 - 6.0	CMOS	±5.2	50	18	-40~125
74HC253	Dual 4-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	17	-40~125
74HC257	Quad 2-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	11	-40~125
74HCT151	8-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40~125
74HCT153	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40~125
74HCT157	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	13	-40~125
74HCT251	8-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	22	-40~125
74HCT253	Dual 4-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	17	-40~125
74HCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	13	-40~125
74LVC157A	Quad 2-input multiplexer	1.2 - 3.6	CMOS/LVTTL	±24	50	2.5	-40~125
74LVC1G157	Single 2-input multiplexer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	-40~125
74LVC257A	Quad 2-input multiplexer (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	-40~125

Analog Switches

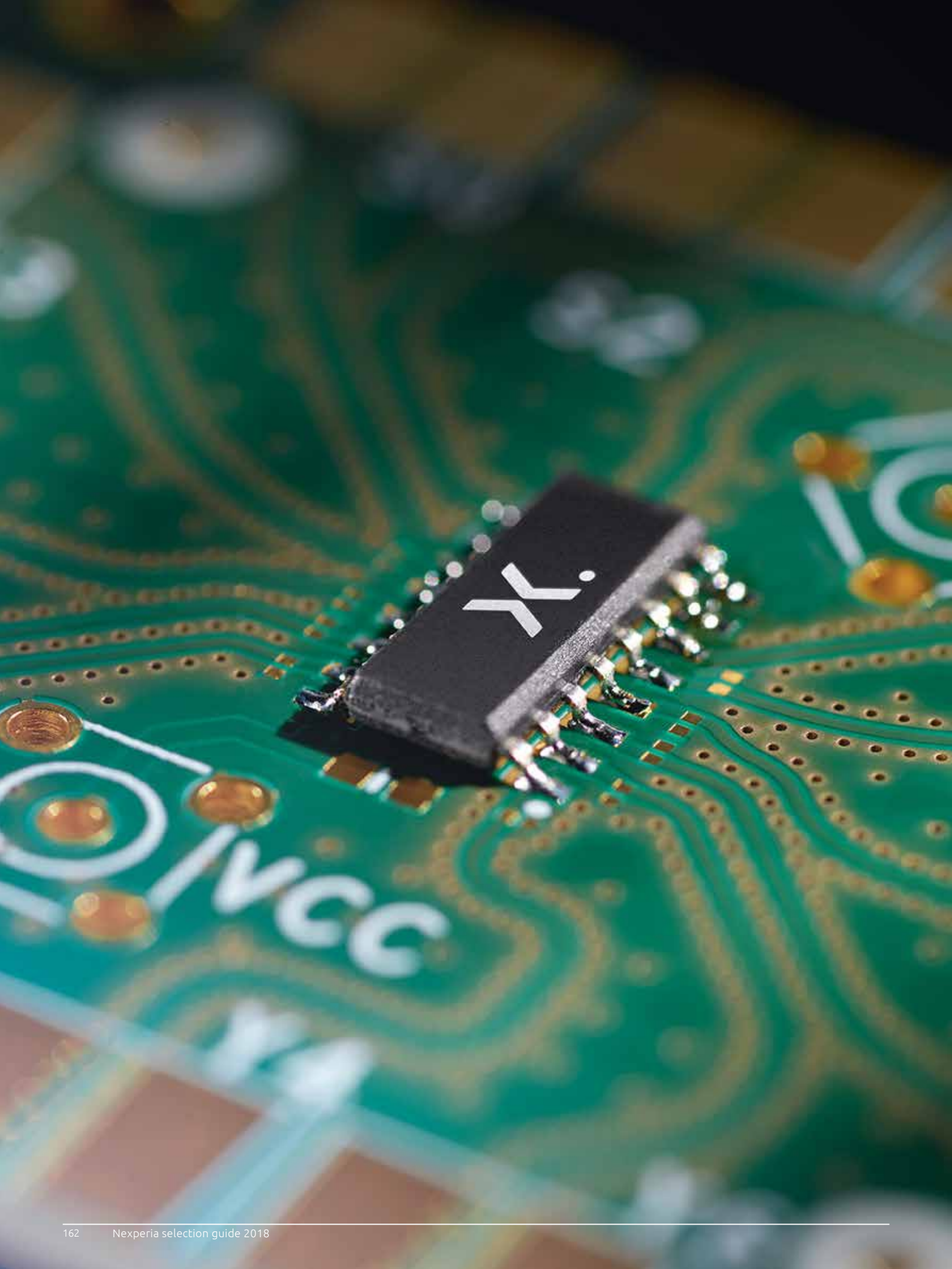
Type number	Description	V _{CC} (V)	Logic switching levels	R _{ON} (Ω)	R _{ON(FLAT)} (Ω)	f _(-3dB) (MHz)	T _{HD} (%)	X _{talk} (dB)	T _{amb} (°C)
74AHC1G66	Single-pole, single-throw analog switch	2.0 - 5.5	CMOS	40	14	280	0.015		-40~125
74AHC1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	40	14	280	0.015		-40~125
74HC1G66	Single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02		-40~125
74HC2G66	Dual single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02	-60	-40~125
74HC4016	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	300	80	160	0.4	-60	-40~125
74HC4051	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02		-40~125
74HC4052	Dual single-pole, quad-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02	-60	-40~125
74HC4053	Triple single-pole, double-throw analog switch	2.0 - 10	CMOS	200	20	170	0.02		-40~125
74HC4066	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	105	23	200	0.02	-60	-40~125
74HC4067	Single-pole, 16-throw analog switch	2.0 - 10	CMOS	200	25	100	0.02		-40~125
74HC4316	Quad single-pole, single-throw analog switch with translation	2.0 - 10	CMOS	300	80	160	0.4	-60	-40~125
74HC4351	Single-pole, octal-throw analog switch with latch	2.0 - 10	CMOS	200	20	180	0.02		-40~125
74HC4851	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	220					-40~125
74HC4852	Dual single-pole, quad-throw analog switch; TTL-enabled	2.0 - 10	CMOS	220					-40~125
74HCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04		-40~125
74HCT2G66	Dual single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40~125
74HCT4051	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40~125
74HCT4052	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04	-60	-40~125
74HCT4053	Triple single-pole, double-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	160	0.04		-40~125
74HCT4066	Quad single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40~125
74HCT4067	Single-pole, 16-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	25	90	0.04		-40~125
74HCT4316	Quad single-pole, single-throw analog switch with translation; TTL-enabled	4.5 - 5.5	TTL	400	50	150	0.8	-60	-40~125
74HCT4351	Single-pole, octal-throw analog switch with latch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40~125
74HCT4851	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40~125
74HCT4852	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40~125
74LV4051	Single-pole, octal-throw analog switch	1.0 - 6.0	TTL	135	35	200	0.4	-60	-40~125
74LV4052	Dual single-pole, quad-throw analog switch	1.0 - 6.0	TTL	125	15	180	0.4	-60	-40~125
74LV4053	Triple single-pole, double-throw analog switch	1.0 - 6.0	TTL	150	30	180	0.4	-60	-40~125
74LV4066	Quad single-pole, single-throw analog switch	1.0 - 6.0	TTL	50	3.0	180	0.02	-60	-40~125
74LVC1G3157	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC1G384	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.001		-40~125
74LVC1G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC1G66	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.001		-40~125
74LVC2G3157	Dual single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078	-54	-40~125
74LVC2G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC2G66	Dual single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.005	-56	-40~125
74LVC4066	Quad single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.005	-58	-40~125
74LVCV2G66	Dual single-pole, single-throw analog switch; overvoltage tolerant	2.3 - 5.5	CMOS/ LVTTTL	15	3.0	210	0.01	-55	-40~125
HEF4016B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	350	65	90	0.04	-50	-40~85
HEF4051B	Single-pole, octal-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4052B	Dual single-pole, quad-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4053B	Triple single-pole, double-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4066B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	175	20	90	0.04	-50	-40~85
HEF4067B	Single-pole, 16-throw analog switch	3.0 - 15	CMOS	175	20	13	0.04	-50	-40~85

Standard logic functions

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

Mini logic functions

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



Package details and packing methods	164
Package details and packing methods SMD – Part 1	164
Package details and packing methods SMD – Part 2	165
Package details and packing methods SMD – Part 3	166
Package details and packing methods SMD – Part 4	167
Package details and packing methods WLCSP	168
Packing details glass diodes, single ended and through hole packages	168
Package cross reference	169
Package cross reference list – Part 1	169
Package cross reference list – Part 2	170
Package cross reference list – Part 3	171
Package cross reference list – Part 4	172
Package cross reference list – Part 5	173
Package cross reference matrix – Part 1	174
Package cross reference matrix – Part 2	175
Package cross reference matrix – Part 3	176
Competitive cross reference - Logic	176
Packing methods	177
Product orientation (tape and reel pack)	178
Minimized outline drawings and reflow soldering footprint	181
2-pin SMD packages	181
3-pin SMD packages	184
4-pin SMD packages	187
5-pin SMD packages	188
6-pin SMD packages	189
8-pin SMD packages	194
8-pin SMD packages	195
8-pin SMD packages	196
More than 8-pin SMD packages	198
Glass diodes	204
Single-ended and through-hole packages	205
Index	206

Package details and packing methods SMD – Part 1

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

Package details and packing methods SMD – Part 2

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

Package details and packing methods SMD – Part 3

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

Package details and packing methods SMD – Part 4

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

Package details and packing methods WLCSP

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

Packing details glass diodes, single ended and through hole packages

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

Package cross reference list – Part 1

Type	Competitor	Nexperia	Pins/ Leads
μQFN-10L	ST	DFN2510A-10 (SOT1176)	10
μQFN-2L	ST	DFN1006-2 (SOD882)	2
6 Lead DFN	ON Semi	DFN2020-6 (SOT1118)	6
CL2	Toshiba	DSN0402-2 (SOD992)	2
CLP0603	Vishay	DSN0603-2 (SOD962)	2
CMAK/ CMPAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CMPAK/ CMAK	Renesas	SOT323	3
CP4	Toshiba	SOT143B	4
CPT3	Rohm	DPAK (SOT428)	3
CS6	Toshiba	DFN1010-6 (SOT891)	6
CST3	Toshiba	DFN1006-3 (SOT883)	3
CST3	Toshiba	DFN1006B-3 (SOT883B)	3
CTS2 (fsc)	Toshiba	DFN1006-2 (SOD882)	2
CTS2 (fsc)	Toshiba	DFN1006D-2 (SOD882D)	2
D2PAK	ON Semi	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK-3	OnSemi	D2PAK (SOT404)	3
D2PAK-7	ST	D2PAK-7 (SOT427)	7
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK7P	Infineon	D2PAK-7 (SOT427)	7
DFN-5	OnSemi	LFPK56 (SOT669)	4
DFN-8	OnSemi	LFPK56D (SOT1205)	8
DFN1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1006H4-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1411*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
DFN2	ST	DSN0603-2 (SOD962)	2
DPAK	ON Semi	DPAK (SOT428)	3
DPAK	Toshiba	DPAK (SOT428)	3
DPAK	OnSemi	DPAK (SOT428)	3
DPAK	Infineon	DPAK (SOT428)	3
DPAK	ST	DPAK (SOT428)	3
DPAK(S)	Renesas	DPAK (SOT428)	3
DSN2, 0.4 x 0.2	ON Semi	DSN0402-2 (SOD992)	2
DSN2, 0.6 x 0.3	ON Semi	DSN0603-2 (SOD962)	2
DSN2, 1.0 x 0.6	ON Semi	DSN1006-2 (SOD993)	2
DSN2, 1.0 x 0.6	ON Semi	DFN1006D-2 (SOD882D)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
EMD2	Rohm	SOD523	2
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
EMD5/EMT5	Rohm	SOT665	5
EMD6/EMT6/WEMT6	Rohm	SOT666	6
EMT3	Rohm	DFN1006-3 (SOT883)	3

Types with * show footprint compatibility only

Type	Competitor	Nexperia	Pins/ Leads
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
EMT5*	Rohm	SOT666	6
EMT5/EMD5	Rohm	SOT665	5
EMT6	Rohm	SOT666	6
EMT6/EMD6/WEMT6	Rohm	SOT666	6
ES6	Toshiba	SOT666	6
ES6 ESV	Toshiba	SOT666	6
ESC/TESC	Toshiba	SOD523	2
ESM	Toshiba	DFN1006-3 (SOT883)	3
ESV	Toshiba	SOT665	5
ESV	Toshiba	SOT666	6
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
GMD2	Rohm	DSN0603-2 (SOD962)	2
H2PAK-2	ST	D2PAK (SOT404)	3
H2PAK-6	ST	D2PAK-7 (SOT427)	7
HSMT8	Rohm	LFPK33 (SOT1210)	8
HSO8-8	Renesas	LFPK56 (SOT669)	4
HSO8-8 Dual	Renesas	LFPK56D (SOT1205)	8
HSOP8 (Dual)	Rohm	LFPK56D (SOT1205)	8
HSOP8 (Single)	Rohm	LFPK56 (SOT669)	4
HUML2020L8 (Dual)	Rohm	DFN2020-6 (SOT1118)	6
HUML2020L8 (Single)	Rohm	DFN2020MD-6 (SOT1220)	6
I2PAK	OnSemi	I2PAK (SOT226)	3
I2PAK	ST	I2PAK (SOT226)	3
KMD2	Rohm	DFN1608D-2 (SOD1608)	2
LDPK(S)-1	Renesas	D2PAK (SOT404)	3
LFPK	Renesas	LFPK (SOT669)	5
LG A 1.0 x 0.6mm	Texas Instruments	DFN1006B-3 (SOT883B)	3
LLD	Renesas	SOD80C	2
LLDS	Rohm	SOD80C	2
LLP1006-2L	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2L	Vishay	DFN1006D-2 (SOD882D)	2
LLP1006-2M	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2M	Vishay	DFN1006D-2 (SOD882D)	2
LLP75-7L	Vishay	DFN1616-6 (SOT1189)	6
LPDS/LPTS	Rohm	D2PAK (SOT404)	3
LPTS	Rohm	D2PAK (SOT404)	3
LPTS/LPDS	Rohm	D2PAK (SOT404)	3
M-Flat	Toshiba	SOD128	2
Micro 3	Int. Rectifier	SOT23	3
Micro 6	Int. Rectifier	SOT457	6
MICRO FOOT 0.8 x 0.8*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
MICRO FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
MICRO FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6

Package cross reference list – Part 2

Type	Competitor	Nexperia	Pins/ Leads
MicroFET	Fairchild	DFN2020MD-6 (SOT1220)	6
MicroFET 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
MiniMelf	Diodes Inc.	SOD80C	2
MiniMelf	ST	SOD80C	2
MiniMelf	Vishay	SOD80C	2
MP-25(K)	Renesas	TO-220 (SOT78)	3
MP-25SK	Renesas	I2PAK (SOT226)	3
MP-25ZT	Renesas	D2PAK-7 (SOT427)	7
MP-25ZT	Renesas	D2PAK (SOT404)	3
MP-3Z	Renesas	DPAK (SOT428)	3
MP6	Renesas	DSN0603-2 (SOD962)	2
MPAK	Renesas	SOT23	3
MPAK	Renesas	SOT23	3
MPAK-4R	Renesas	SOT143B	4
MPT3	Rohm	SOT89	3
PG-TD SON-8	Infineon	LFPAK (SOT669)	5
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO220-3	Infineon	TO-220 (SOT78)	3
PG-TO252-3	Infineon	DPAK (SOT428)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TO263-7	Infineon	D2PAK-7 (SOT427)	7
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power FLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
Power FLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8
Power FLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDi5	Diodes Inc.	CFP15 (SOT1289)	3
PowerFLAT (6 x 5)	ST	LFPAK56 (SOT669)	5
PowerFLAT (6 x 5)	ST	LFPAK56D (SOT1205)	5
PowerPAK 1212-8	Vishay	LFPAK33 (SOT1210)	8
PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPak SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPak SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPAK SO-8	Vishay	LFPAK56 (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8

Types with * show footprint compability only

Type	Competitor	Nexperia	Pins/ Leads
PW-Mini	Toshiba	SOT89	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
S08	Vishay	SOT96	8
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC-74 TSOP-6	ON Semi	SOT457	6
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC-88	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC-89	Semtech	SOT666	6
SC2	Toshiba	DSN0603-2 (SOD962)	2
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-3	AOS	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	Vishay	SOT363	6
SC70-6	AOS	SOT363	6
SC70-6	Fairchild	SOT363	6
SC70-6L	Semtech	SOT363	6
SC74 TSOP6	Infineon	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC88/SC 70-6/SOT 363 6 LEAD	ON Semi	SOT363	6
SC89	Fairchild	SOT666	6
SC89-3	Vishay	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Fairchild	DFN1006-3 (SOT883)	3
SC89-6	Vishay	SOT666	6
SC89-6	AOS	SOT666	6
SC89-6	Fairchild	SOT666	6
SC89-6lead	Vishay	SOT666	6
SLP0402P2X3	Semtech	DSN0402-2 (SOD992)	2
SLP1006P2	Semtech	DFN1006-2 (SOD882)	2
SLP1006P2T	Semtech	DFN1006D-2 (SOD882D)	2
SLP1006P3	Semtech	DFN1006-3 (SOT883)	3
SLP1006P3T	Semtech	DFN1006B-3 (SOT883B)	3
SLP1510N6	Semtech	DFN1410-6 (SOT886)	6
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1610P4	Semtech	DFN2510A-10 (SOT1176)	10
SLP1616P6	Semtech	DFN1616-6 (SOT1189)	6
SLP1713P8	Semtech	DFN1714-8 (SOT1166)	8

Package cross reference list – Part 3

Type	Competitor	Nexperia	Pins/ Leads
SLP1713P8	Semtech	DFN1714U-8 (SOT983)	8
SLP2513P12	Semtech	DFN2514-12 (SOT1167)	12
SLP3313P16	Semtech	DFN3314-16 (SOT1168)	16
SM6 VS-6	Toshiba	SOT457	6
SMA flat	ST	SOD128	2
SMD TO-263	Renesas	D2PAK (SOT404)	3
SMD0402	Rohm	DSN0402-2 (SOD992)	2
SMD6/SMT6	Rohm	SOT457	6
SMD6/SMZ6	Rohm	SOT457	6
SMFPAK-6	Renesas	SOT666	6
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC TO-277A	Vishay	CFP15 (SOT1289)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPK56 (SOT669)	5
SO-8FL Dual	OnSemi	LFPK56D (SOT1205)	8
SO-8FL Dual	OnSemi	LFPK56 (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	LFPK56 (SOT669)	4
SOP8	Rohm	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT-143	Diodes Inc.	SOT143B	4
SOT-223	ON Semi	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	OnSemi	SOT223	3
SOT-223	Infineon	SOT223	3

Types with * show footprint compatibility only

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

Package cross reference list – Part 4

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

Types with * show footprint compability only

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

Package cross reference list – Part 5

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

Types with * show footprint compability only

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

Package cross reference matrix – Part 1

Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
2	DSN0402-2 (SOD992)		0.4 x 0.2 x 0.12			SMD0402	CL2	DSN2 0.4 x 0.2		WLL-2-2		ST01005		SLP- 0402P2X3
	DSN1006-2 (SOD993)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DSN1006U-2 (SOD995)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250		(VMN2)	CTS2 (FSC)	(SOD923-2)		TSLP-2-1	XI-DFN1006-2	SOD 882 uQFN-2L	LLP1006-2M LLP1006-2L	SLP1006P2
	DFN1006D-2 (SOD882D)		1.0 x 0.6 x 0.37	250		(VMN2)	CTS2 (FSC)	DSN2 1.0 x 0.6		TSLP-2-7/ -17	X2- DFN1006-2	SOD882T	LLP1006-2L LLP1006-2M	SLP1006P2T
	DFN1608D-2 (SOD1608)		1.6 x 0.8 x 0.37	780		KMD2		DSN2 1.6 x 0.8		TSNP-2-2				SLP1610N2
	DSN0603-2 (SOD962)		0.6 x 0.3 x 0.3	525		GMD2	SC2	DSN2, X3DFN-2 WLCSP2	MP6	TSSLP-2-1	X3- DFN0603-2	DFN2	CLP0603	SLP- 0603P2X3
	SOD80C	Mini- Melf	3.5 x 1.5 x 1.5	300		LLDS			LLD		MiniMelf	MiniMelf	MiniMelf	
	SOD123F		2.6 x 1.6 x 1.1	830			S-Flat	SOD-123-FL			PowerDI123	SOD-123		
	SOD123W		2.6 x 1.7 x 1.0	900		PMDU	S-Flat	SOD-123-FL	SRP-F		PowerDI123	Strmite flat		
	SOD128		3.8 x 2.5 x 1.0	1000		PMDT	M-Flat					SMA flat		
	SOD323	SC-76	1.7 x 1.25 x 0.95	400			USC	SOD-323	URP	SOD323	SOD-323	SOD-323	SOD323	SOD323
	SOD323F	SC-90	1.7 x 1.25 x 0.7	830		UMD2	US-Flat				PowerDI323			
	SOD523	SC-79	1.2 x 0.8 x 0.6	500		EMD2	ESC/ TESC	SOD-523	UFP	SC79	SOD523	SOD-523	SOD523	SOD523
3	CFP15 (SOT1289)		5.8 x 4.3 x 0.78	1200							PowerDI5		SMPC TO-277A	
	DFN1006-3 (SOT883)	SC-101	1.0 x 0.6 x 0.48	250		VML1006	SS CSP2	XDFN3		TSLP-3-4	X1-DFN 1006-3			SLP1006P3
	DFN1006B-3 (SOT883B)		1.0 x 0.6 x 0.37	250		VML1006	CST3	XDFN3		TSLP-3-1, -15	X2- DFN1006-3			SLP1006P3T
	DFN1010D-3 (SOT1215)		1.1 x 1.0 x 0.37	325		(VMT3)	(VESM)	(SOT723)			X2- DFN1010-3			
	DFN2020-3 (SOT1061)	HU- SON3	2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DFN2020D-3 (SOT1061D)		2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DPAK (SOT428)		6.6 x 6.1 x 2.3			CPT3	DPAK	DPAK, TP-FA	TO-252 (MP-3ZK) DPAK(S)	TO-252- 3/-3-2 3 DPAK, PG- TO252-3	TO252	DPAK	TO- 252,TO-252 reverse	
	D2PAK (SOT404)		11.0 x 11.0 x 4.3			LPDS/ LPTS	TO- 220SM D2PAK	D2PAK D2PAK 3 TO-263-2L	TO-220S / SMD TO-263 LDPAK(S)-(1) MP-25Z	D2PAK, PG- TO263-3	T0263 (D2PAK)	D2PAK, H2PAK-2	TO-263 3-lead TO-263AB / D2PAK TO-263	
	SOT23		2.9 x 1.3 x 1.0	250		SSD3/ SST3	S-Mini TSM	SOT-23	MPAK	SOT23	SOT-23	SOT23	SOT23	SOT23
	SOT89	SC-62	4.5 x 2.5 x 1.5	1300		MPT3	PW-Mini	SOT-89	UPAK (SOT89)	SOT89	SOT89			
	SOT323	SC-70	2.0 x 1.25 x 0.95	200		UMD3/ UMT3 TUMT3	USM	SC-70	CMAK/ CMPAK	SOT323	SOT-323	SOT-323	SC-70 3 leads	SOT-323

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

Package cross reference matrix – Part 2

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

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

Package cross reference matrix – Part 3

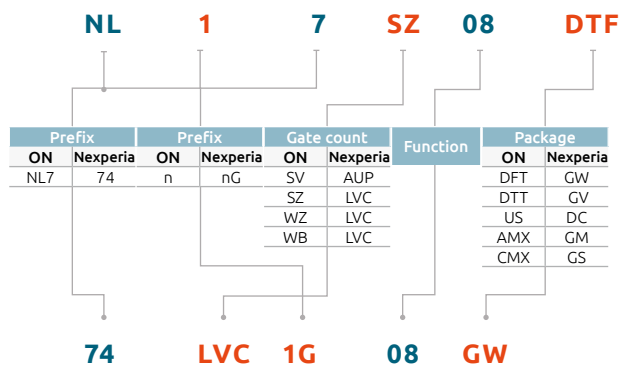
Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
10	DF-N2510A-10 (SOT1176)	x SON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2626-10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

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

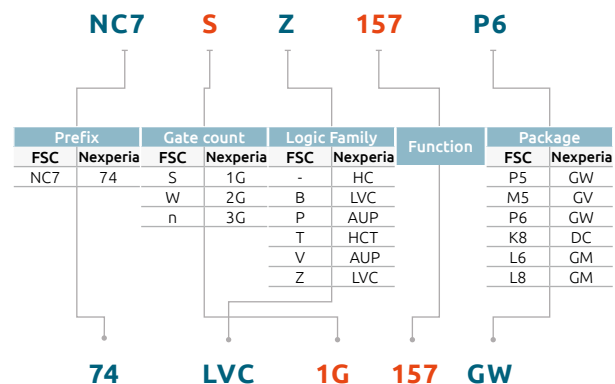
Competitive cross reference - Logic

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

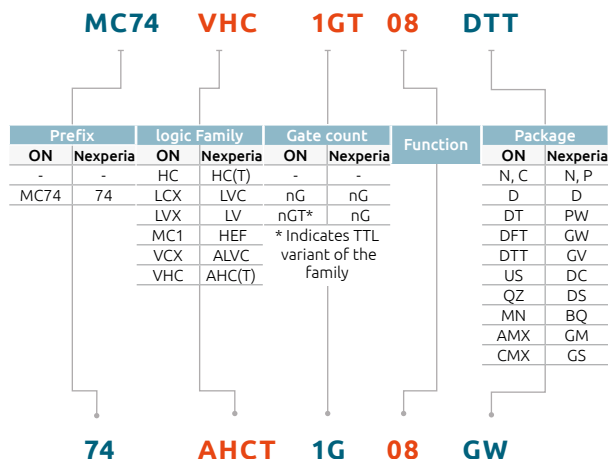
On semiconductor low pin count logic



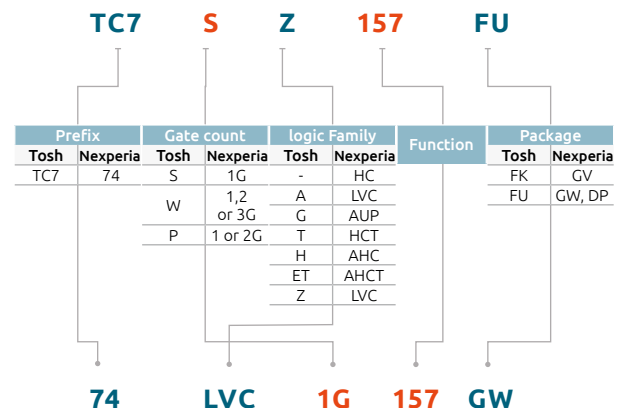
Fairchild semiconductor tiny logic



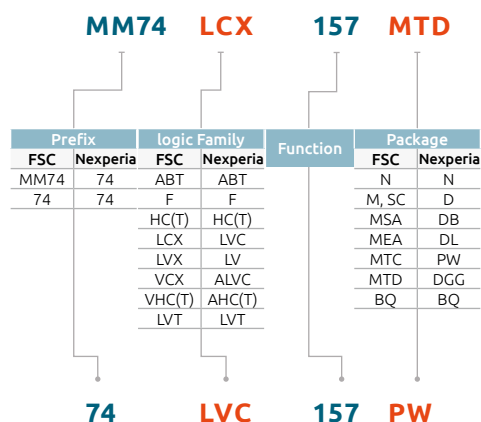
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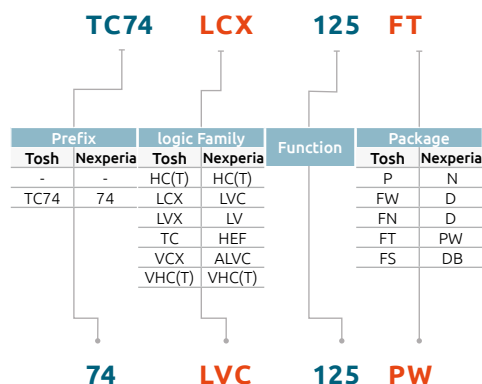
Toshiba one gate



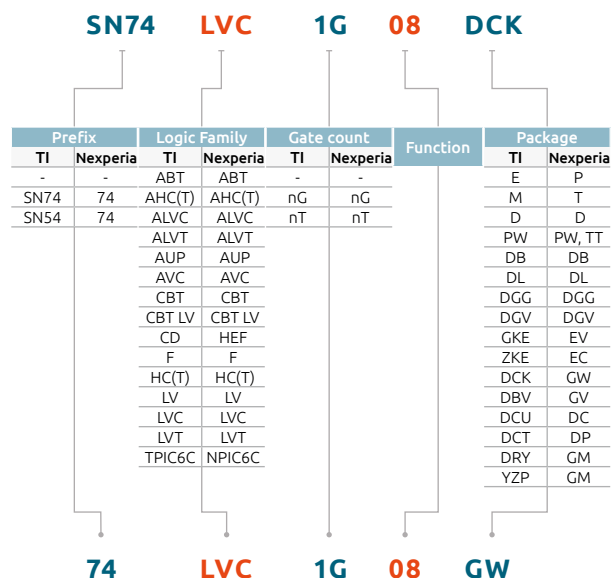
Fairchild semiconductor standard logic



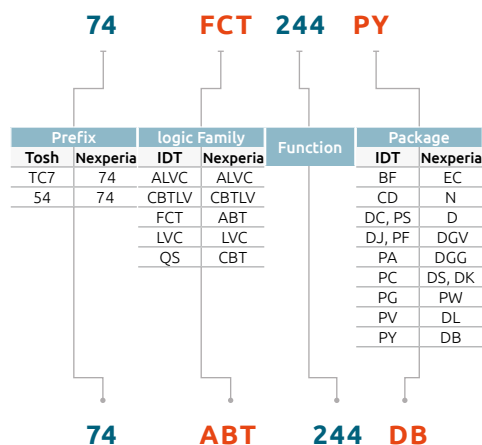
Toshiba standard logic



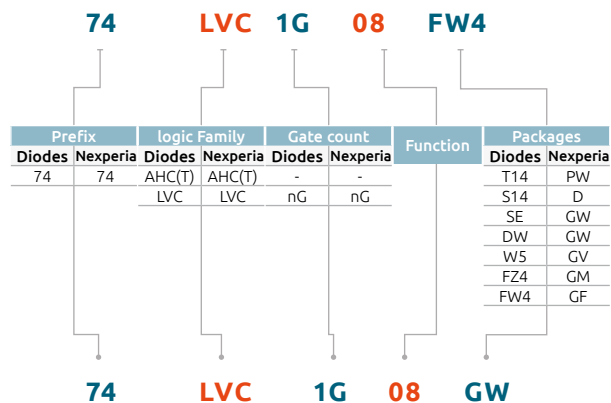
Texas instruments logic



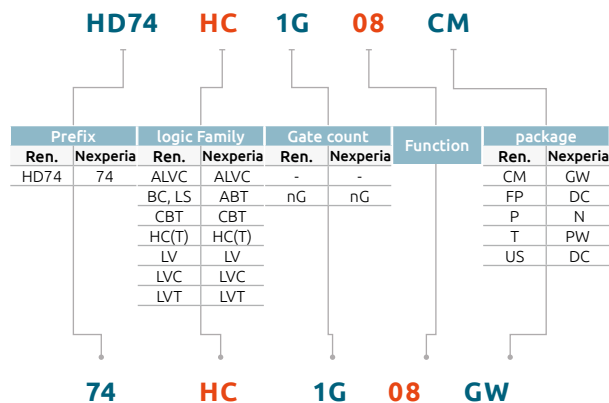
IDT logic



Diodes Inc. logic



Renesas logic



Product orientation (tape and reel pack)

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

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

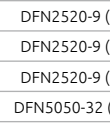
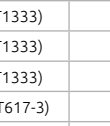
3 pin packages	Orientation in tape	Package	Packing 12NC ending
		DFN1010D-3 (SOT1215)	147
		DFN2020-3 (SOT1061)	115, 135
		DFN2020D-3 (SOT1061D)	115, 135
		SOT89	115, 135
		SOT663	115
		CFP15 (SOT1289)	139, 146
		DPAK (SOT428)	118
		D2PAK (SOT404)	118
	Orientation in tape	Package	Packing 12NC ending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

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

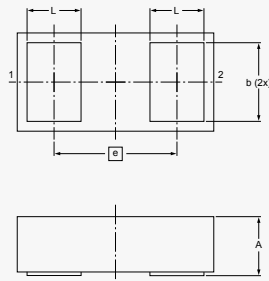
4 pin packages	Orientation in tape	Package	Packing 12NC ending
		SOT89	115, 135
	Orientation in tape	Package	Packing 12NC ending
			

5 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		LPAK56 (SOT669)	115			SOT353	115, 135
		WLCSP5 (1208)	087			SOT665	115
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		SOT753	125				
		X2SON5 (SOT1226)	125				
		UMTS (SOT353-1)	125				
		SOS (SOT753)	125				

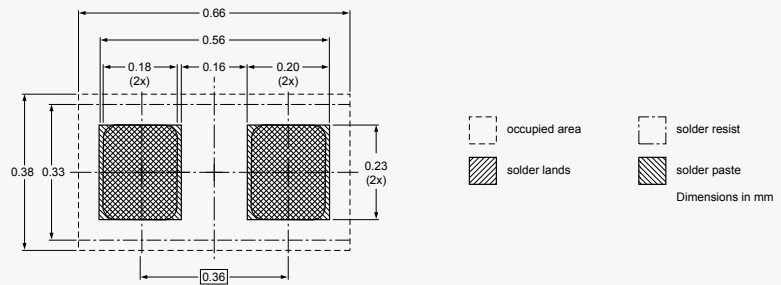
6 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN1410-6 (SOT886)	115			DFN1412-6 (SOT1268)	147
		DFN1616-6 (SOT1189)	115			DFN2020-6 (SOT1118)	115
		DFN2020MD-6 (SOT1220)	184			DFN2020D-6 (SOT1118D)	115
		LPAK33 (SOT1210)	115			DFN2020MD-6 (SOT1220)	115
		LPAK56D (SOT1205)	115			SOT363	115, 135
		WLCSP6 (1510)	023			SOT457	115, 135
		X2SON6 (SOT1115)	125			SOT666	115, 315
		XSON6 (SOT1202)	125			X2SON6 (SOT1255)	147
		XSON6 (SOT886)	125				
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN1010-6 (SOT891)	132				
		DFN1010E-6 (SOT1202)	132				
		DFN1410-6 (SOT886)	132				
		DFN2020MD-6 (SOT1220)	125				
		SOT363	125, 165				
		SOT457	125, 165				
		XSON6 (SOT891)	125				
		SC-88 (SOT363)	125				
		SC-74 (SOT457)	125				

multi I/O pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN2110-9 (SOT1178)	115				
		DFN2111-7 (SOT1358)	471				
		DFN2510A-10 (SOT1176)	115				
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN2520-9 (SOT1333)					
		DFN5050-32 (SOT617-3)					
		XSON8 (SOT1116)	115				
		X2SON8 (SOT1233)	115				
		XSON8 (SOT1203)	115				
		XSON8 (SOT1089)	115				
		XSON8 (SOT833-1)	115				
		TSSOP8 (SOT530-1)	118				
		SO8 (SOT96-1)	118				
		X2QFN10 (SOT1430-1)	471				
		XQFN10 (SOT1337-1)	115				
		XSON10 (SOT1081-2)	115				
		TSSOP10 (SOT552-1)	118				
		XQFN10 (SOT1160-1)	115				
		XQFN12 (SOT1174-1)	115				
		DHVQFN14 (SOT762-1)	115				
		TSSOP14 (SOT402-1)	118				
		SSOP14 (SOT337-1)	118				
		SSOP16 (SOT519-1)	118				
		TSSOP16 (SOT403-1)	118				
		SSOP16 (SOT338-1)	118				
		SO16 (SOT109-1)	118				
		TSSOP20 (SOT360-1)	118				
		SO20 (SOT163-1)	118				
		DHXQFN20 (SOT1045-2)	115				
		DHVQFN20 (SOT764-1)	115				
		SSOP20 (SOT339-1)	118				
		SO24 (SOT137-1)	118				
		DHVQFN24 (SOT815-1)	118				
		TSSOP24 (SOT355-1)	118				
		SSOP24 (SOT340-1)	118				
		TSSOP48 (SOT362-1)	118				
		TSSOP48 (SOT480-1)	118				
		SSOP48 (SOT370-1)	118				
		TSSOP56 (SOT364-1)	118				
		SSOP56 (SOT371-1)	518				
		VFBGA56 (SOT702-1)	518				
		LFBGA96 (SOT536-1)	518				
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		XQFN8 (SOT902-2)	125				
		VSSOP8 (SOT765-1)	125				
		TSSOP8 (SOT505-2)	125				

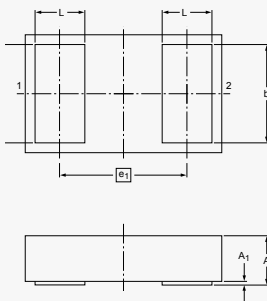
2-pin SMD packages



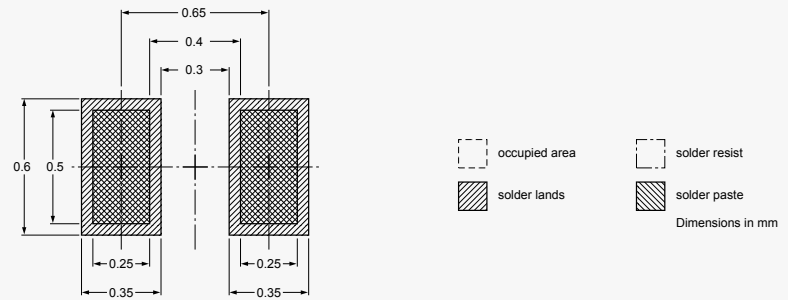
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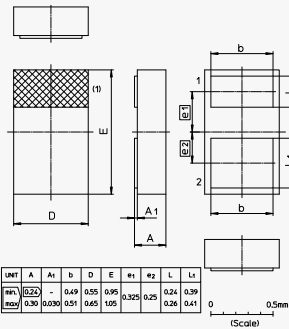
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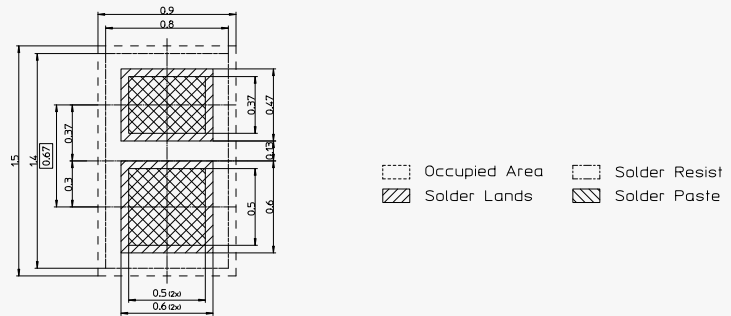
DSN1006-2 (SOD993)



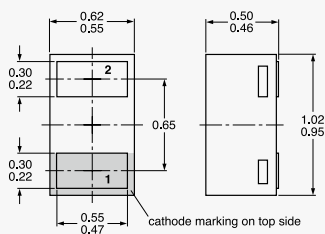
DSN1006-2 (SOD993)



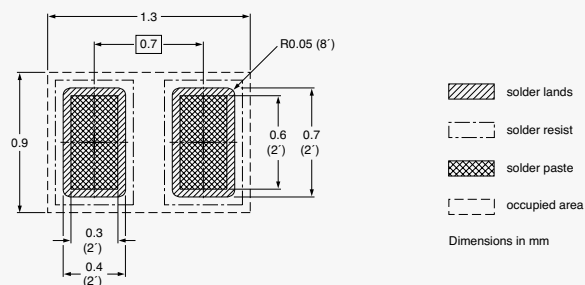
DSN1006U-2 (SOD995)



DSN1006U-2 (SOD995)



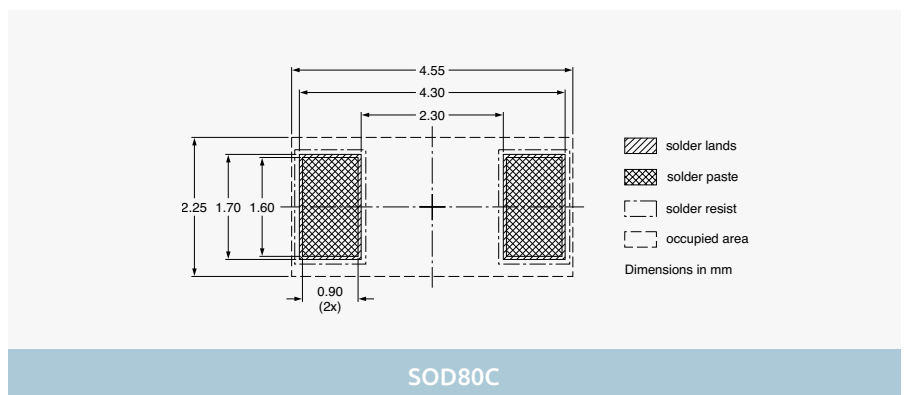
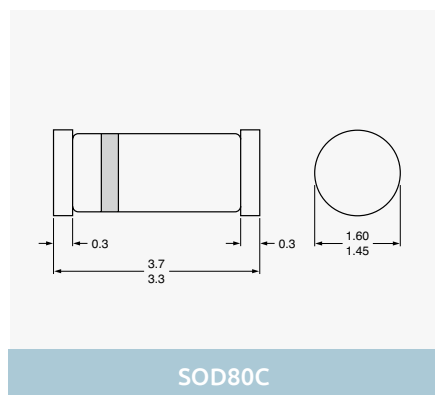
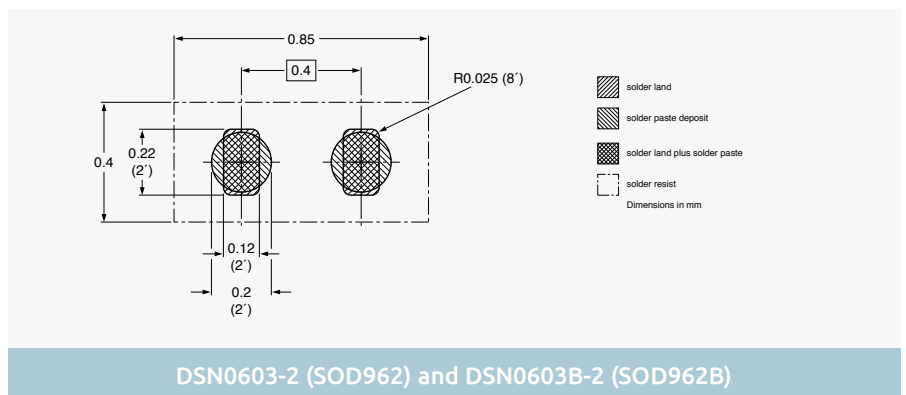
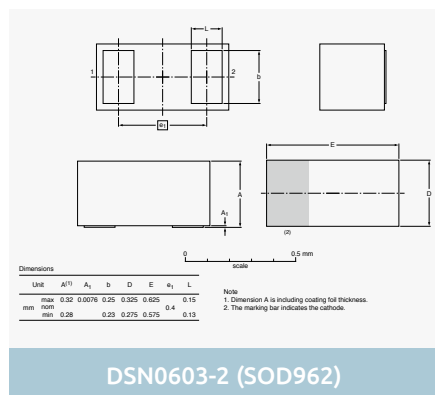
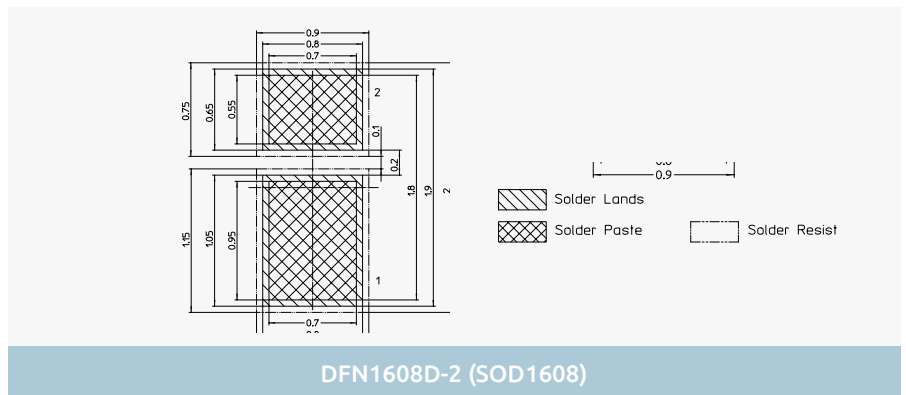
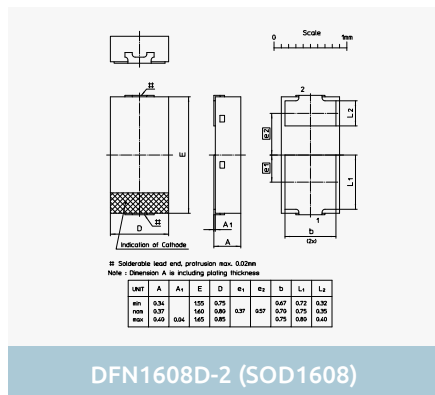
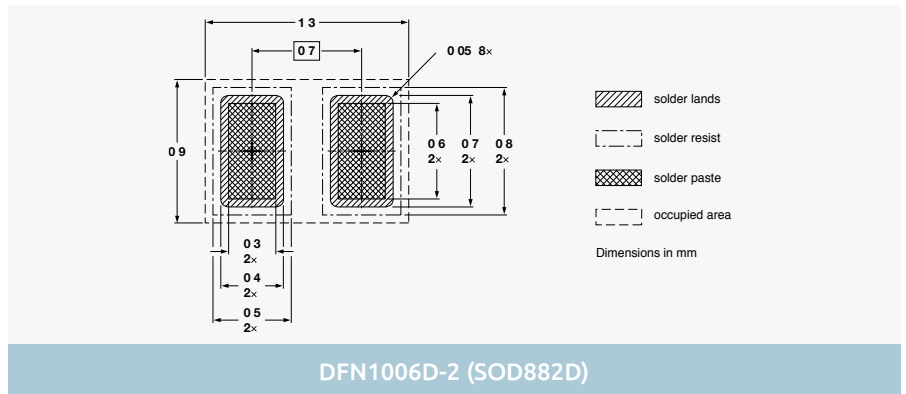
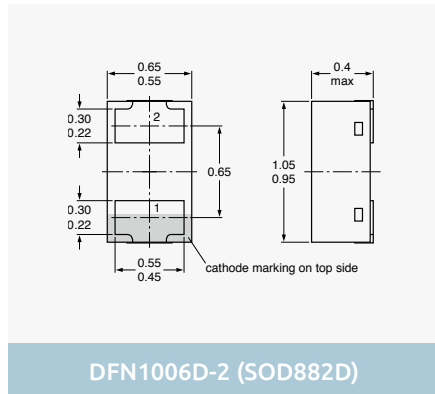
DFN1006-2 (SOD882)



DFN1006-2 (SOD882)

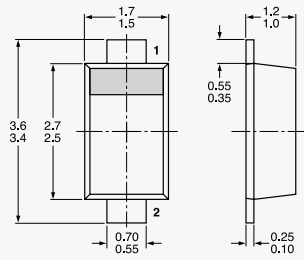
Dimensions in mm

2-pin SMD packages

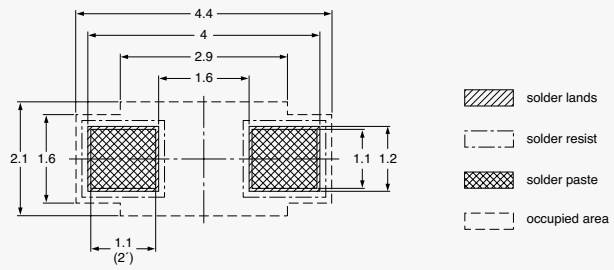


Dimensions in mm

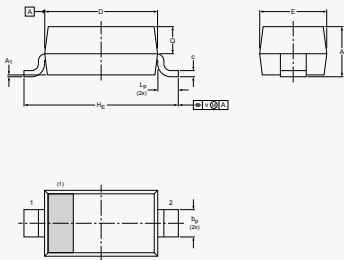
2-pin SMD packages



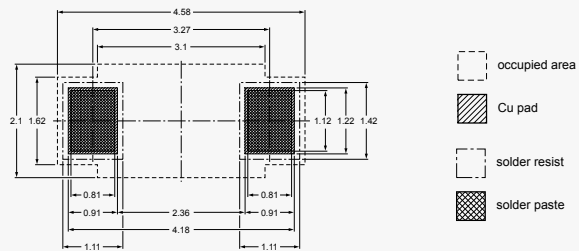
SOD123F



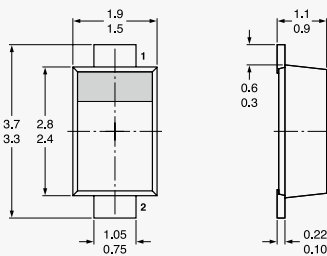
SOD123F



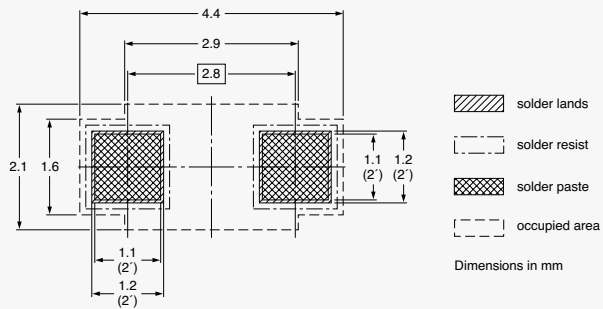
SOD123



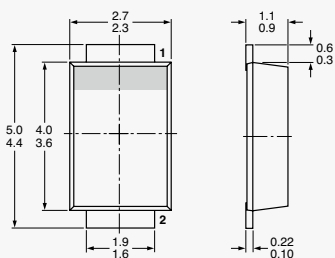
SOD123



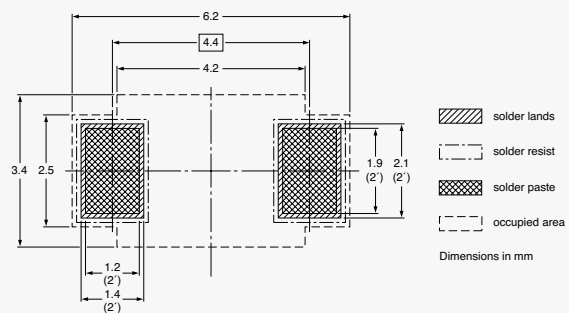
SOD123W



SOD123W



SOD128



SOD128

Dimensions in mm

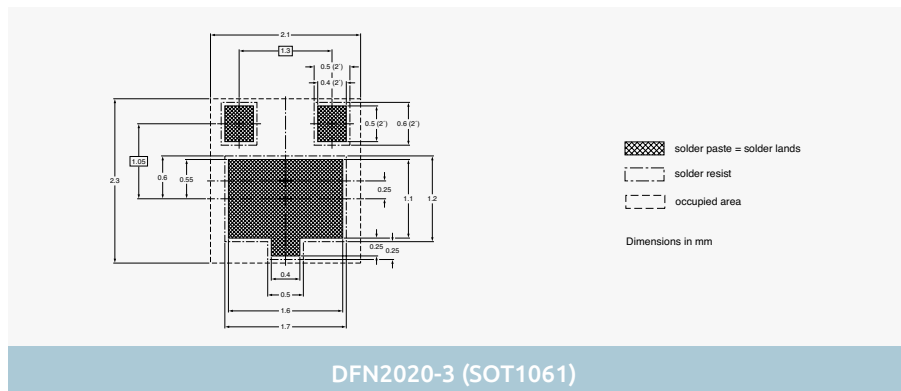
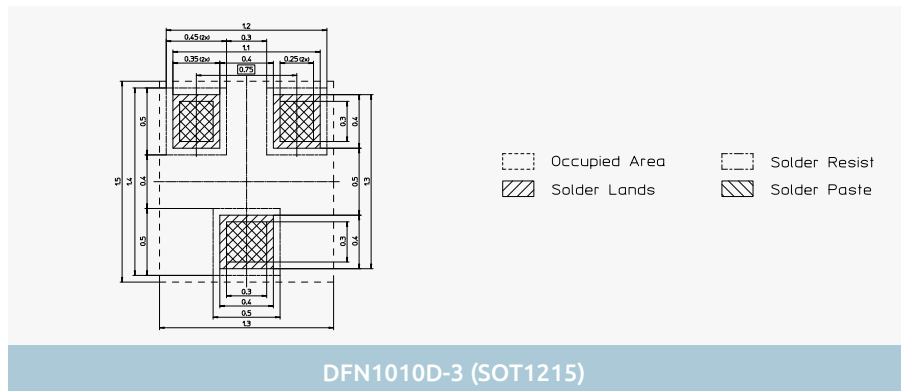
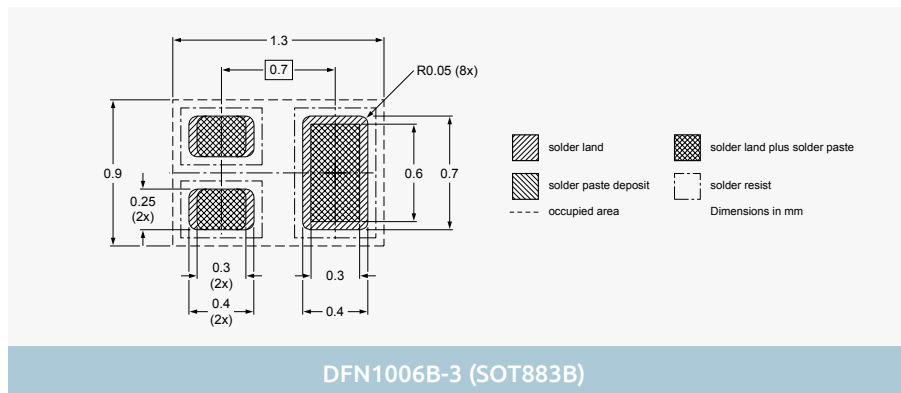
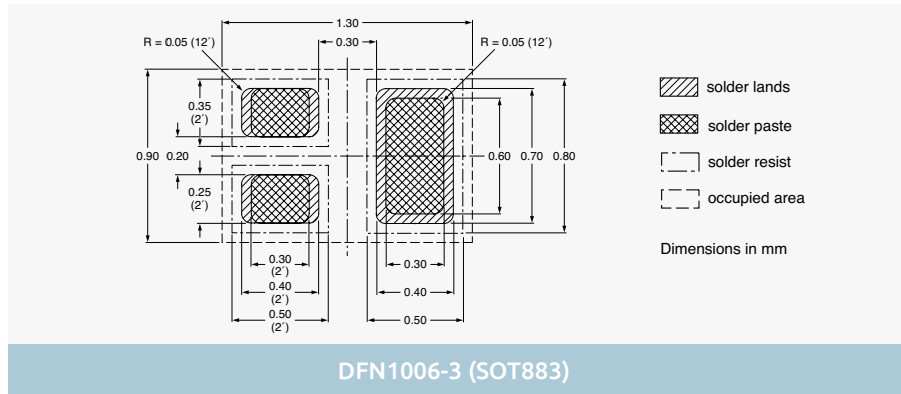


3-pin SMD packages



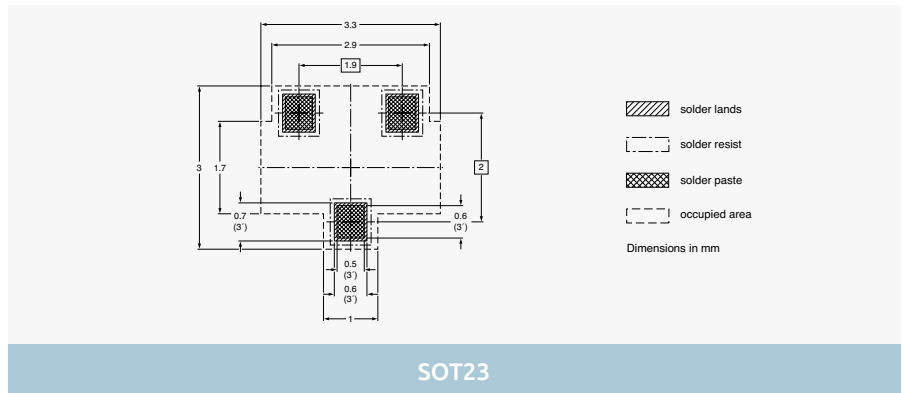
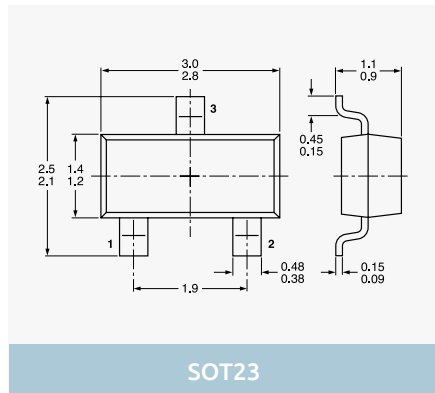
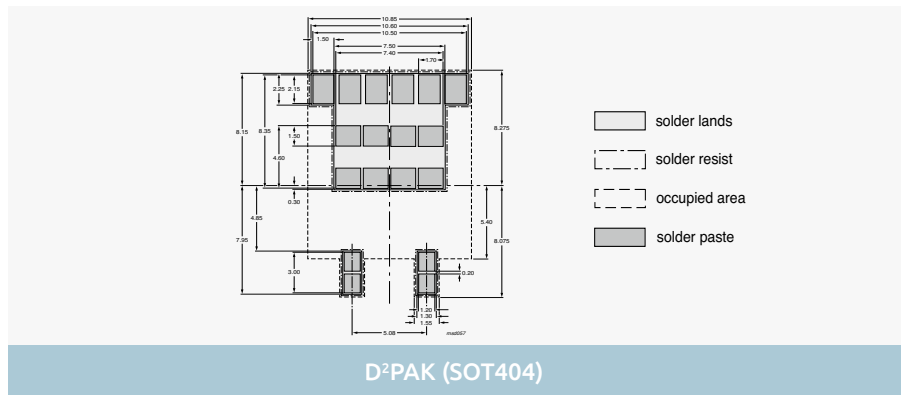
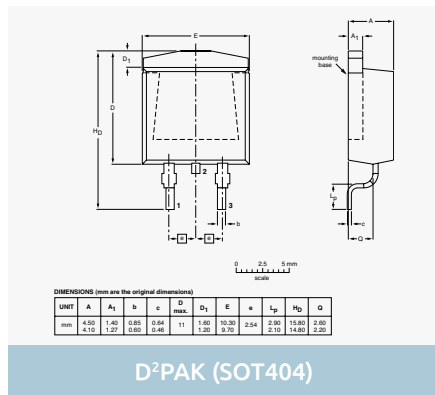
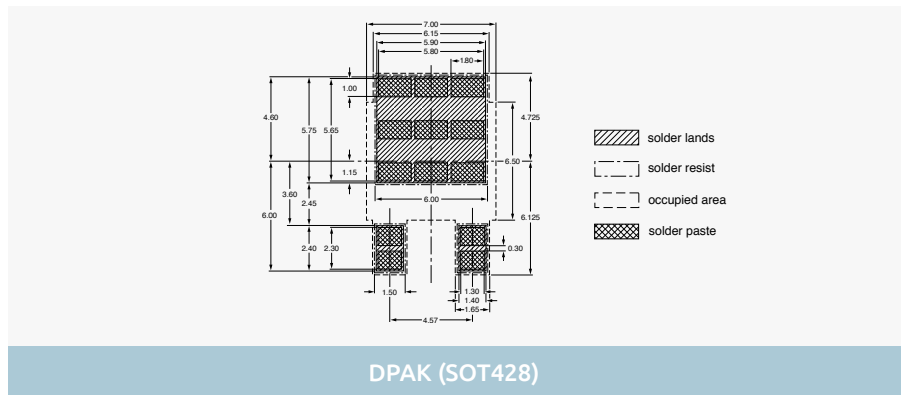
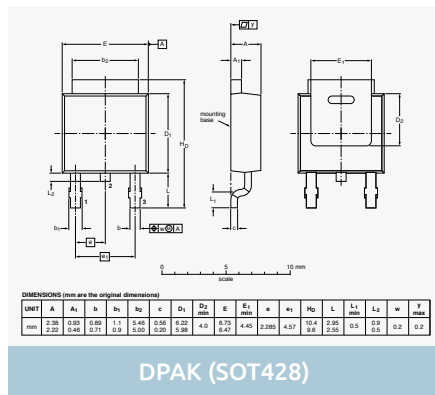
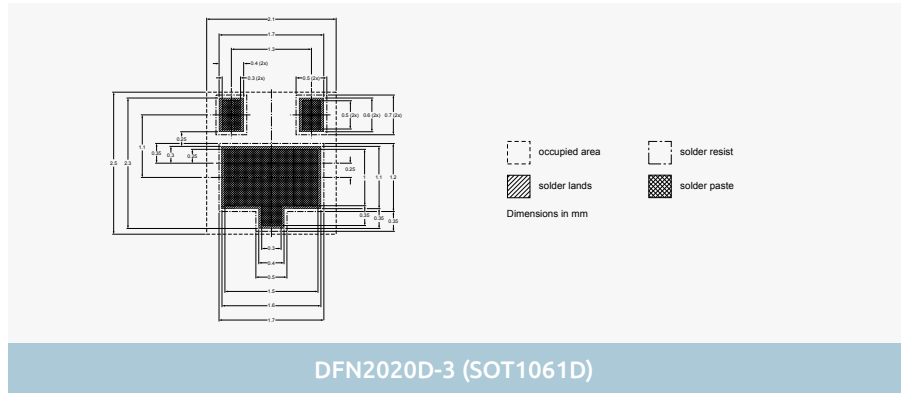
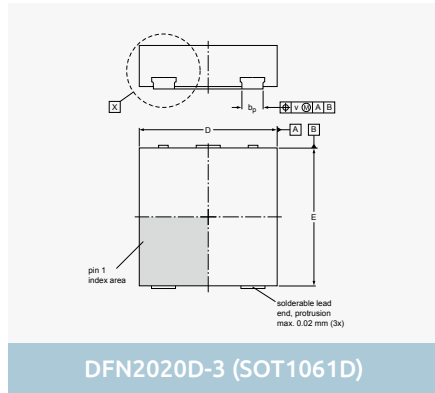
184

The drawing shows the mechanical specifications for the DFN1006-3 (SOT883) package. The top view (left) shows a rectangular package with a central cavity. Dimensions include a total width of 0.62 mm, a central cavity width of 0.55 mm, and a distance of 0.47 mm from the center to the side edge. The package is 0.55 mm wide at the top and 0.47 mm wide at the bottom. The height of the package is 0.65 mm. The distance from the top edge to the center of the package is 0.30 mm, and the distance from the bottom edge to the center is 0.22 mm. The distance from the center to the side edge is 0.35 mm. The distance from the center to the bottom edge is 0.20 mm, and the distance from the center to the top edge is 0.12 mm. The side view (right) shows a rectangular package with a height of 1.02 mm and a width of 0.50 mm. The distance from the top edge to the center is 0.46 mm, and the distance from the bottom edge to the center is 0.95 mm.



185

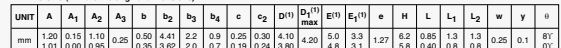
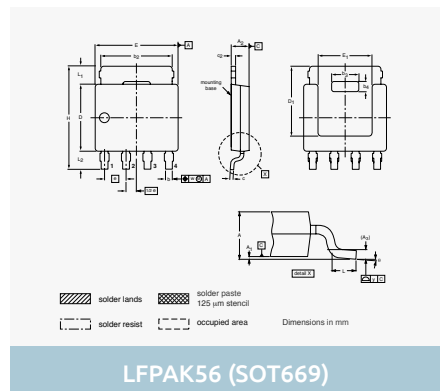
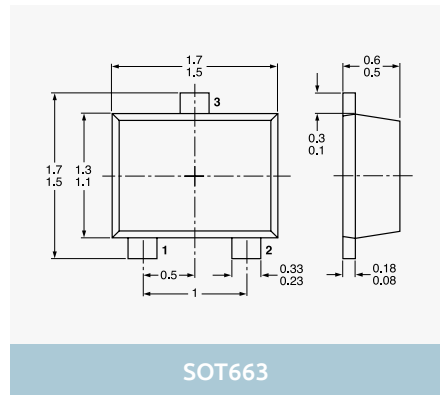
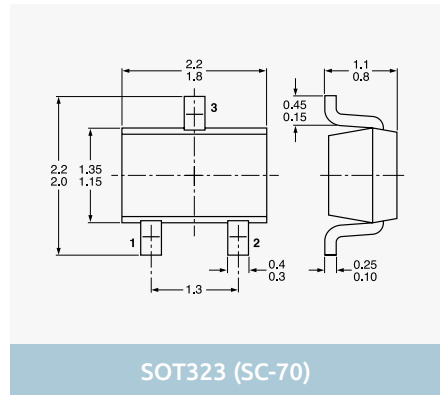
3-pin SMD packages



Dimensions in mm

The drawing shows the SOT89 (SC-62) package with the following dimensions (in mm):

- Top View:**
 - Overall width: 4.6
 - Width of the central mounting pad: 4.4
 - Width of the central pad opening: 1.8
 - Radius of the central pad opening: 1.4
 - Distance from the central pad to the side pads: 1.5
 - Distance from the central pad to the side pads (center-to-center): 3.0
 - Distance from the central pad to the side pads (edge-to-edge): 1.5
 - Distance from the central pad to the side pads (center-to-center): 3.0
 - Distance from the central pad to the side pads (edge-to-edge): 1.5
- Side View:**
 - Overall height: 4.25
 - Height of the central pad: 3.75
 - Height of the side pads: 1.2
 - Height of the central pad opening: 0.8
 - Height of the side pads (center-to-center): 0.44
 - Height of the side pads (edge-to-edge): 0.23



187

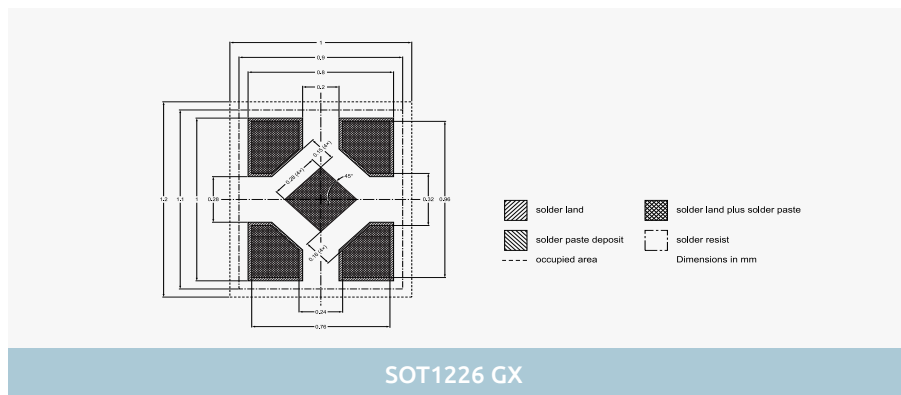
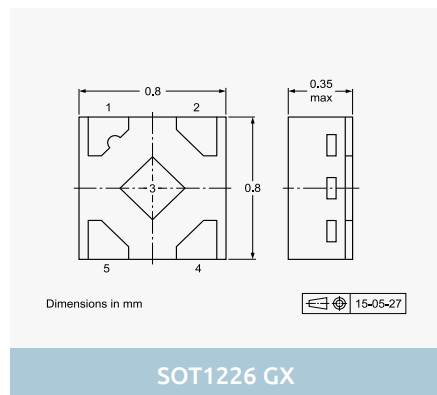
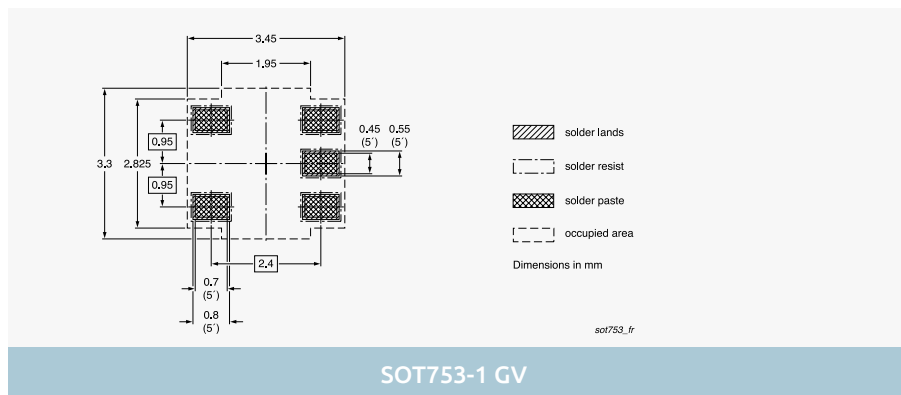
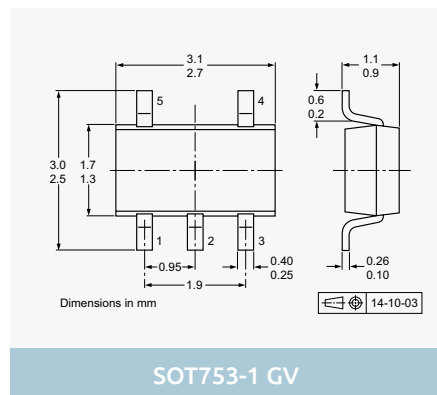
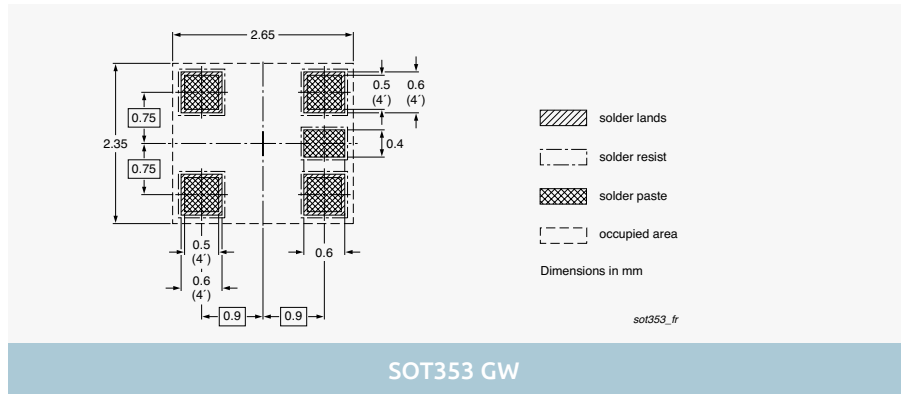
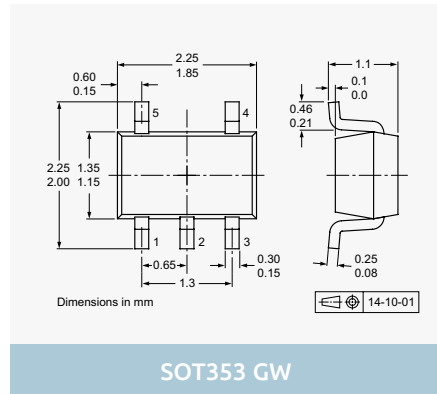


SOT353 (SC-88A)

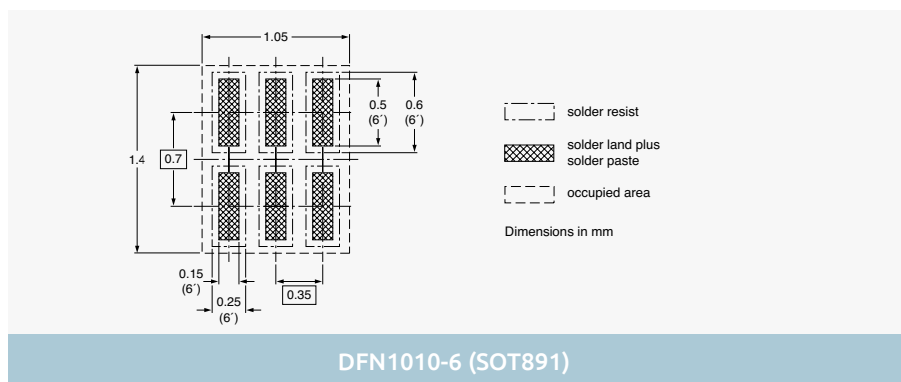
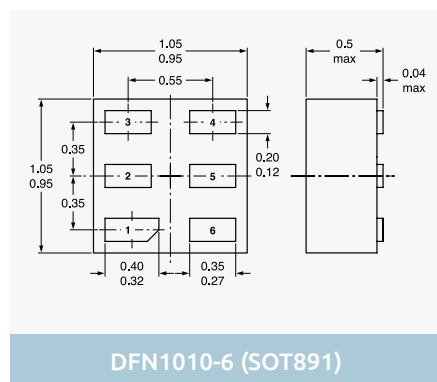


188

5-pin SMD packages

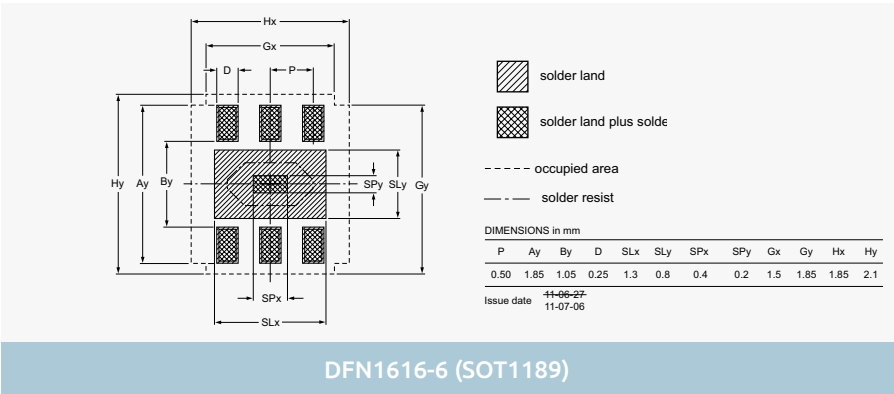
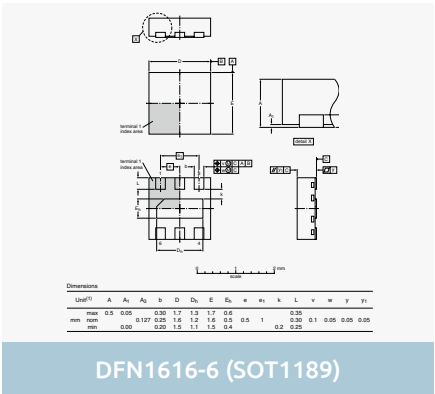
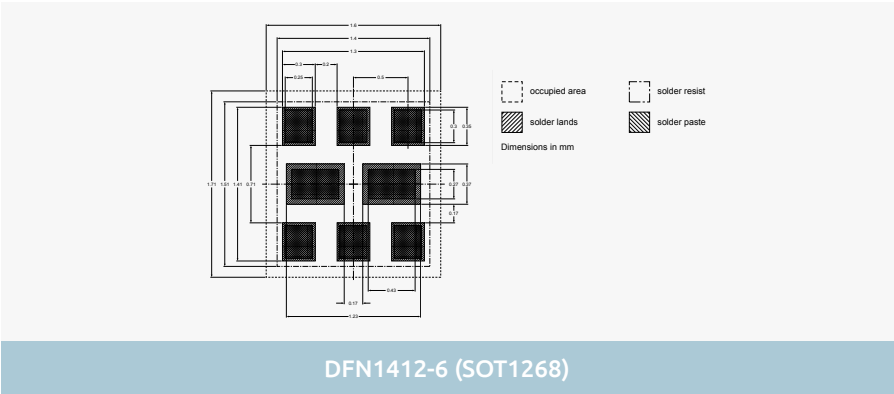
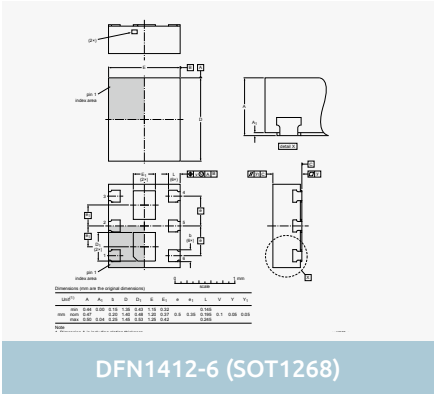
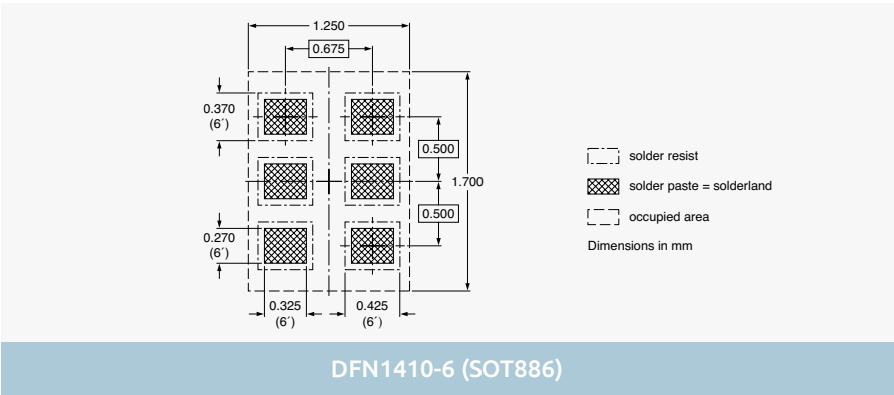
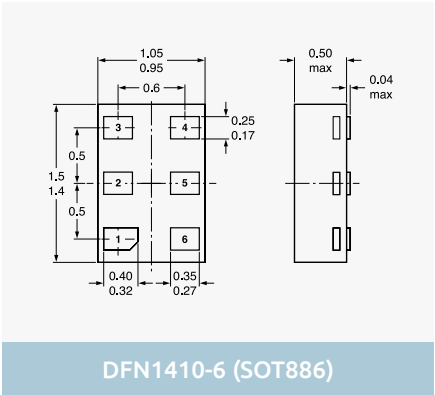
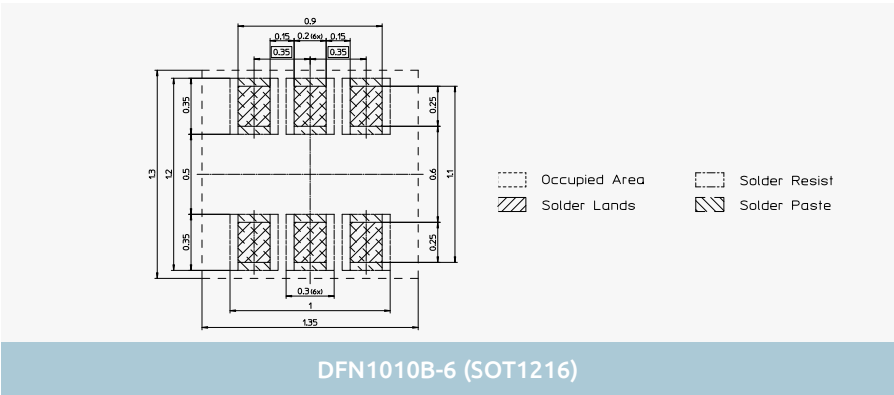
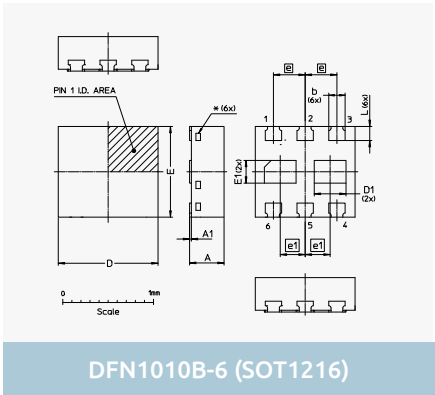


6-pin SMD packages



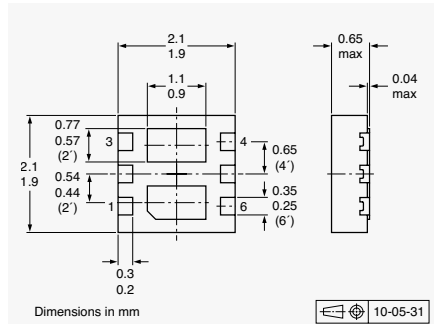
Dimensions in mm

6-pin SMD packages

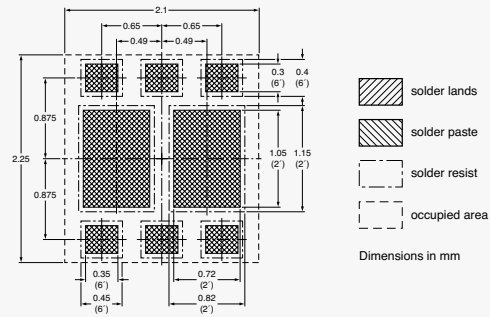


Dimensions in mm

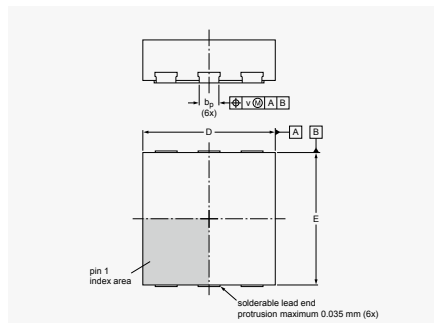
6-pin SMD packages



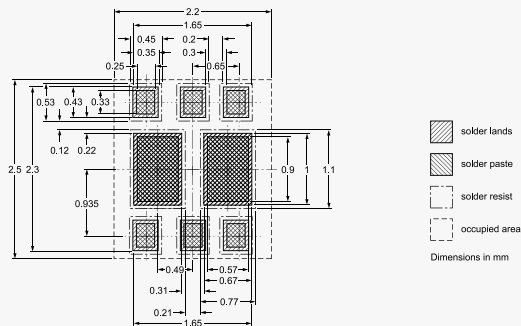
DFN2020-6 (SOT1118)



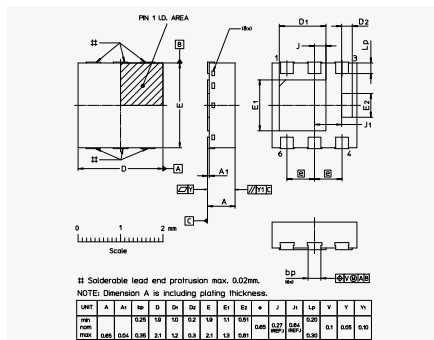
DFN2020-6 (SOT1118)



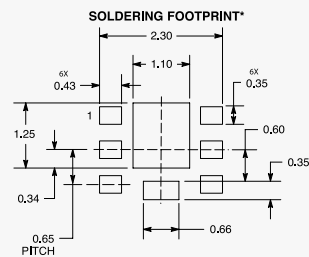
DFN2020D-6 (SOT1118D)



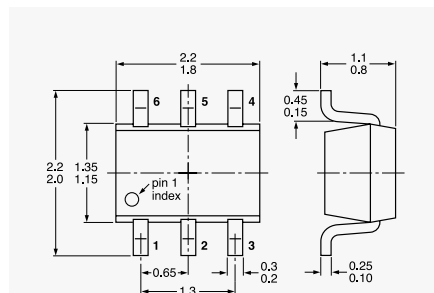
DFN2020D-6 (SOT1118D)



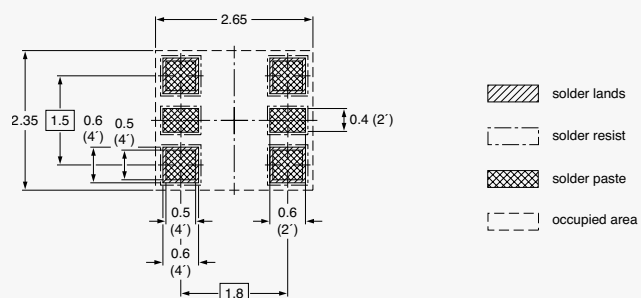
DFN2020MD-6 (SOT1220)



DFN2020MD-6 (SOT1220)



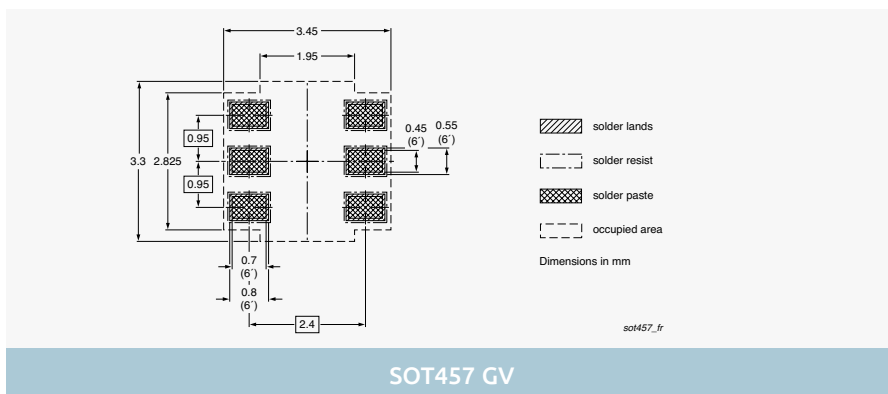
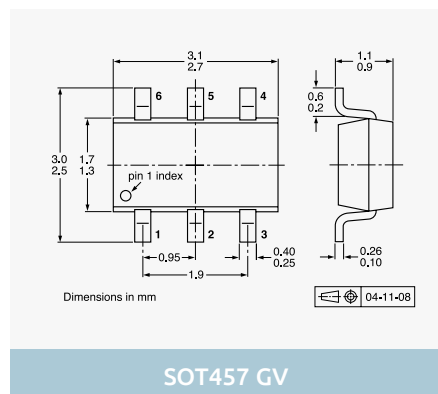
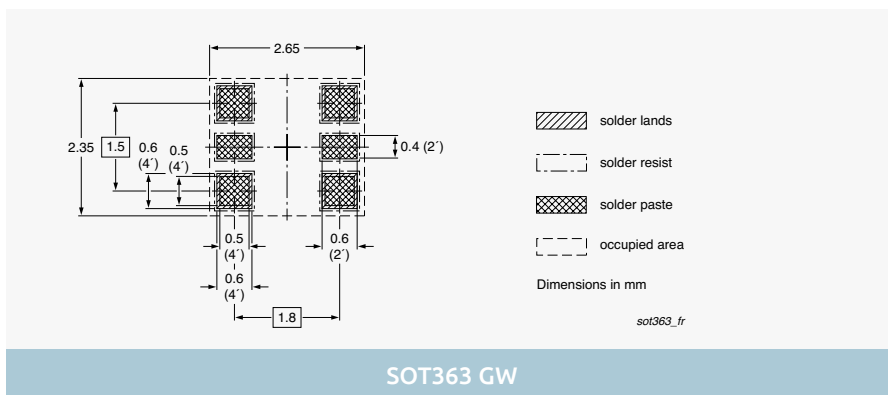
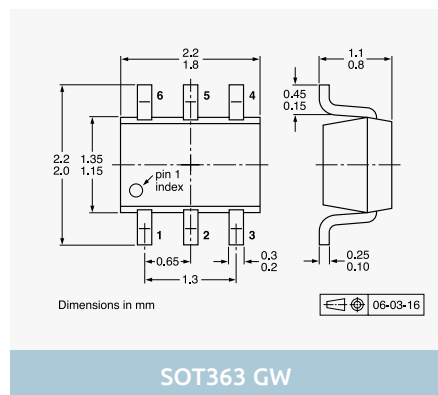
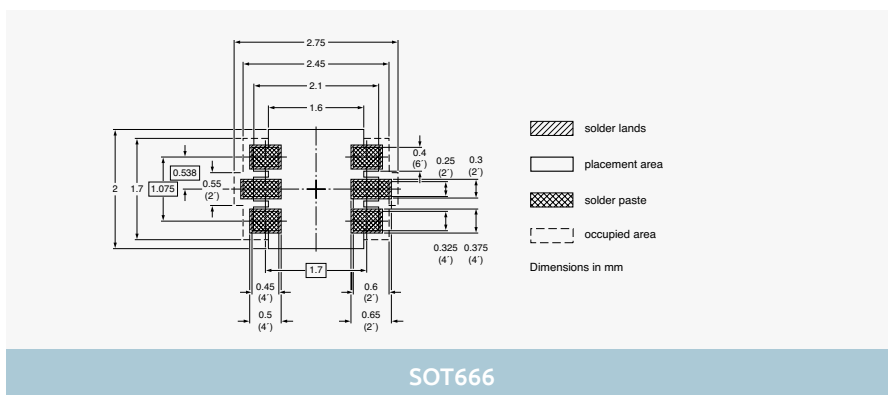
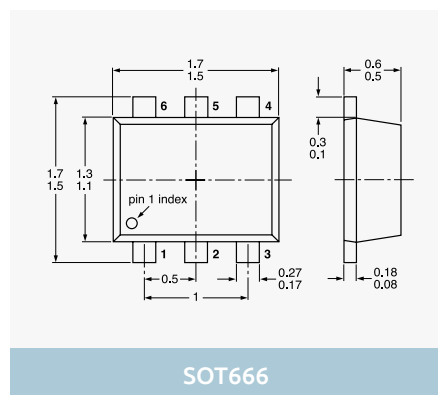
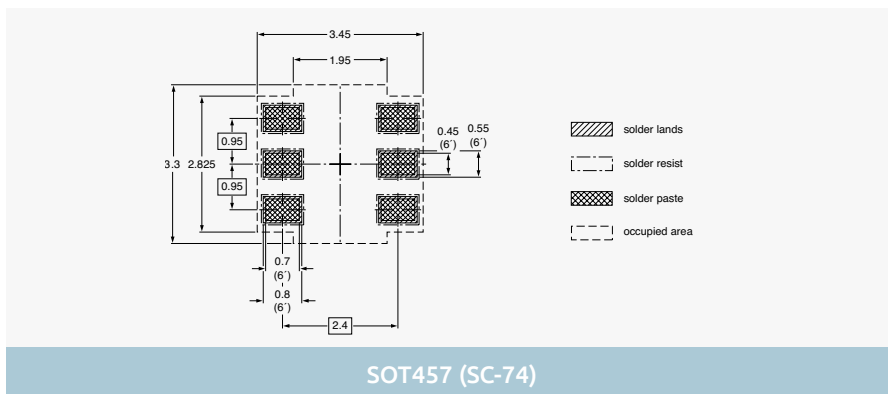
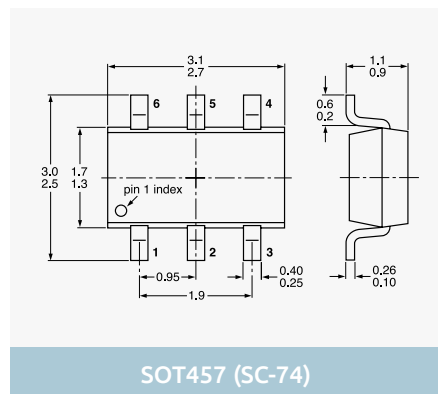
SOT363 (SC-88)



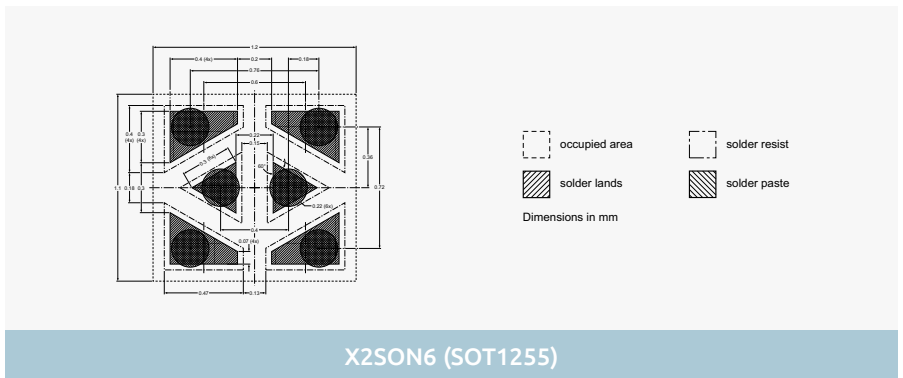
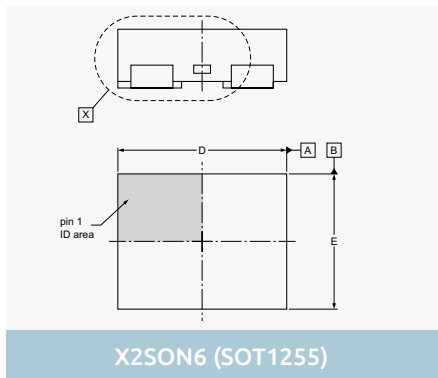
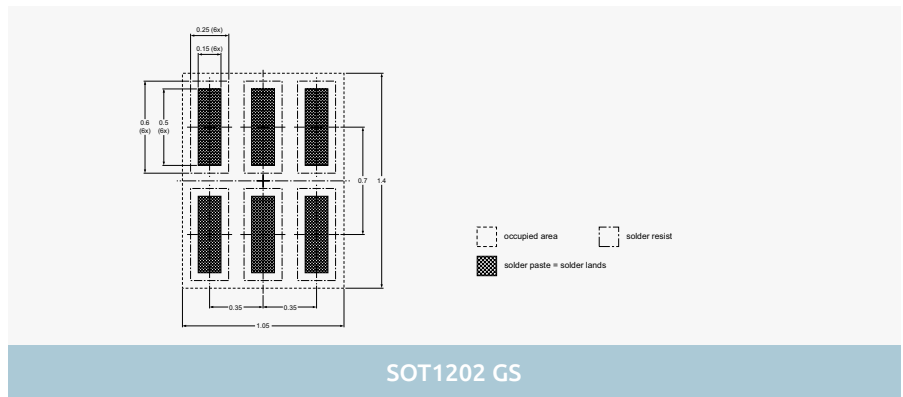
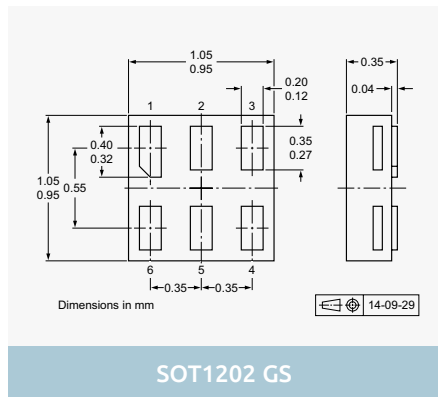
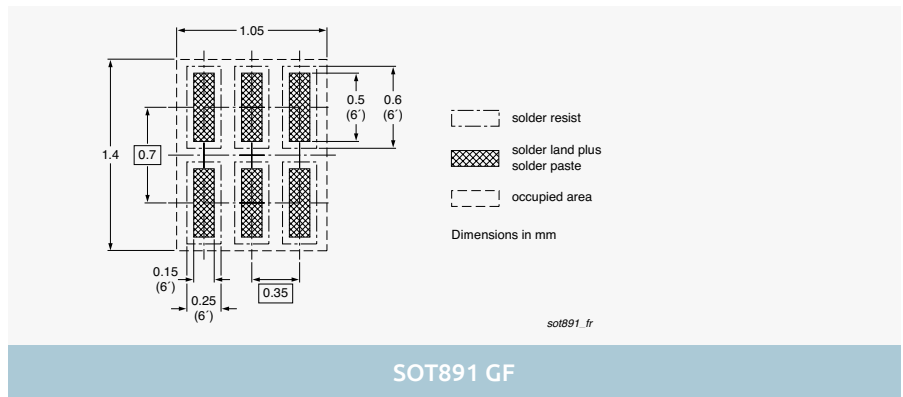
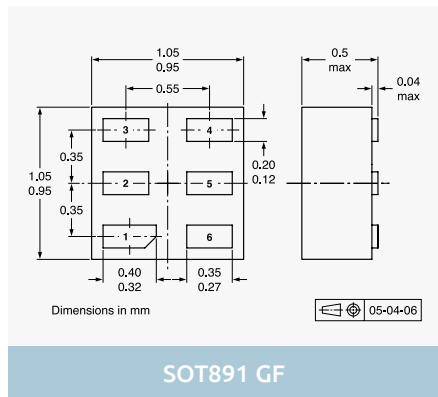
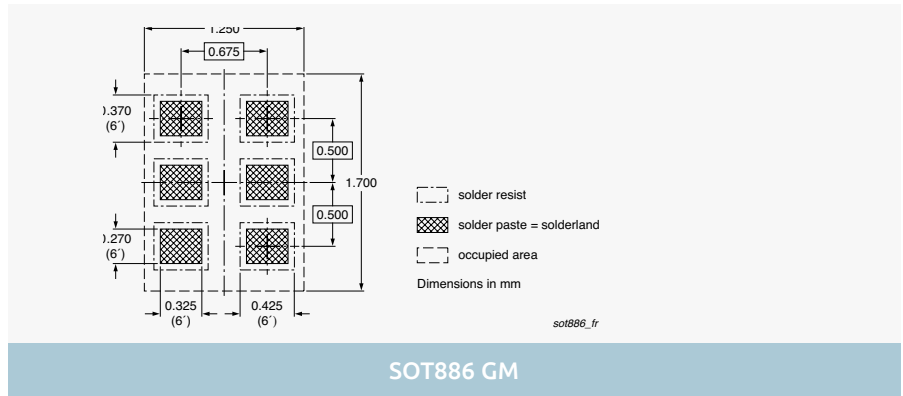
SOT363 (SC-88)

Dimensions in mm

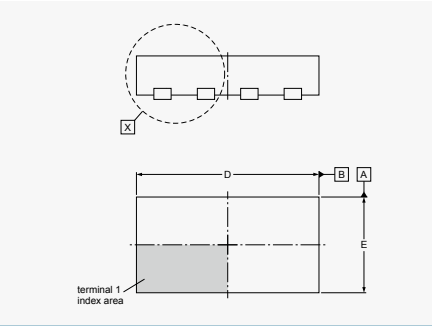
6-pin SMD packages



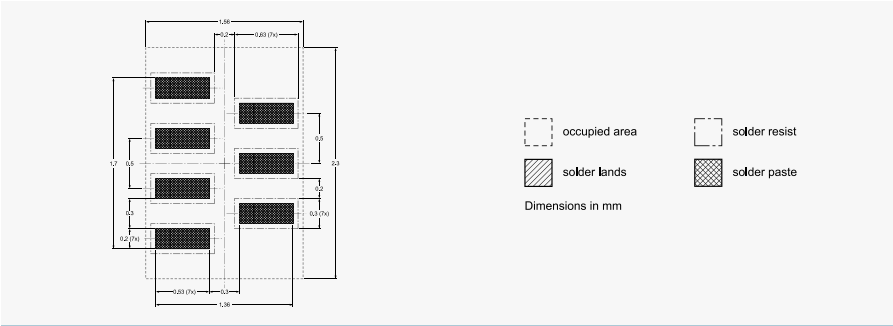
Dimensions in mm

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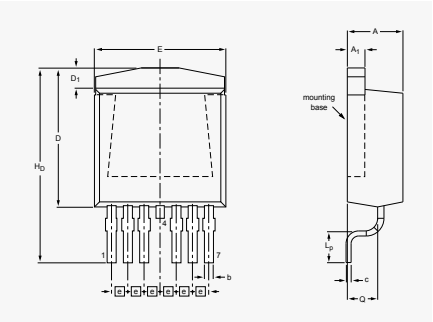
7-pin SMD packages



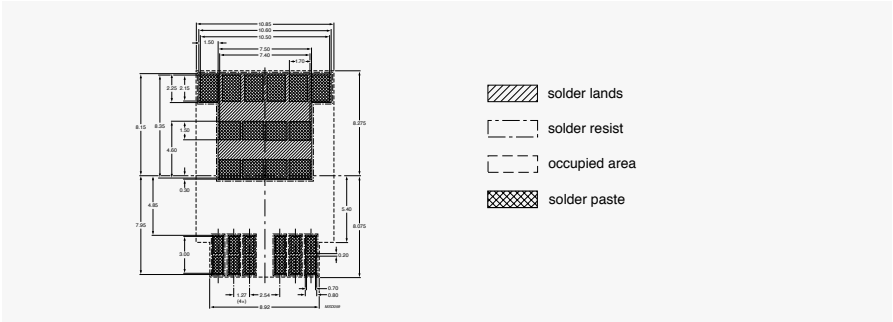
DFN2111-7 (SOT1358)



DFN2111-7 (SOT1358)

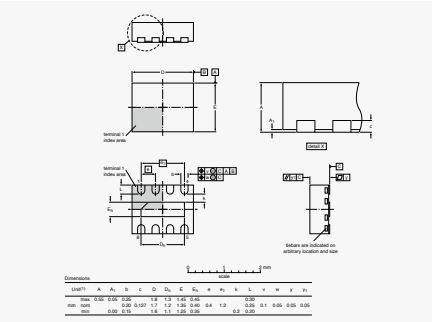


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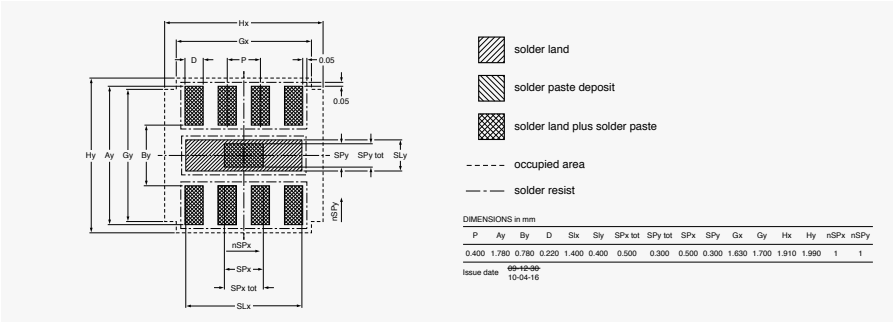


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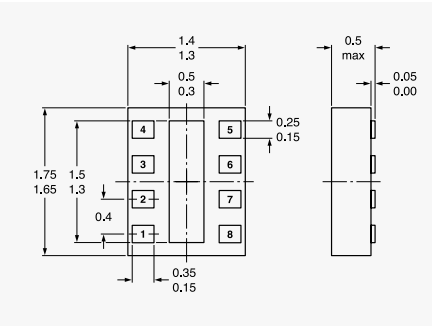
8-pin SMD packages



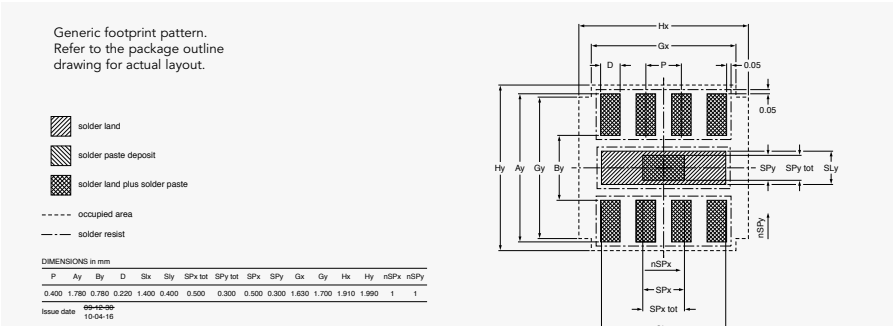
DFN1714-8 (SOT1166)



DFN1714-8 (SOT1166)



DFN1714U-8 (SOT983)



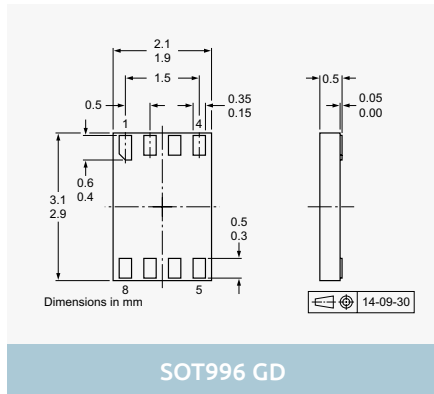
DFN1714U-8 (SOT983)

Dimensions in mm

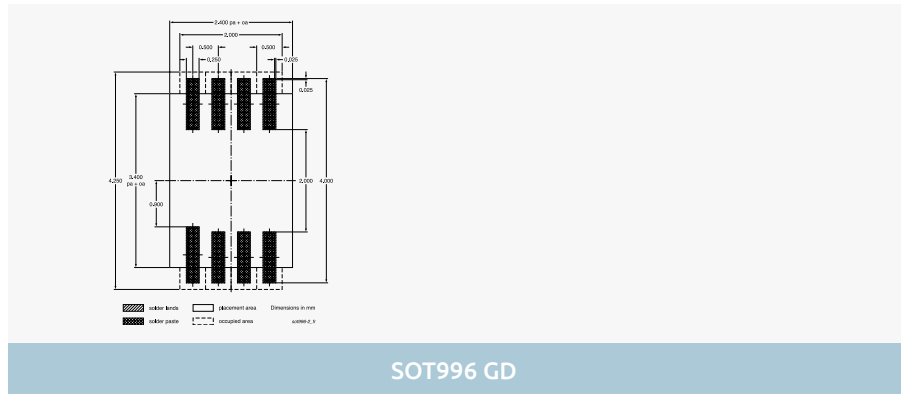


196 Nexperia selection guide 2018

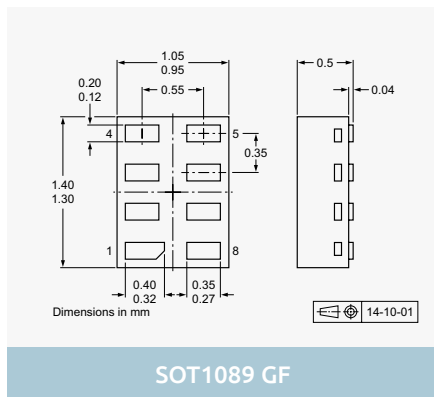
8-pin SMD packages



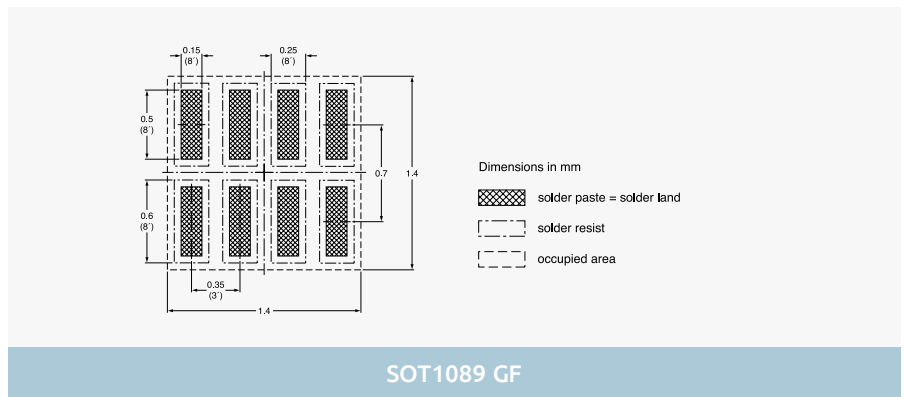
SOT996 GD



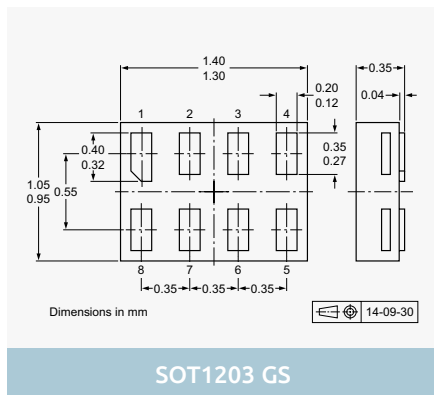
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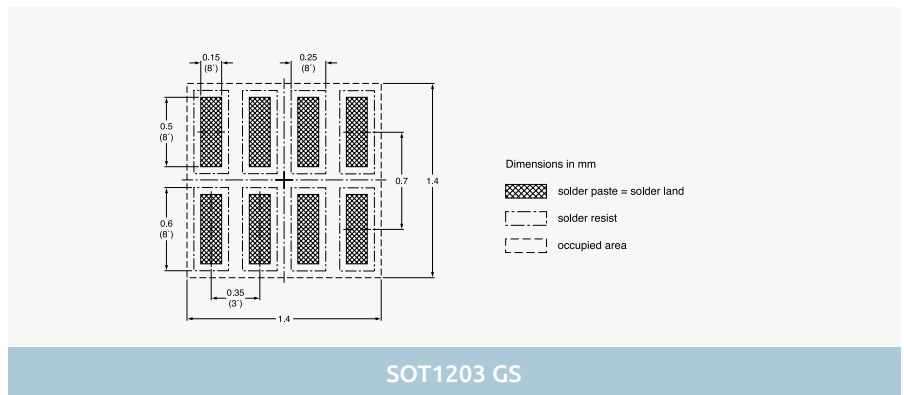
SOT1089 GF



SOT1089 GF



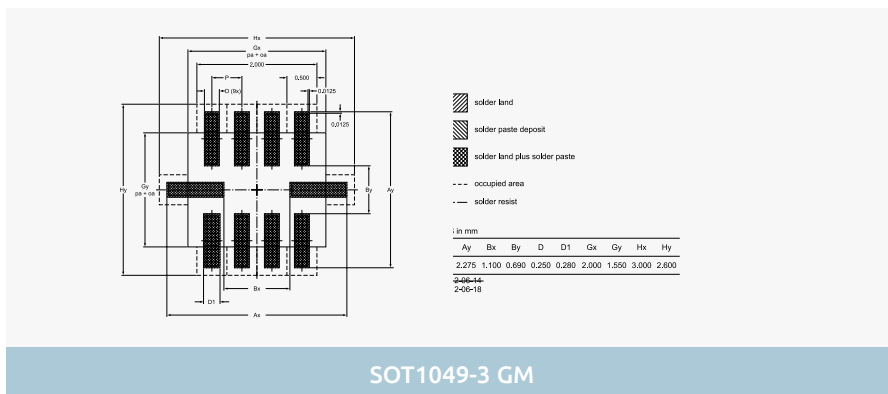
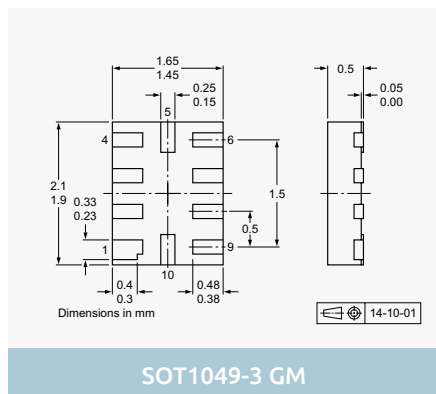
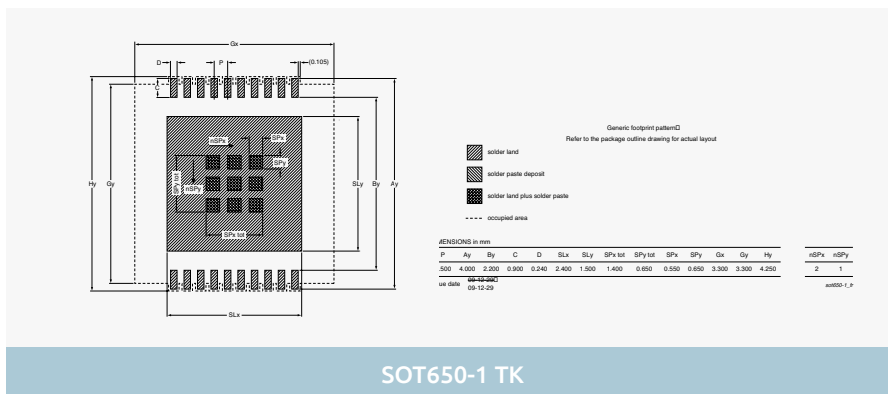
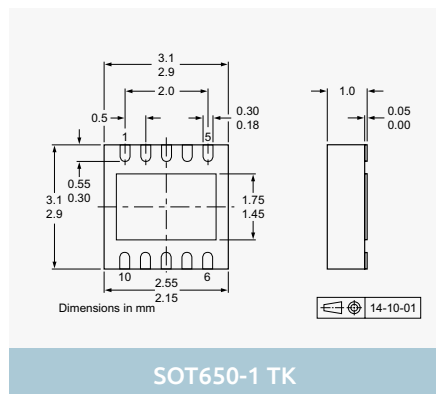
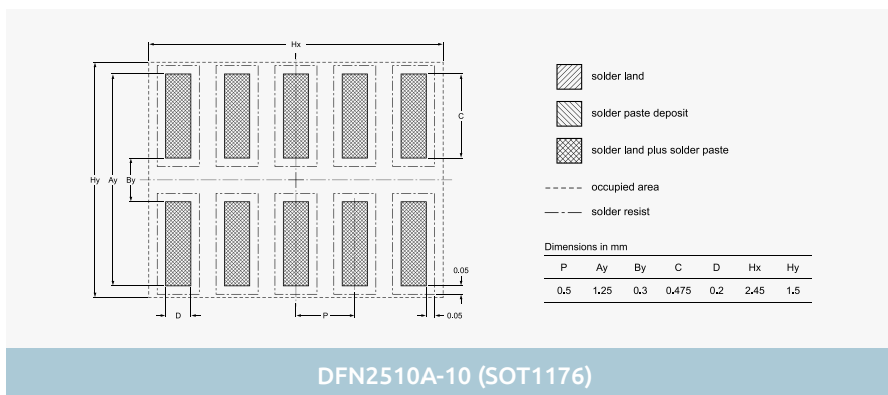
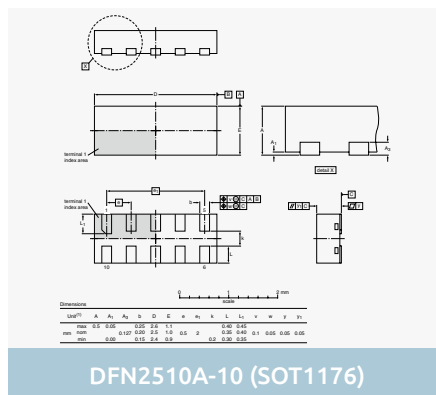
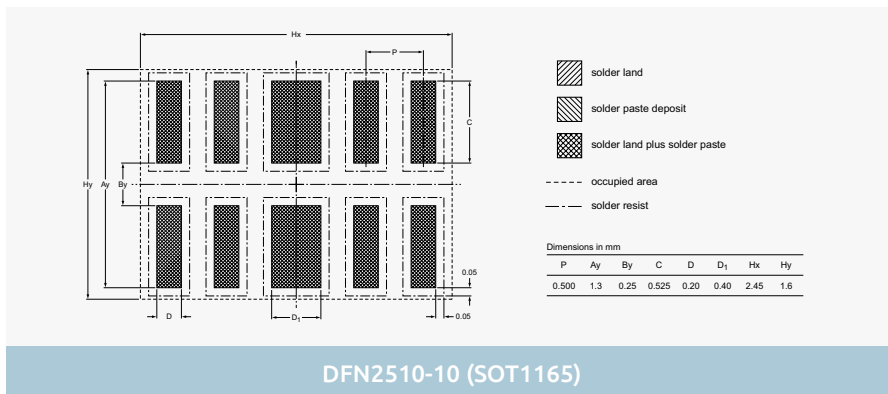
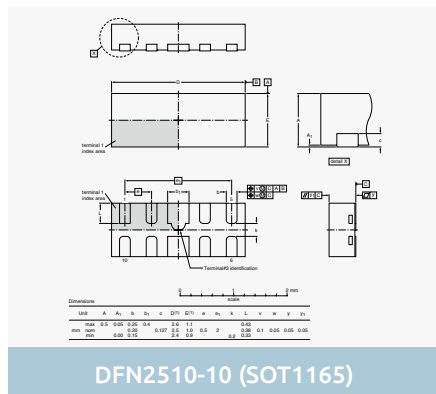
SOT1203 GS



SOT1203 GS

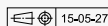
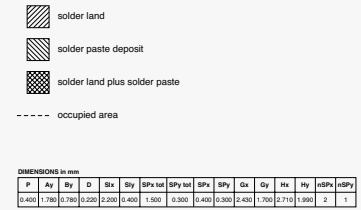
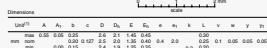
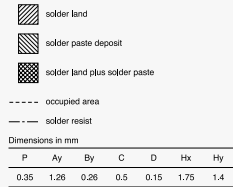
Dimensions in mm

More than 8-pin SMD packages

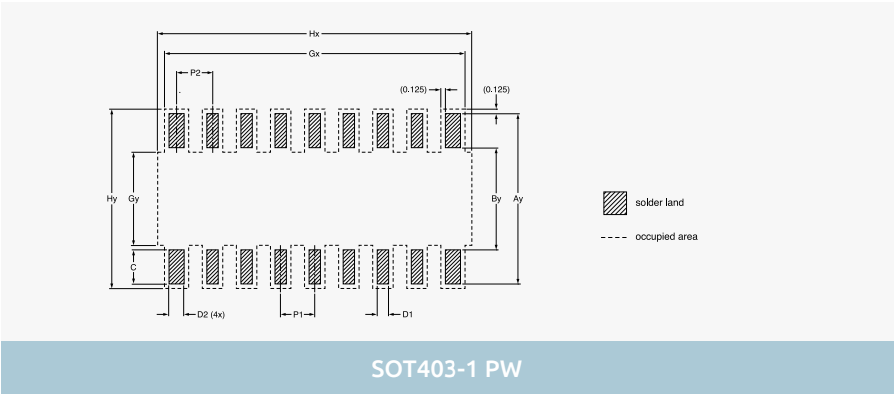
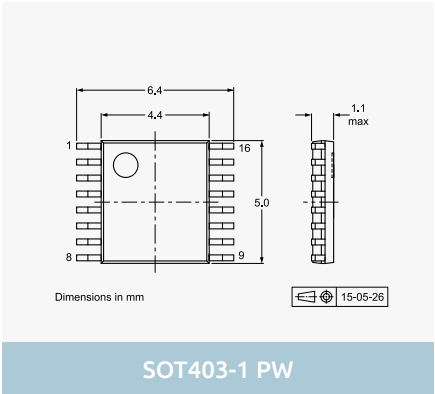
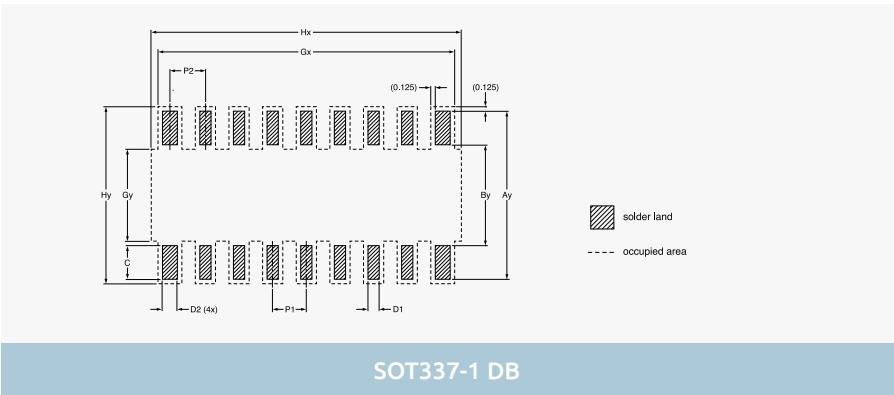
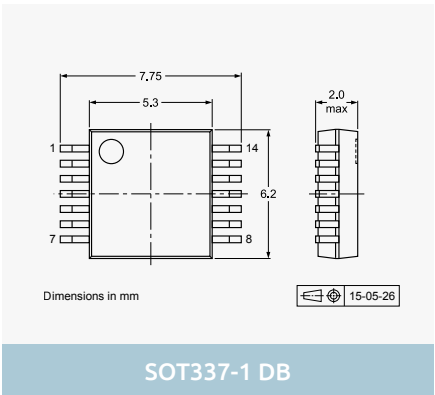
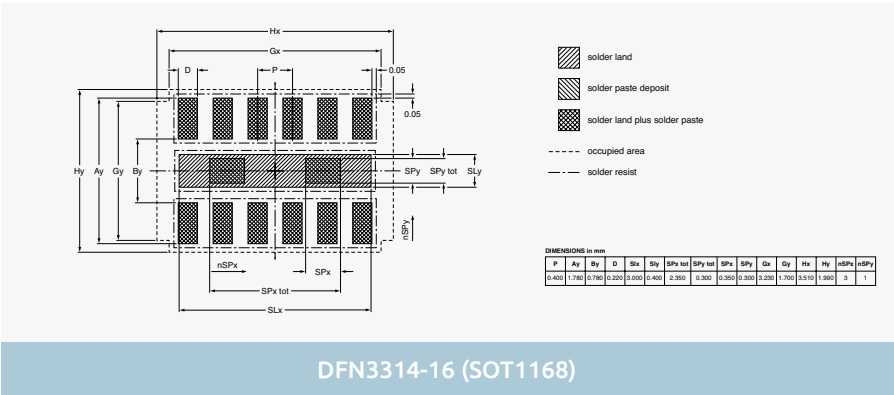
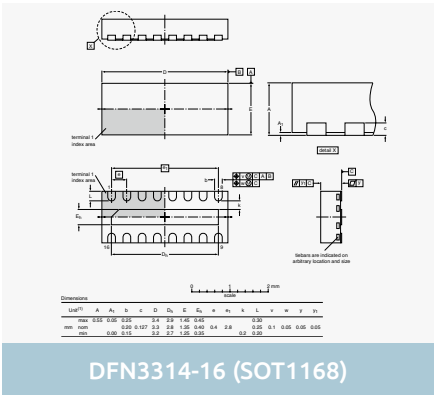
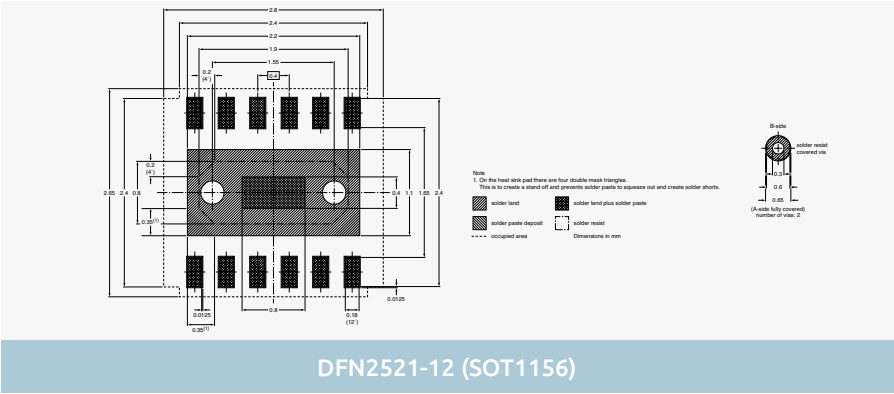
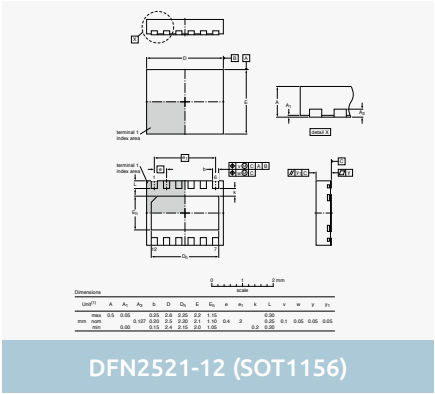


Dimensions in mm

Dimensions in mm

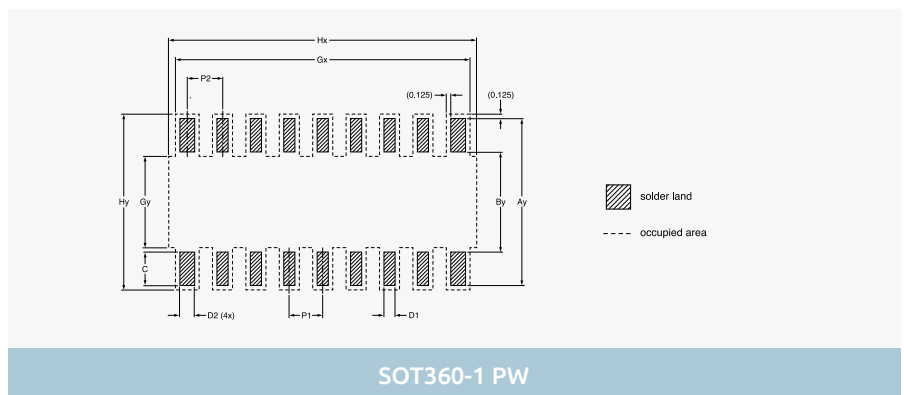
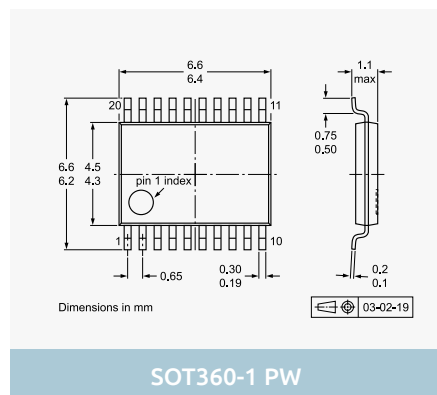
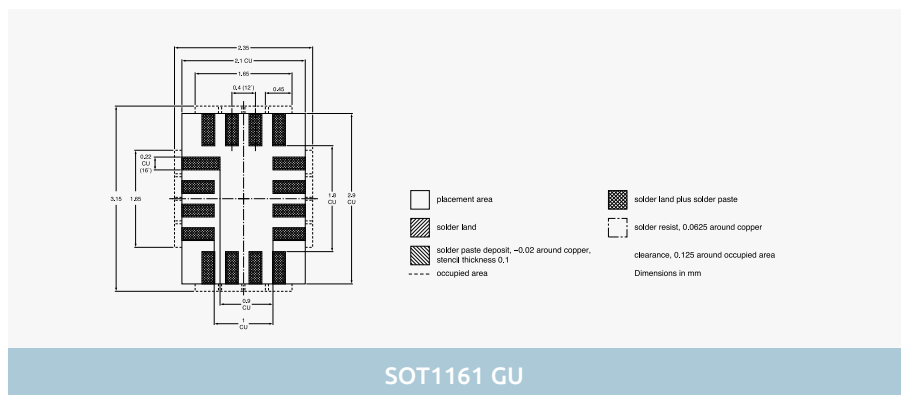
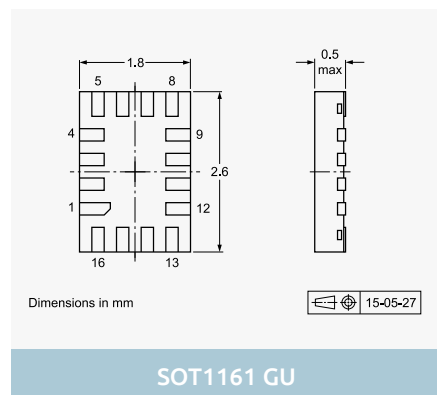
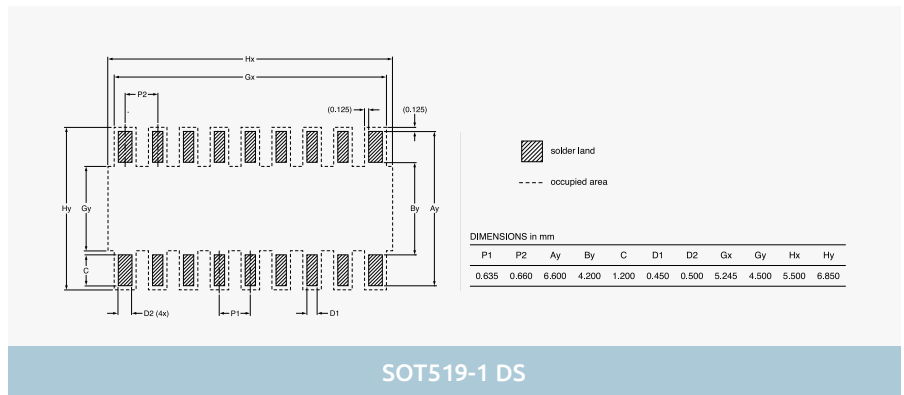
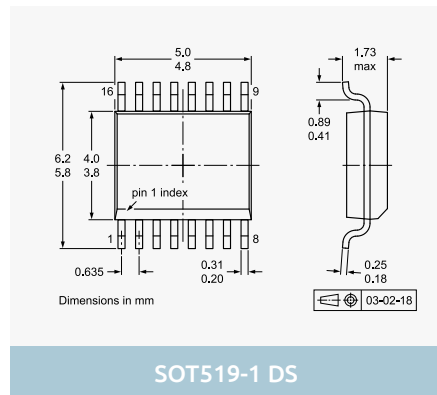
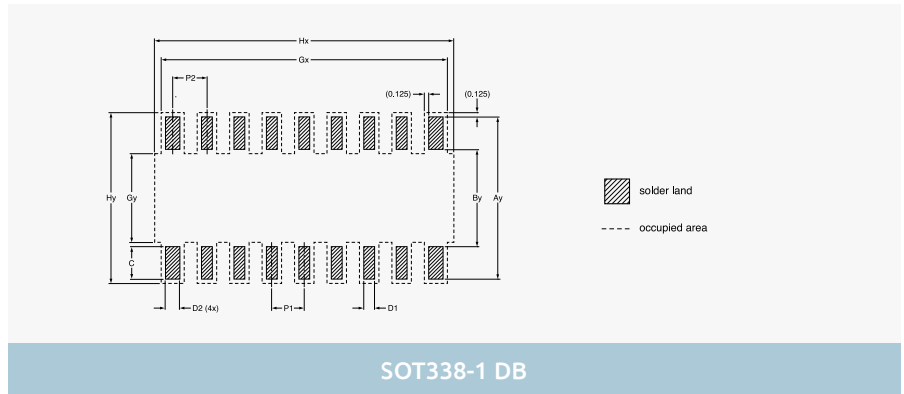
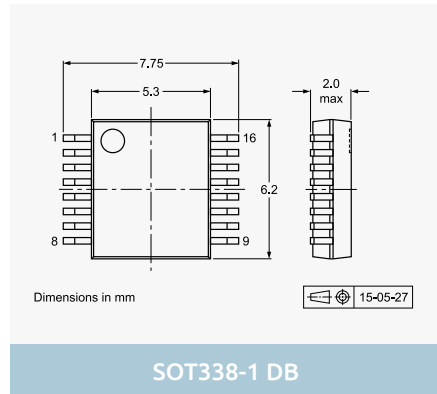


More than 8-pin SMD packages



Dimensions in mm

More than 8-pin SMD packages



Dimensions in mm

More than 8-pin SMD packages

Top view dimensions (mm):

- Overall width: 7.4
- Pin pitch (between pins 1 and 11): 7.0
- Pin 1 offset from left edge: 2.0
- Pin 11 offset from right edge: 1.1
- Overall height: 7.9
- Pin pitch (between pins 1 and 10): 5.4
- Pin 1 offset from bottom edge: 7.6
- Pin 10 offset from bottom edge: 5.2
- Pin 1 offset from left edge: 1.1
- Pin 10 offset from right edge: 1.0
- Pin pitch (between pins 1 and 10): 0.65
- Pin 1 offset from bottom edge: 0.38
- Pin 10 offset from bottom edge: 0.25

Side view dimensions (mm):

- Maximum height: 2 max
- Pin 1 offset from left edge: 1.03
- Pin 10 offset from right edge: 0.63
- Pin pitch (between pins 1 and 10): 0.20
- Pin 1 offset from bottom edge: 0.09
- Pin 10 offset from bottom edge: 0.09

Detail view dimensions (mm):

- Pin diameter: 0.38
- Pin length: 0.25
- Pin pitch (between pins 1 and 10): 0.65
- Pin 1 offset from left edge: 2.0
- Pin 11 offset from right edge: 1.1
- Pin pitch (between pins 1 and 11): 7.0
- Pin 1 offset from bottom edge: 7.6
- Pin 11 offset from bottom edge: 5.2
- Pin pitch (between pins 1 and 11): 5.4
- Pin 1 offset from left edge: 1.1
- Pin 11 offset from right edge: 1.0
- Pin pitch (between pins 1 and 10): 0.65
- Pin 1 offset from bottom edge: 0.38
- Pin 10 offset from bottom edge: 0.25

Dimensions in mm

 solder lands
 solder paste
 solder resist
 occupied area
 Dimensions in mm

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

Dimensions in mm

15-05-27

Legend:

- solder land
- occupied area

DIMENSIONS in mm

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

The drawing shows the mechanical specifications of the SOT815-1 BQ package. The top view is a rectangle with a total width of 5.5 mm and a central distance of 4.1 mm between the two rows of pins. The pins are numbered 1 through 14. The side view shows a maximum height of 1.0 mm and a width of 2.1 mm. The overall height of the package is 3.5 mm. The drawing also includes a detail of the pin profile, showing a flat top and a rounded bottom.

Dimensions in mm

15-05-26

Figure 1 is a detailed solder paste layout for the SOT815-1 BQ component. The layout is centered around a rectangular component footprint with a width of 1.000 and a height of 0.400. The footprint is divided into a central area (solder land plus solder paste) and four side areas (solder land). The dimensions for the solder paste layout are as follows:

- Overall width: 2.700
- Overall height: 2.000
- Distance from component center to the left and right edges of the solder paste area: 0.700
- Distance from component center to the top and bottom edges of the solder paste area: 0.500
- Distance from component center to the left and right edges of the solder land area: 0.350
- Distance from component center to the top and bottom edges of the solder land area: 0.250
- Distance from component center to the left and right edges of the solder paste area: 0.250
- Distance from component center to the top and bottom edges of the solder paste area: 0.250
- Distance from component center to the left and right edges of the solder land area: 0.250
- Distance from component center to the top and bottom edges of the solder land area: 0.250

The legend indicates the following areas:

- solder land (hatched area)
- solder paste deposit (hatched area)
- solder land plus solder paste (hatched area)

The drawing shows the mechanical specifications of the SOT137-1 D package. The top view (left) indicates a total width of 10,325 and a central width of 7,5. The side view (right) shows a maximum height of 2,65. The package is 15,4 high from the base to the top of the central body. The base has a width of 12 on the left and 13 on the right. The central body has a width of 24. The drawing also includes a symbol for a leaded package and a date code 15-05-26.

Dimensions in mm

10,325

7,5

2,65 max

15,4

12

13

24

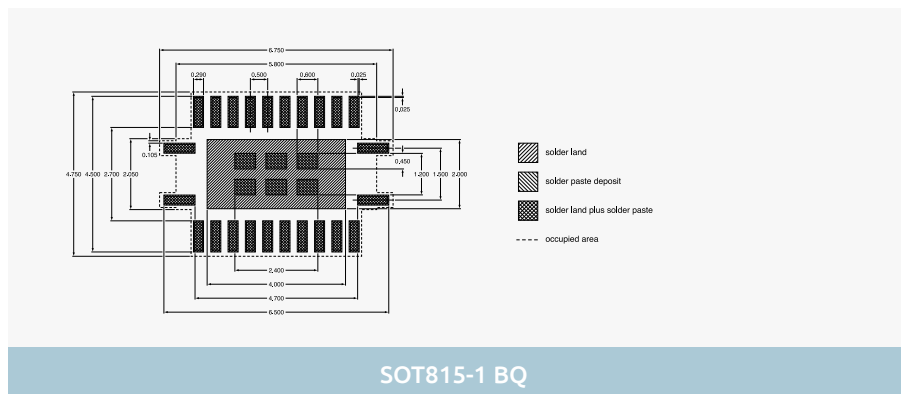
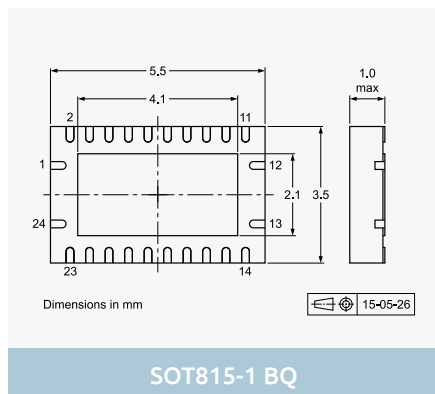
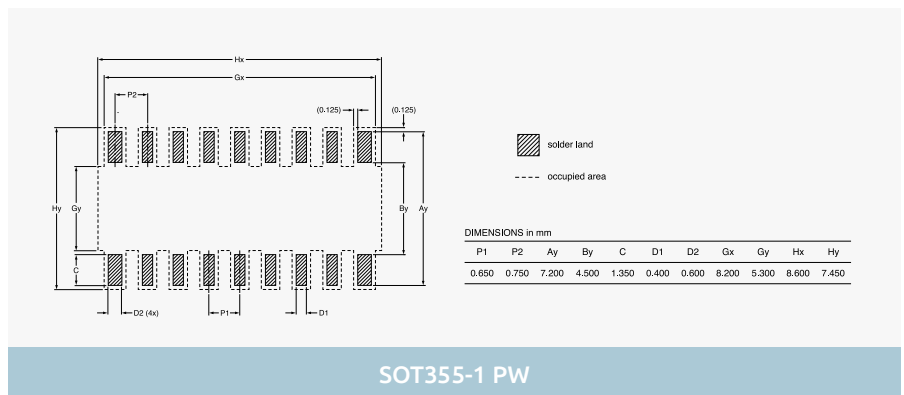
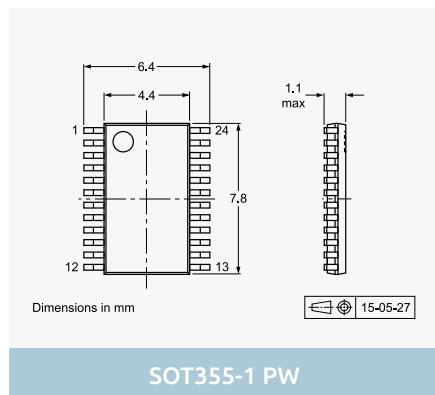
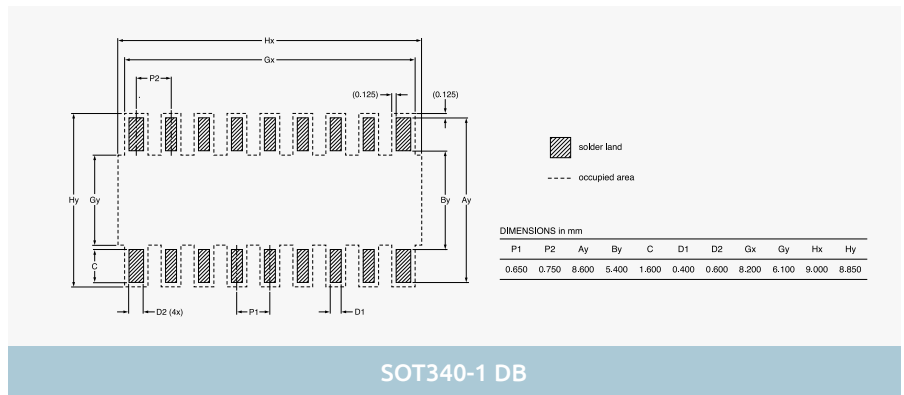
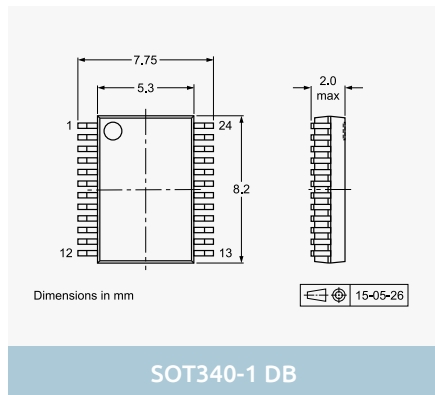
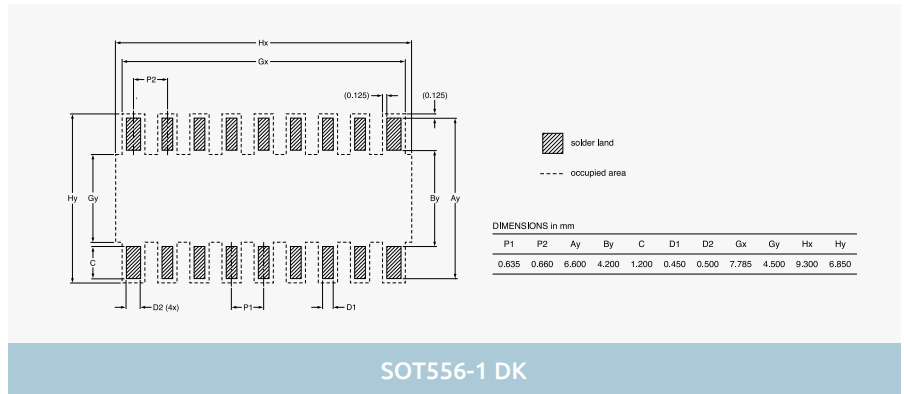
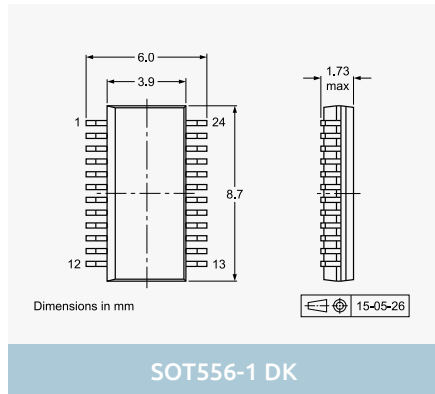
15-05-26

The drawing shows the mechanical specifications for the SOT137-1 D package. The top view includes dimensions for the overall width (Hx), body width (Gx), and pitch (P2). It also shows the width of the solder land (C) and the occupied area (dashed line). The side view shows the height (Hx) and the width of the body (Gx). The legend indicates that the hatched area represents the solder land and the dashed line represents the occupied area.

DIMENSIONS in mm

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

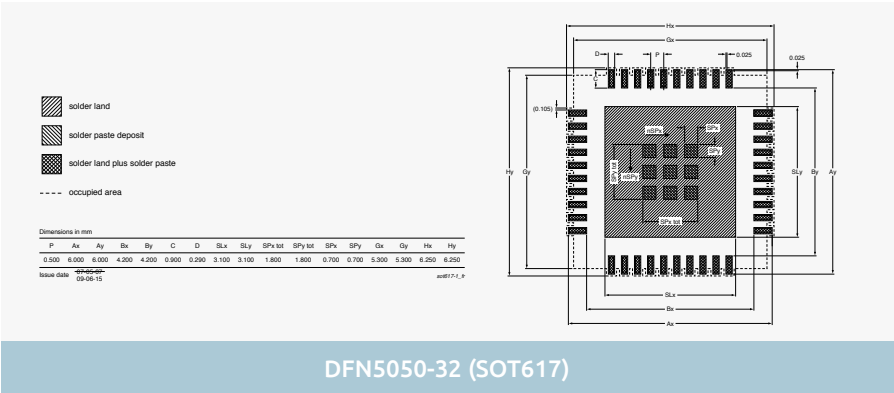
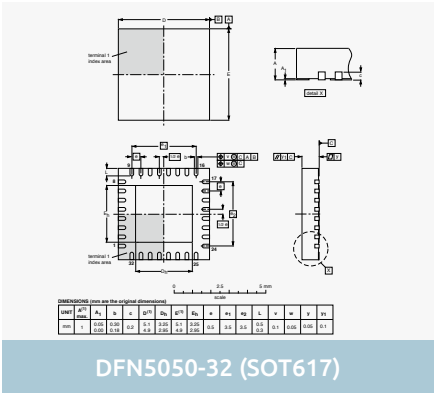
More than 8-pin SMD packages



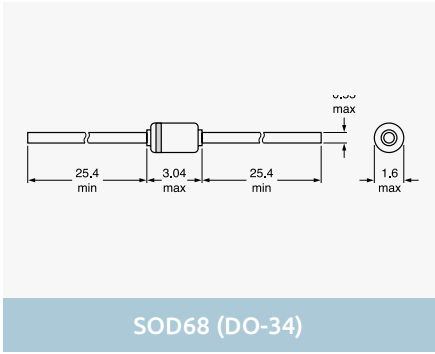
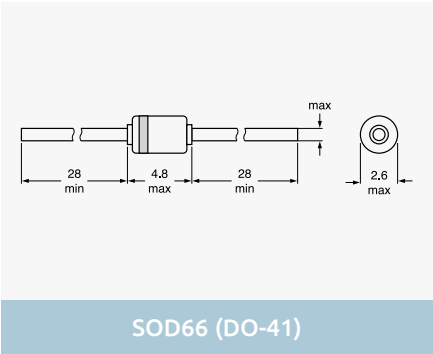
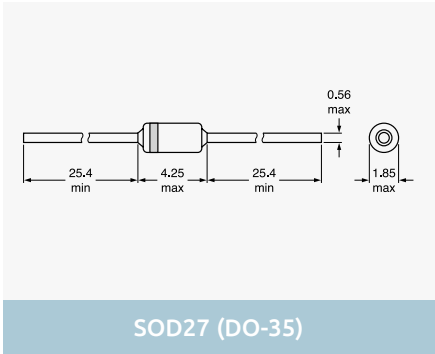
Dimensions in mm

Minimized outline drawings and reflow soldering footprint

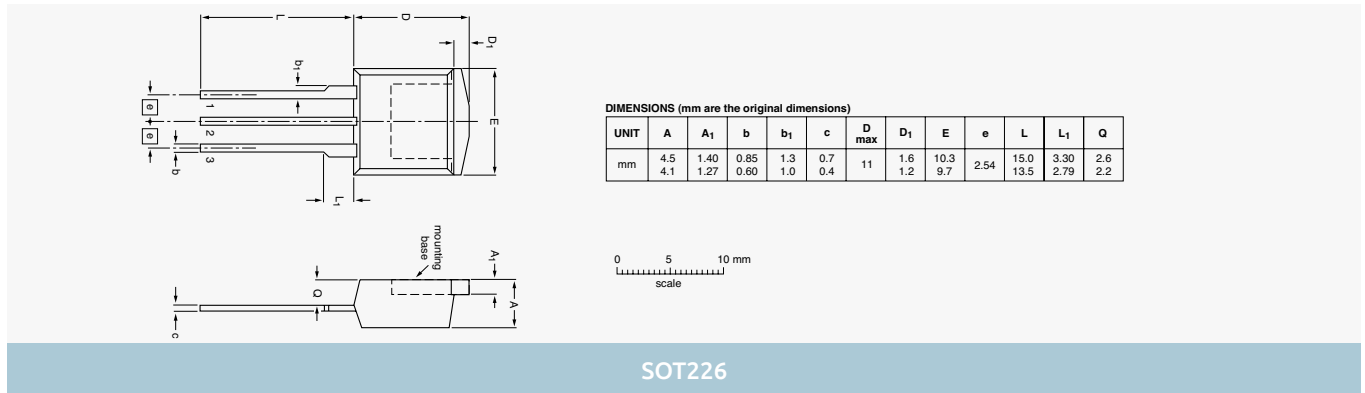
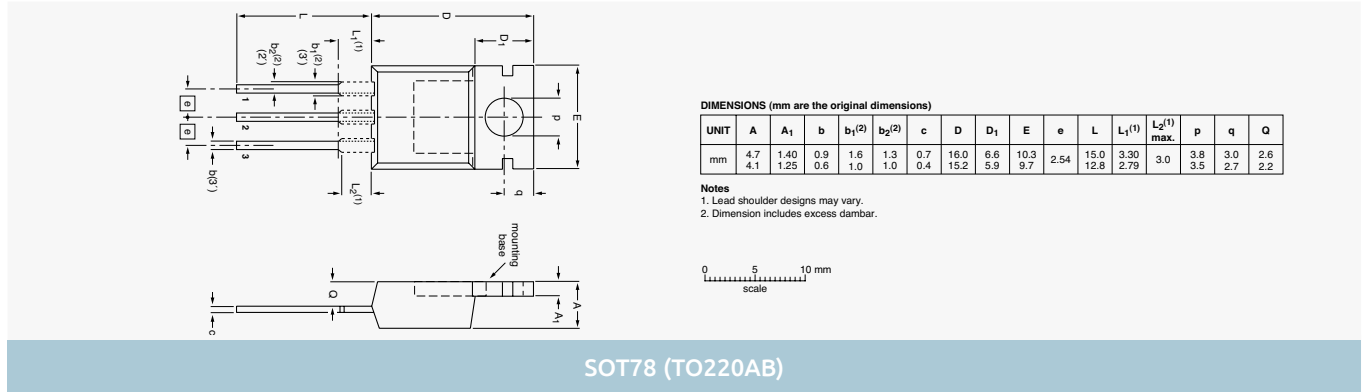
More than 8-pin SMD packages



Glass diodes



Single-ended and through-hole packages



Dimensions in mm

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
1N47xxA series	36	2PD602ARL	14	74AHC1G32	153	74AHCT00	150	74AHCT257	159
1PS10SB82	43	2PD602ASL	14	74AHC1G32-Q100	125	74AHCT00-Q100	113	74AHCT257-Q100	111
1PS300	38	74ABT00	150	74AHC1G4210	141	74AHCT02	152	74AHCT273	143
1PS301	38	74ABT04	129	74AHC1G4212	141	74AHCT02-Q100	113	74AHCT273-Q100	111
1PS302	38	74ABT08	148	74AHC1G4214	141	74AHCT04	129	74AHCT2G00	151
1PS66SB17	43	74ABT125	129	74AHC1G66	160	74AHCT04-Q100	107	74AHCT2G00-Q100	125
1PS66SB82	43	74ABT126	129	74AHC1G66-Q100	121	74AHCT04A	129	74AHCT2G08	148
1PS70SB20	47	74ABT162244	129	74AHC1G79	143	74AHCT07A	11, 129	74AHCT2G08-Q100	125
1PS70SB82	43	74ABT162245A	137	74AHC1G79-Q100	124	74AHCT08	148	74AHCT2G125	130
1PS70SB84	43	74ABT16240A	129	74AHC1G86	150	74AHCT08-Q100	113	74AHCT2G125-Q100	122
1PS70SB85	43	74ABT16244A	129	74AHC1G86-Q100	125	74AHCT123A	155	74AHCT2G126	130
1PS70SB86	43	74ABT16245B	137	74AHC1GU04	129	74AHCT123A-Q100	116	74AHCT2G126-Q100	122
1PS74SB23	47	74ABT20	150	74AHC1GU04-Q100	122	74AHCT125	129	74AHCT2G241	130
1PS76SB17	43	74ABT244	129	74AHC240-Q100	107	74AHCT125-Q100	107	74AHCT2G241-Q100	122
1PS79SB17	43	74ABT245	137	74AHC244	129	74AHCT126	129	74AHCT2G32	153
1PS88SB82	43	74ABT32	153	74AHC244-Q100	107	74AHCT126-Q100	107	74AHCT2G32-Q100	125
2N7002BK	85	74ABTH162245A	137	74AHC245	137	74AHCT132	138, 150	74AHCT30	151
2N7002BKM	85	74AHC00	150	74AHC245-Q100	120	74AHCT132-Q100	117	74AHCT30-Q100	113
2N7002BKMB	94	74AHC00-Q100	113	74AHC257	159	74AHCT138	158	74AHCT32	153
2N7002BKS	85	74AHC02	152	74AHC257-Q100	111	74AHCT138-Q100	110	74AHCT32-Q100	113
2N7002BKW	85	74AHC02-Q100	113	74AHC273	143	74AHCT139	158	74AHCT374	143
2N7002CK	85	74AHC04	129	74AHC273-Q100	111	74AHCT139-Q100	110	74AHCT374-Q100	111
2N700BKM	94	74AHC04-Q100	107	74AHC2G00	150	74AHCT14	129, 138	74AHCT377	143
2PA1576Q	14	74AHC08	148	74AHC2G00-Q100	125	74AHCT14-Q100	117	74AHCT377-Q100	111
2PA1576R	14	74AHC08-Q100	113	74AHC2G08	148	74AHCT14A	129	74AHCT3G04	130
2PA1576S	14	74AHC123A	155	74AHC2G08-Q100	125	74AHCT157	159	74AHCT3G04-Q100	122
2PA1774QM	14	74AHC123A-Q100	116	74AHC2G125	129	74AHCT157-Q100	111	74AHCT3G14	130, 138
2PA1774QMB	14	74AHC125	129	74AHC2G125-Q100	122	74AHCT164-Q100	118	74AHCT3G14-Q100	127
2PA1774RM	14	74AHC125-Q100	107	74AHC2G126	129	74AHCT17A	11, 129, 138	74AHCT541	130
2PA1774RMB	14	74AHC126	129	74AHC2G126-Q100	122	74AHCT1G00	151	74AHCT541-Q100	107
2PA1774SM	14	74AHC126-Q100	107	74AHC2G241	129	74AHCT1G00-Q100	125	zzzzzzzzzz	11, 130
2PA1774SMB	14	74AHC132	138, 150	74AHC2G241-Q100	122	74AHCT1G02	152	74AHCT573	146
2PB1219AQ	14	74AHC132-Q100	117	74AHC2G32	153	74AHCT1G02-Q100	125	74AHCT573-Q100	115
2PB1219AR	14	74AHC138	158	74AHC2G32-Q100	125	74AHCT1G04	129	74AHCT574	143
2PB1219AS	14	74AHC138-Q100	110	74AHC30	151	74AHCT1G04-Q100	122	74AHCT594-Q100	118
2PB709ARL	14	74AHC139	158	74AHC30-Q100	113	74AHCT1G08	148	74AHCT595-Q100	118
2PB709ART	14	74AHC139-Q100	110	74AHC32	153	74AHCT1G08-Q100	125	74AHCT74	143
2PB709ARW	14	74AHC14	129, 138	74AHC32-Q100	113	74AHCT1G125	129	74AHCT74-Q100	111
2PB709ASL	14	74AHC14-Q100	117	74AHC373	146	74AHCT1G125-Q100	122	74AHCT86	150
2PB709ASW	14	74AHC157	159	74AHC374	143	74AHCT1G126	129	74AHCT86-Q100	113
2PB709BRL	14	74AHC157-Q100	111	74AHC374-Q100	111	74AHCT1G126-Q100	122	74AHCU04	130
2PB709BSL	14	74AHC164-Q100	118	74AHC377	143	74AHCT1G14	129, 138	74AHCU04-Q100	107
2PB710ARL	14	74AHC1G00	150	74AHC377-Q100	111	74AHCT1G14-Q100	127	74AHCV07A	11, 130, 138
2PB710ASL	14	74AHC1G00-Q100	125	74AHC3G04	129	74AHCT1G17	129, 138	74AHCV14A	130, 138
2PC4081Q	14	74AHC1G02	152	74AHC3G04-Q100	122	74AHCT1G17-Q100	122	74AHCV17A	130, 138
2PC4081R	14	74AHC1G02-Q100	125	74AHC3G14	129, 138	74AHCT1G32	153	74AHCV244A	11, 130, 138
2PC4081S	14	74AHC1G04	129	74AHC3G14-Q100	127	74AHCT1G32-Q100	125	74AHCV245A	137, 138
2PC4617QM	14	74AHC1G04-Q100	122	74AHC3GU04	129	74AHCT1G66	160	74AHCV541A	11, 130, 138
2PC4617QMB	14	74AHC1G07-Q100	122	74AHC3GU04-Q100	122	74AHCT1G66-Q100	121	74ALVC00	151
2PC4617RM	14	74AHC1G08	148	74AHC541	129	74AHCT1G79	143	74ALVC00-Q100	133
2PC4617RMB	14	74AHC1G08-Q100	125	74AHC541-Q100	107	74AHCT1G79-Q100	124	74ALVC02	152
2PD1820AR	14	74AHC1G09	148	74AHC573	146	74AHCT1G86	150	74ALVC04	130
2PD1820AS	14	74AHC1G09-Q100	125	74AHC573-Q100	115	74AHCT1G86-Q100	125	74ALVC08	148
2PD601ARL	14	74AHC1G125	129	74AHC574	143	74AHCT240	130	74ALVC125	130
2PD601ART	14	74AHC1G125-Q100	122	74AHC594-Q100	118	74AHCT240-Q100	107	74ALVC125-Q100	107
2PD601ARW	14	74AHC1G126	129	74AHC595-Q100	118	74AHCT244	130	74ALVC14	130, 138
2PD601ASL	14	74AHC1G126-Q100	122	74AHC74	143	74AHCT244-Q100	107	74ALVC162334A	146
2PD601ASW	14	74AHC1G14	129, 138	74AHC74-Q100	111	74AHCT244A	11, 130	74ALVC16244	130
2PD601BRL	14	74AHC1G14-Q100	127	74AHC86	150	74AHCT245	137	74ALVC16245	137
2PD601BSL	14	74AHC1G17	129, 138	74AHC86-Q100	113	74AHCT245-Q100	120	74ALVC162834A	146
2PD602AQL	14	74AHC1G17-Q100	122	74AHC9541A	11, 129	74AHCT245A	137	74ALVC162835A	146

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74ALVC162836A	146	74AUP1G11	148	74AUP2G157	159	74AVCH4T245-Q100	116	74HC03	151
74ALVC164245	154	74AUP1G125	130	74AUP2G16	131	74AVCH8T245	154	74HC03-Q100	114
74ALVC164245-Q100	116	74AUP1G125-Q100	122	74AUP2G17	131, 139	74AXP1G00	151	74HC04	131
74ALVC16834A	146	74AUP1G126	130	74AUP2G240	131	74AXP1G02	152	74HC04-Q100	107
74ALVC16835A	146	74AUP1G132	138, 151	74AUP2G241	131	74AXP1G04	131	74HC05	131
74ALVC16836A	146	74AUP1G14	130, 138	74AUP2G32	153	74AXP1G06	131	74HC05-Q100	107
74ALVC244	130	74AUP1G157	159	74AUP2G34	149	74AXP1G07	131	74HC08	148
74ALVC245	137	74AUP1G158	159	74AUP2G3404	149	74AXP1G08	148	74HC08-Q100	114
74ALVC32	153	74AUP1G16	130	74AUP2G3407	149	74AXP1G09	148	74HC10	151
74ALVC32-Q100	114	74AUP1G17	138	74AUP2G38	151	74AXP1G10	151	74HC10-Q100	114
74ALVC373	146	74AUP1G175	143	74AUP2G57	149	74AXP1G11	148	74HC107	143
74ALVC374	143	74AUP1G175-Q100	124	74AUP2G58	139, 149	74AXP1G125	131	74HC107-Q100	112
74ALVCS41	130	74AUP1G18	158	74AUP2G79	143	74AXP1G14	131, 139	74HC109	144
74ALVCS41-Q100	107	74AUP1G19	158	74AUP2G79-Q100	124	74AXP1G157	159	74HC109-Q100	112
74ALVC573	146	74AUP1G240	130	74AUP2G80	143	74AXP1G17	131, 139	74HC11	148
74ALVC574	143	74AUP1G32	149	74AUP2G86	150	74AXP1G32	153	74HC11-Q100	114
74ALVC74	143	74AUP1G32-Q100	125	74AUP2G97	139, 149	74AXP1G57	139, 149	74HC112	144
74ALVCH162244	130	74AUP1G3208	149	74AUP2G98	139, 149	74AXP1G58	139, 149	74HC123	155
74ALVCH162245	137	74AUP1G332	153	74AUP2GU04	131	74AXP1G86	150	74HC123-Q100	116
74ALVCH16244	130	74AUP1G34	130	74AUP2GU04-Q100	122	74AXP1G97	149	74HC125	131
74ALVCH16245	137	74AUP1G34-Q100	122	74AUP2T1326	149	74AXP1G98	149	74HC125-Q100	107
74ALVCH162601	137	74AUP1G373	146	74AUP3G04	149	74AXP1T125	154	74HC126	131
74ALVCH162827	130	74AUP1G373-Q100	126	74AUP3G0434	149	74AXP1T14	154	74HC126-Q100	107
74ALVCH16373	146	74AUP1G374	143	74AUP3G14	131, 139	74AXP1T32	154	74HC132	139, 151
74ALVCH16374	143	74AUP1G374-Q100	124	74AUP3G16	131	74AXP1T34	154	74HC132-Q100	117
74ALVCH16500	137	74AUP1G38	150	74AUP3G17	131, 139	74AXP1T57	154	74HC137	158
74ALVCH16501	137	74AUP1G386	150	74AUP3G3404	149	74AXP1T57-Q100	128	74HC138	158
74ALVCH16543	137	74AUP1G57	139, 149	74AVC16244	131	74AXP2G14	139	74HC138-Q100	110
74ALVCH16600	137	74AUP1G58	139, 149	74AVC16245	137	74AXP2G17	131, 139	74HC139	158
74ALVCH16601	137	74AUP1G74	143	74AVC16245-Q100	120	74AXP2G34	131	74HC139-Q100	110
74ALVCH16646	137	74AUP1G74-Q100	124	74AVC16334A	146	74AXP2G3404	131	74HC14	131, 139
74ALVCH16652	137	74AUP1G79	143	74AVC16373	146	74AXP2T08	154	74HC14-Q100	117
74ALVCH16821	143	74AUP1G80	143	74AVC16374	143	74AXP2T08-Q100	128	74HC151	159
74ALVCH16823	143	74AUP1G86	150	74AVC16374-Q100	111	74AXP2T3407	154	74HC151-Q100	111
74ALVCH16825	143	74AUP1G86-Q100	125	74AVC16834A	146	74CB3Q3253	11, 157	74HC153	159
74ALVCH16827	130	74AUP1G885	149	74AVC16835A	146	74CB3Q3257	11, 157	74HC153-Q100	111
74ALVCH16841	146	74AUP1G97	139, 149	74AVC16836A	146	74CBTLV16211	157	74HC154	158
74ALVCH16843	146	74AUP1G98	139, 149	74AVC16T245	154	74CBTLV1G125	157	74HC157	159
74ALVCH16952	137	74AUP1GU04	130	74AVC16T245-Q100	116	74CBTLV3125	157	74HC157-Q100	111
74ALVCH32973	146	74AUP1T34	154	74AVC1T1022	154	74CBTLV3125-Q100	11, 110	74HC158	159
74ALVT162245	137	74AUP1T34-Q100	128	74AVC1T45	154	74CBTLV3126	157	74HC160	141
74ALVT16244	130	74AUP1T45	154	74AVC1T45-Q100	128	74CBTLV3126-Q100	110	74HC161	141
74ALVT162821	143	74AUP1T57	149	74AVC20T245	154	74CBTLV3244	157	74HC161-Q100	11, 109
74ALVT162823	143	74AUP1T58	149	74AVC20T245-Q100	116	74CBTLV3245	157	74HC163-Q100	109
74ALVT162827	130	74AUP1T97	149	74AVC2T245	154	74CBTLV3245-Q100	110	74HC164-Q100	118
74ALVT16373	146	74AUP1T98	149	74AVC2T45	154	74CBTLV3253	157	74HC165-Q100	118
74ALVT16821	143	74AUP1T98-Q100	125	74AVC2T45-Q100	128	74CBTLV3253-Q100	110	74HC166-Q100	118
74ALVT16823	143	74AUP1Z04	149	74AVC32T245	154	74CBTLV3257	157	74HC173	144
74ALVT16827	130	74AUP1Z125	149	74AVC4T245	154	74CBTLV3257-Q100	110	74HC174	144
74AUP1G00	151	74AUP2G00	151	74AVC4T245-Q100	116	74CBTLV3306	157	74HC174-Q100	112
74AUP1G02	152	74AUP2G02	152	74AVC4TD245	154	74CBTLV3384	157	74HC175	144
74AUP1G02-Q100	125	74AUP2G04	131	74AVC8T245	154	74CBTLV3861	157	74HC175-Q100	112
74AUP1G04	130	74AUP2G04-Q100	122	74AVC8T245-Q100	116	74CBTLVD3244	157	74HC191	141
74AUP1G04-Q100	122	74AUP2G06	131	74AVCH16244	131	74CBTLVD3245	157	74HC193	141
74AUP1G06	130	74AUP2G0604	149	74AVCH16245	137	74CBTLVD3245-Q100	110	74HC193-Q100	109
74AUP1G06-Q100	122	74AUP2G07	131	74AVCH16T245	154	74CBTLVD3384	157	74HC1G00	151
74AUP1G07	130	74AUP2G08	148	74AVCH1T45	154	74CBTLVD3861	157	74HC1G00-Q100	125
74AUP1G08	148	74AUP2G125	131	74AVCH1T45-Q100	128	74HC00	151	74HC1G02	152
74AUP1G08-Q100	125	74AUP2G126	131	74AVCH20T245	154	74HC00-Q100	114	74HC1G02-Q100	125
74AUP1G0832	149	74AUP2G132	11, 139, 151	74AVCH2T45	154	74HC02	152	74HC1G04	131
74AUP1G09	148	74AUP2G14	131, 139	74AVCH4T245	154	74HC02-Q100	114	74HC1G04-Q100	122

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74HC1G08	148	74HC2G34-Q100	123	74HC4060	141	74HCT04	132	74HCT1G14-Q100	127
74HC1G08-Q100	125	74HC2G66	160	74HC4060-Q100	109	74HCT04-Q100	107	74HCT1G32	153
74HC1G125	131	74HC2G66-Q100	121	74HC4066	160	74HCT08	148	74HCT1G32-Q100	125
74HC1G125-Q100	122	74HC2G86	150	74HC4066-Q100	106	74HCT08-Q100	114	74HCT1G66	160
74HC1G126	131	74HC2G86-Q100	126	74HC4067	160	74HCT10	151	74HCT1G66-Q100	121
74HC1G14	131, 139	74HC2GU04	132	74HC4067-Q100	106	74HCT10-Q100	114	74HCT1G86	150
74HC1G14-Q100	127	74HC2GU04-Q100	122	74HC4075	153	74HCT107	144	74HCT1G86-Q100	126
74HC1G32	153	74HC30	151	74HC4075-Q100	114	74HCT107-Q100	112	74HCT20	151
74HC1G32-Q100	125	74HC30-Q100	114	74HC4094-Q100	118	74HCT109	144	74HCT20-Q100	114
74HC1G66	160	74HC32	153	74HC42	158	74HCT109-Q100	112	74HCT221	155
74HC1G66-Q100	121	74HC32-Q100	114	74HC423	155	74HCT11	148	74HCT238	158
74HC1G86	150	74HC365	132	74HC4316	160	74HCT11-Q100	114	74HCT238-Q100	110
74HC1G86-Q100	125	74HC365-Q100	107	74HC4351	160	74HCT112	144	74HCT240	132
74HC1GU04	131	74HC366	132	74HC4511	158	74HCT123	155	74HCT240-Q100	107
74HC1GU04-Q100	122	74HC366-Q100	107	74HC4514	158	74HCT123-Q100	116	74HCT241	132
74HC20	151	74HC368	132	74HC4515	158	74HCT125	132	74HCT244	132
74HC20-Q100	114	74HC373	146	74HC4520	141	74HCT125-Q100	107	74HCT244-Q100	107
74HC21	148	74HC373-Q100	115	74HC4520-Q100	109	74HCT126	132	74HCT245	137
74HC237	158	74HC374	144	74HC4538	155	74HCT126-Q100	107	74HCT245-Q100	120
74HC237-Q100	110	74HC377	144	74HC4538-Q100	116	74HCT132	139, 151	74HCT251	159
74HC238	158	74HC377-Q100	112	74HC4851	160	74HCT132-Q100	117	74HCT251-Q100	111
74HC238-Q100	110	74HC390	141	74HC4851-Q100	106	74HCT138	158	74HCT253	159
74HC240	131	74HC393	141	74HC4852	160	74HCT138-Q100	110	74HCT253-Q100	111
74HC240-Q100	107	74HC393-Q100	109	74HC4852-Q100	106	74HCT139	158	74HCT257	159
74HC241	131	74HC3G04	132	74HC540	132	74HCT139-Q100	110	74HCT257-Q100	111
74HC244	131	74HC3G04-Q100	123	74HC540-Q100	107	74HCT14	132, 139	74HCT259	146
74HC244-Q100	107	74HC3G06	132	74HC541	132	74HCT14-Q100	132	74HCT259-Q100	115
74HC245	137	74HC3G07	132	74HC541-Q100	107	74HCT151	159	74HCT27	152
74HC245-Q100	120	74HC3G07-Q100	123	74HC5555	141	74HCT151-Q100	111	74HCT27-Q100	114
74HC251	159	74HC3G14	132, 139	74HC573	146	74HCT153	159	74HCT273	144
74HC251-Q100	111	74HC3G14-Q100	127	74HC573-Q100	115	74HCT153-Q100	111	74HCT273-Q100	114
74HC253	159	74HC3G16	132	74HC574	144	74HCT154	158	74HCT280	155
74HC253-Q100	111	74HC3G34	132	74HC574-Q100	112	74HCT157	111	74HCT2G00	151
74HC257	159	74HC3G34-Q100	123	74HC590	141	74HCT157-Q100	159	74HCT2G00-Q100	125
74HC257-Q100	111	74HC3GU04	132	74HC594-Q100	118	74HCT161	141	74HCT2G02	152
74HC259	146	74HC3GU04-Q100	122	74HC595-Q100	118	74HCT163	141	74HCT2G02-Q100	125
74HC259-Q100	115	74HC4002	152	74HC597-Q100	118	74HCT163-Q100	109	74HCT2G04	132
74HC27	152	74HC4002-Q100	114	74HC6323	141	74HCT164-Q100	118	74HCT2G04-Q100	123
74HC27-Q100	114	74HC40103	141	74HC688	155	74HCT165-Q100	118	74HCT2G08	148
74HC273	144	74HC40105	143	74HC7014	132, 139	74HCT166-Q100	118	74HCT2G08-Q100	126
74HC273-Q100	112	74HC4016	160	74HC7014-Q100	117	74HCT173	144	74HCT2G125	132
74HC280	155	74HC4017	141	74HC73	144	74HCT174	144	74HCT2G125-Q100	123
74HC2G00	151	74HC4017-Q100	109	74HC74	144	74HCT174-Q100	112	74HCT2G14	132, 139
74HC2G00-Q100	125	74HC4020	141	74HC74-Q100	112	74HCT175	144	74HCT2G14-Q100	127
74HC2G02	152	74HC4020-Q100	109	74HC75	146	74HCT175-Q100	112	74HCT2G17	132, 139
74HC2G02-Q100	125	74HC4024	141	74HC7540	132, 139	74HCT193	141	74HCT2G17-Q100	127
74HC2G04	132	74HC4024-Q100	109	74HC7541	132, 139	74HCT193-Q100	109	74HCT2G32	153
74HC2G04-Q100	123	74HC4040	141	74HC7541-Q100	117	74HCT1G00	151	74HCT2G32-Q100	126
74HC2G08	148	74HC4040-Q100	109	74HC85	155	74HCT1G00-Q100	125	74HCT2G34	133
74HC2G08-Q100	125	74HC4046A	156	74HC86	150	74HCT1G02	152	74HCT2G34-Q100	123
74HC2G125	132	74HC4049	154	74HC86-Q100	114	74HCT1G02-Q100	125	74HCT2G66	160
74HC2G125-Q100	123	74HC4050	154	74HC9114	132, 139	74HCT1G04	132	74HCT2G66-Q100	121
74HC2G14	132, 139	74HC4050-Q100	116	74HC9115	132, 139	74HCT1G04-Q100	122	74HCT2G86	150
74HC2G14-Q100	127	74HC4051	160	74HCT00	151	74HCT1G08	148	74HCT2G86-Q100	126
74HC2G17	132	74HC4051-Q100	106	74HCT00-Q100	114	74HCT1G08-Q100	125	74HCT30	151
74HC2G17-Q100	127	74HC4052	160	74HCT02	152	74HCT1G125	132	74HCT30-Q100	114
74HC2G32	153	74HC4052-Q100	106	74HCT02-Q100	114	74HCT1G125-Q100	122	74HCT32	153
74HC2G32-Q100	126	74HC4053	160	74HCT03	151	74HCT1G126	132	74HCT32-Q100	114
74HC2G34	132	74HC4053-Q100	106	74HCT03-Q100	114	74HCT1G14	132, 139	74HCT365	133

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74HCT365-Q100	107	74HCT540	133	74LV4053	160	74LVC1G04	134	74LVC1G86	150
74HCT366	133	74HCT540-Q100	107	74LV4053-Q100	106	74LVC1G04-Q100	123	74LVC1G86-Q100	126
74HCT366-Q100	107	74HCT541	133	74LV4060	141	74LVC1G06	134	74LVC1G97	140
74HCT367	133	74HCT541-Q100	108	74LV4060-Q100	119	74LVC1G06-Q100	123	74LVC1G98	140
74HCT368	133	74HCT573	146	74LV4066	160	74LVC1G07	134	74LVC1G99	140
74HCT373	146	74HCT573-Q100	115	74LV4094	160	74LVC1G07-Q100	123	74LVC1GU04	134
74HCT373-Q100	115	74HCT574	144	74LV540A	11, 133	74LVC1G08	148	74LVC1GU04-Q100	123
74HCT374	144	74HCT574-Q100	112	74LV541A	133	74LVC1G08-Q100	126	74LVC1GX04	149
74HCT377	144	74HCT594-Q100	118	74LV541AT	133	74LVC1G10	151	74LVC1GX04-Q100	126
74HCT377-Q100	112	74HCT595-Q100	118	74LV74	144	74LVC1G10-Q100	126	74LVC1T45	154
74HCT390	141	74HCT597-Q100	118	74LV74-Q100	112	74LVC1G11	148	74LVC1T45-Q100	128
74HCT393	141	74HCT6323	141	74LVC00A	151	74LVC1G11-Q100	126	74LVC2244A	134
74HCT393-Q100	109	74HCT688	155	74LVC00A-Q100	114	74LVC1G123	155	74LVC2245A	137
74HCT3G04	133	74HCT74	144	74LVC02A	152	74LVC1G123-Q100	127	74LVC240A	134
74HCT3G04-Q100	123	74HCT74-Q100	112	74LVC02A-Q100	114	74LVC1G125	134	74LVC244A	134
74HCT3G06	133	74HCT7540	133	74LVC04A	133	74LVC1G125-Q100	123	74LVC244A-Q100	108
74HCT3G07	133	74HCT7541	133	74LVC04A-Q100	108	74LVC1G126	134	74LVC245A	137
74HCT3G07-Q100	123	74HCT7541-Q100	117	74LVC06A	133	74LVC1G126-Q100	123	74LVC245A-Q100	120
74HCT3G14	133	74HCT85	155	74LVC06A-Q100	108	74LVC1G14	134	74LVC257A	159
74HCT3G14-Q100	127	74HCT86	150	74LVC07A	133	74LVC1G14-Q100	127	74LVC273	144
74HCT3G16	133	74HCT86-Q100	114	74LVC07A-Q100	108	74LVC1G157	159	74LVC273-Q100	112
74HCT3G34	133	74HCT9046A	156	74LVC08	148	74LVC1G157-Q100	124	74LVC2G00	151
74HCT3G34-Q100	123	74HCT9114	140	74LVC08A-Q100	114	74LVC1G16	134	74LVC2G00-Q100	126
74HCT4002	152	74HCU04	133	74LVC10		74LVC1G17	134	74LVC2G02	152
74HCT4017	141	74HCU04-Q100	108	74LVC10A	151	74LVC1G17-Q100	127	74LVC2G02-Q100	126
74HCT4017-Q100	109	74LV00	151	74LVC11	148	74LVC1G175	144	74LVC2G04	134
74HCT4020	141	74LV02	152	74LVC125A	133	74LVC1G175-Q100	124	74LVC2G04-Q100	123
74HCT4020-Q100	109	74LV03	151	74LVC125A-Q100	108	74LVC1G18	158	74LVC2G06	134
74HCT4040	141	74LV04	133	74LVC126A	133	74LVC1G18-Q100	124	74LVC2G06-Q100	123
74HCT4040-Q100	109	74LV04AT	11, 133	74LVC126A-Q100	108	74LVC1G19	158	74LVC2G07	134
74HCT4046A	156	74LV05A	11, 133	74LVC132A	140	74LVC1G19-Q100	11, 124	74LVC2G07-Q100	123
74HCT4051	160	74LV07A	133	74LVC132A-Q100	117	74LVC1G27	152	74LVC2G08	148
74HCT4051-Q100	106	74LV07AT	11, 133	74LVC138A	158	74LVC1G3157	160	74LVC2G08-Q100	126
74HCT4052	160	74LV08	148	74LVC138A-Q100	110	74LVC1G3157-Q100	121	74LVC2G125	134
74HCT4052-Q100	106	74LV08-Q100	114	74LVC139	158	74LVC1G32	153	74LVC2G125-Q100	123
74HCT4053	160	74LV123	155	74LVC14A	133	74LVC1G32-Q100	126	74LVC2G126	134
74HCT4053-Q100	106	74LV132	151	74LVC14A-Q100	117	74LVC1G332	153	74LVC2G126-Q100	123
74HCT4060	141	74LV132-Q100	117	74LVC157A	159	74LVC1G332-Q100	126	74LVC2G14	134
74HCT4060-Q100	109	74LV138	158	74LVC157A-Q100	111	74LVC1G34	134	74LVC2G14-Q100	127
74HCT4066	160	74LV14	140	74LVC161	141	74LVC1G34-Q100	123	74LVC2G16	134
74HCT4066-Q100	106	74LV14A	140	74LVC162244A	133	74LVC1G38	126	74LVC2G17	134
74HCT4067	160	74LV164-Q100	118	74LVC162245A	137	74LVC1G38-Q100	150	74LVC2G17-Q100	127
74HCT4067-Q100	106	74LV165-Q100	118	74LVC162245A-Q100	120	74LVC1G384	160	74LVC2G240	134
74HCT4075	153	74LV165A-Q100	118	74LVC162373A	146	74LVC1G384-Q100	121	74LVC2G240-Q100	123
74HCT4075-Q100	114	74LV17A	11, 133	74LVC16240A	134	74LVC1G386	150	74LVC2G241	134
74HCT4094-Q100	118	74LV244	133	74LVC16240A-Q100	108	74LVC1G53	160	74LVC2G241-Q100	123
74HCT423	155	74LV244-Q100	108	74LVC16241A	134	74LVC1G53-Q100	121	74LVC2G3157	160
74HCT4316	160	74LV244A	11, 133	74LVC16244A	134	74LVC1G57	149	74LVC2G32	153
74HCT4351	160	74LV244AT	11, 133	74LVC16244A-Q100	108	74LVC1G57-Q100	140	74LVC2G32-Q100	126
74HCT4511	158	74LV245	137	74LVC16245A	137	74LVC1G58	140	74LVC2G34	134
74HCT4514	158	74LV245A	137	74LVC163	142	74LVC1G58-Q100	126	74LVC2G34-Q100	126
74HCT4520	141	74LV245AT	137	74LVC16373A	146	74LVC1G66	121	74LVC2G38	151
74HCT4520-Q100	109	74LV365	133	74LVC16373A-Q100	115	74LVC1G66-Q100	160	74LVC2G53	160
74HCT4538	155	74LV393	141	74LVC16374A	144	74LVC1G74	144	74LVC2G66	160
74HCT4538-Q100	116	74LV393-Q100	109	74LVC16374A-Q100	113	74LVC1G74-Q100	124	74LVC2G66-Q100	121
74HCT4851	106	74LV4020	141	74LVC1G00	151	74LVC1G79	144	74LVC2G74	144
74HCT4851-Q100	160	74LV4051	160	74LVC1G00-Q100	126	74LVC1G79-Q100	124	74LVC2G74-Q100	124
74HCT4852	160	74LV4052	160	74LVC1G02	152	74LVC1G80	144	74LVC2G86	150
74HCT4852-Q100	106	74LV4052-Q100	106	74LVC1G02-Q100	126	74LVC1G80-Q100	124	74LVC2G86-Q100	126

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74LVC2GU04	134	74LVCH1T45	154	74VHC126-Q100	108	BAS321	39	BAT754	42
74LVC2GU04-Q100	123	74LVCH1T45-Q100	128	74VHC14	135, 140	BAS321J	9, 39	BAT754A	42
74LVC2T45	154	74LVCH244A	135	74VHC244	135	BAS32L	38	BAT754C	42
74LVC2T45-Q100	128	74LVCH244A-Q100	108	74VHC245	138	BAS35	40	BAT754S	42
74LVC30	151	74LVCH245A	137	74VHC32	153	BAS40	42	BAT760	47
74LVC30A	151	74LVCH245A-Q100	120	74VHC32-Q100	115	BAS40-04	42	BAT85	42
74LVC32A	153	74LVCH2T45	154	74VHC541	135	BAS40-04W	43	BAT854AW	43
74LVC32245A	137	74LVCH2T45-Q100	128	74VHC541-Q100	108	BAS40-05	42	BAT854CW	43
74LVC32A-Q100	114	74LVCH8T245	154	74VHC595-Q100	119	BAS40-05W	43	BAT854SW	43
74LVC373A	146	74LVCH8T245-Q100	116	74VHCT02	152	BAS40-06	42	BAT854W	43
74LVC373A-Q100	115	74LVCU04A	135	74VHCT02-Q100	114	BAS40-06W	43	BAT86	42
74LVC374A	144	74LVCU04A-Q100	108	74VHCT08	148	BAS40-07	42	BAT960	47
74LVC374A-Q100	112	74LVCV2G66	160	74VHCT08-Q100	115	BAS40H	43	BAV102	39
74LVC377	144	74LVT02	152	74VHCT125	135	BAS40W	43	BAV103	39
74LVC3G04	134	74LVT04	135	74VHCT126	135	BAS416	40	BAV170	40
74LVC3G04-Q100	123	74LVT04-Q100	108	74VHCT126-Q100	108	BAS45A	40	BAV170M	40
74LVC3G06	134	74LVT08	148	74VHCT14	135, 140	BAS45AL	40	BAV170QA	40
74LVC3G07	134	74LVT125	135	74VHCT244	135	BAS516	38	BAV199	40
74LVC3G07-Q100	123	74LVT126	135	74VHCT245	138	BAS521	39	BAV199W	40
74LVC3G14	134, 140	74LVT14	135, 140	74VHCT32	153	BAS56	40	BAV23	39
74LVC3G16	134	74LVT162240A	135	74VHCT32-Q100	115	BAS70	42	BAV23A	39
74LVC3G17	134, 140	74LVT162244B	135	74VHCT541	135	BAS70-04	42	BAV23C	39
74LVC3G17-Q100	127	74LVT162245B	138	74VHCT541-Q100	108	BAS70-04W	43	BAV23S	39
74LVC3G34	134	74LVT162373	147	74VHCT595-Q100	119	BAS70-05	42	BAV70	38
74LVC3G34-Q100	123	74LVT162374	145	BAS21AVD	39	BAS70-05W	43	BAV70M	38
74LVC3GU04	134	74LVT16240A	135	BAL74	38	BAS70-06	42	BAV70QA	38
74LVC4066	160	74LVT16244B	135	BAL99	38	BAS70-06W	43	BAV70S	38
74LVC4066-Q100	106	74LVT16245B	138	BAS16VV	38	BAS70-07	42	BAV70SRA	38
74LVC4245	154	74LVT16373A	147	BAS16VY	38	BAS70H	43	BAV70W	38
74LVC4245A	154	74LVT16374A	145	BAS101	39	BAS70W	43	BAV74	38
74LVC4245A-Q100	116	74LVT16543A	138	BAS101S	39	BAS716	40	BAV756S	38
74LVC4T3144-Q100	11, 116	74LVT2241	135	BAS116	40	BAS85	42	BAV99	38
74LVC541A	134	74LVT2244	135	BAS116GW	40	BAS86	42	BAV99QA	38
74LVC541A-Q100	108	74LVT2245	138	BAS116H	40	BAT120A	48	BAV99S	38
74LVC573A	146	74LVT240	135	BAS116L	40	BAT120C	48	BAV99W	38
74LVC573A-Q100	113	74LVT241	135	BAS116QA	40	BAT120S	48	BAW101	39
74LVC574A	144	74LVT244A	135	BAS16	38	BAT160A	48	BAW101S	39
74LVC594A-Q100	119	74LVT244A-Q100	108	BAS16GW	38	BAT160C	48	BAW156	40
74LVC74A	144	74LVT244B	135	BAS16H	38	BAT160S	48	BAW56	38
74LVC74A-Q100	112	74LVT245	138	BAS16J	38	BAT165A	47	BAW56M	38
74LVC823A	144	74LVT245B	138	BAS16L	38	BAT17	43	BAW56QA	38
74LVC823A-Q100	113	74LVT573	147	BAS16LD	38	BAT46GW	42	BAW56S	38
74LVC827A	134	74LVT640	138	BAS16QA	38	BAT46WH	43	BAW56SRA	38
74LVC86	150	74LVTH125	135	BAS16W	38	BAT54	42	BAW56W	38
74LVC8T245	154	74LVTH16244B	135	BAS20	39	BAT54A	42	BC51-10PA	17
74LVC8T245-Q100	116	74LVTH16245B	138	BAS21	39	BAT54AW	43	BC51-10PAS	17
74LVC8T595	11, 154	74LVTH16374A	145	BAS21AW	39	BAT54C	42	BC51-16PA	17
74LVCH162244A	134	74LVTH2245	138	BAS21GW	39	BAT54CW	43	BC51PA	17
74LVCH162245A	137	74LVTH244A	135	BAS21H	39	BAT54GW	42	BC51PAS	17
74LVCH162373A	146	74LVTH244A-Q100	108	BAS21J	39	BAT54H	43	BC52-10PA	17
74LVCH162374A	144	74LVTH244B	135	BAS21L(D)	39	BAT54S	42	BC52-10PAS	17
74LVCH16244A	135	74LVTN16244B	135	BAS21PG	39	BAT54SW	43	BC52-16PA	17
74LVCH16244A-Q100	108	74LVTN16245B	138	BAS21SW	39	BAT54W	43	BC52PA	17
74LVCH16245A	137	74VHC02	152	BAS21VD	39	BAT720	47	BC52PAS	17
74LVCH16373A	146	74VHC02-Q100	114	BAS21W	39	BAT721	42	BC53-10PA	17
74LVCH16373A-Q100	115	74VHC08	148	BAS28	38	BAT721A	42	BC53-10PAS	17
74LVCH16374A	144	74VHC08-Q100	114	BAS29	40	BAT721C	42	BC53-16PA	17
74LVCH16374A-Q100	113	74VHC125	135	BAS31	40	BAT721S	42	BC53PA	17
74LVCH16541A	135	74VHC126	135	BAS316	38	BAT74	42	BC53PAS	17

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
BC54-10PA	17	BC846	14	BC857AQA	14	BCP55	17	BCX17	14
BC54-10PAS	17	BC846A	14	BC857AW	14	BCP55-10	17	BCX18	14
BC54-16PA	17	BC846AW	14	BC857B	14	BCP55-16	17	BCX19	14
BC54PA	17	BC846B	14	BC857BM	14	BCP56	17	BCX51	17
BC54PAS	17	BC846BMB	14	BC857BMB	14	BCP56-10	17	BCX51-10	17
BC55-10PA	17	BC846BMB	14	BC857BQA	14	BCP56-10H	8, 17	BCX51-16	17
BC55-10PAS	17	BC846BPN	15	BC857BS	15	BCP56-16	17	BCX52	17
BC55-16PA	17	BC846BS	15	BC857BV	15	BCP56-16H	8, 17	BCX52-10	17
BC55PA	17	BC846DS	15	BC857BW	14	BCP56H	8, 17	BCX52-16	17
BC55PAS	17	BC846S	15	BC857C	14	BCP68	17	BCX53	17
BC56-10PA	17	BC846W	14	BC857CM	14	BCP68-25	17	BCX53-10	17
BC56-10PAS	17	BC847	14	BC857CMB	14	BCP69	17	BCX53-16	17
BC56-16PA	17	BC847A	14	BC857CQA	14	BCP69-16	17	BCX54	17
BC569-16PAS	17	BC847AM	14	BC857CW	14	BCP69-25	17	BCX54-10	17
BC56PA	17	BC847AMB	14	BC857QAS	15	BCV26	19	BCX54-16	17
BC56PAS	17	BC847AQA	14	BC857RA	15	BCV27	19	BCX55	17
BC68-25PA	17	BC847AW	14	BC857W	14	BCV28	19	BCX55-10	17
BC68-25PAS	17	BC847BM	14	BC858B	14	BCV29	19	BCX55-16	17
BC68PA	17	BC847BMB	14	BC858W	14	BCV46	19	BCX56	17
BC68PAS	17	BC847BPN	15	BC859B	19	BCV47	19	BCX56-10	17
BC69-16PA	17	BC847BQA	14	BC859BW	19	BCV48	19	BCX56-16	17
BC69-25PA	17	BC847BS	15	BC859C	19	BCV49	19	BCX70G	14
BC69PA	17	BC847BV	15	BC859CW	19	BCV61	20	BCX70H	14
BC69PAS	17	BC847BVN	15	BC860B	19	BCV61A	20	BCX70J	14
BC807	14	BC847BW	14	BC860BW	19	BCV61B	20	BCX70K	14
BC807-16	14	BC847CM	14	BC860C	19	BCV61C	20	BCX71H	14
BC807-16W	14	BC847CMB	14	BC860CW	19	BCV62	20	BCX71J	14
BC807-25	14	BC847CQA	14	BC868	17	BCV62A	20	BCX71K	14
BC807-25QA	14	BC847CW	14	BC868-25	17	BCV62B	20	BF550	21
BC807-25W	14	BC847DS	15	BC869	17	BCV62C	20	BF570	21
BC807-40	14	BC847QAPN	15	BC869-16	17	BCV63	19	BF620	18
BC807-40QA	14	BC847QAS	15	BC869-25	17	BCV63	19	BF621	18
BC807-40W	14	BC847RA	15	BCM53DS	8, 20	BCV63B	19	BF622	18
BC807DS	15	BC847RAPN	15	BCM56DS	8, 20	BCV64B	19	BF623	18
BC807K-16	8, 15	BC847W	14	BCM61B	20	BCV65	21	BF720	18
BC807K-25	8, 15	BC848B	14	BCM62B	20	BCV71	14	BF722	18
BC807K-40	8, 15	BC848W	14	BCM846BS	20	BCV72	14	BF723	18
BC807RA	15	BC849B	19	BCM847BS	20	BCW29	14	BF820	18
BC807W	14	BC849BW	19	BCM847BV	20	BCW30	14	BF820W	18
BC816	14	BC849C	19	BCM847DS	20	BCW31	14	BF821	18
BC816W	14	BC849CW	19	BCM847QAS	8, 20	BCW32	14	BF822	18
BC817	14	BC850B	19	BCM856DS	20	BCW33	14	BF823	18
BC817-25QA	14	BC850BW	19	BCM857DS	20	BCW60B	14	BF824	21
BC817-40QA	14	BC850C	19	BCM857QAS	8, 20	BCW60C	14	BF824W	21
BC817DPN	15	BC850CW	19	BCP51	17	BCW60D	14	BF840	21
BC817DS	15	BC856	14	BCP51-10	17	BCW61B	14	BFS19	21
BC817K-16	15	BC856A	14	BCP51-16	17	BCW61C	14	BFS20	21
BC817K-16H	17	BC856AW	14	BCP52	17	BCW61D	14	BFS20W	21
BC817K-25	8, 15	BC856B	14	BCP52-10	17	BCW66F	14	BSH111BK	99
BC817K-25H	8, 17	BC856BM	14	BCP52-16	17	BCW66G	14	BSH205G2	83, 101
BC817K-40	8, 15	BC856BMB	14	BCP53	17	BCW66H	14	BSN20BK	99
BC817K-40H	8, 17	BC856BS	15	BCP53-10	17	BCW68F	14	BSP19	18
BC817RA	15	BC856BW	14	BCP53-10H	8, 17	BCW68G	14	BSP31	17
BC817RAPN	15	BC856S	15	BCP53-16	17	BCW68H	14	BSP32	17
BC817W	14	BC856W	14	BCP53-16H	8, 17	BCW69	14	BSP33	17
BC825	14	BC857	14	BCP53H	8, 17	BCW70	14	BSP41	17
BC825W	14	BC857A	14	BCP54	17	BCW71	14	BSP43	17
BC840	14	BC857AM	14	BCP54-10	17	BCW72	14	BSP50	19
BC840W	14	BC857AMB	14	BCP54-16	17	BCW89	14	BSP51	19

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
BSP52	19	BUK753R1-40E	75	BUK7K18-40E	75	BUK7Y7R2-60E	77	BUK9D23-40E	83
BSP60	19	BUK753R8-80E	79	BUK7K23-80E	79	BUK7Y7R6-40E	75	BUK9K12-60E	78
BSP61	19	BUK755R4-100E	80	BUK7K25-40E	75	BUK7Y7R8-80E	79	BUK9K13-60E	78
BSP62	19	BUK758R3-40E	75	BUK7K29-100E	81	BUK7Y8R7-60E	77	BUK9K134-100E	81
BSR14	16	BUK7607-30B	74	BUK7K32-100E	81	BUK7Y98-80E	79	BUK9K17-60E	78
BSR16	16	BUK7610-55AL	76	BUK7K35-60E	78	BUK7Y9R9-80E	79	BUK9K18-40E	75
BSR19A	18	BUK7613-100E	80	BUK7K45-100E	81	BUK9209-40B	75	BUK9K20-80E	79
BSR30	17	BUK7613-60E	76	BUK7K52-60E	78	BUK9212-55B	77	BUK9K22-80E	79
BSR31	17	BUK7613-75B	79	BUK7K5R1-30E	74	BUK9215-55A	77	BUK9K25-40E	75
BSR33	17	BUK761R6-40E	75	BUK7K5R6-30E	74	BUK92150-55A	77	BUK9K29-100E	81
BSR41	17	BUK761R7-40E	75	BUK7K6R2-40E	75	BUK9217-75B	79	BUK9K30-80E	79
BSR43	17	BUK7620-55A	76	BUK7K6R8-40E	75	BUK9219-55A	77	BUK9K32-100E	81
BSS138AKA	85	BUK7623-75A	79	BUK7K89-100E	81	BUK9222-55A	77	BUK9K35-60E	78
BSS138BK	85	BUK7624-55A	76	BUK7K8R7-40E	75	BUK9225-55A	77	BUK9K45-100E	81
BSS138BKS	85	BUK7628-55A	76	BUK7M10-40E	76	BUK9226-75A	79	BUK9K52-60E	78
BSS138BKW	85	BUK762R0-40E	75	BUK7M12-40E	76	BUK9230-100B	80	BUK9K5R1-30E	74
BSS138P	85	BUK762R4-60E	76	BUK7M12-60E	78	BUK9230-55A	77	BUK9K5R6-30E	74
BSS138PS	85	BUK762R6-40E	75	BUK7M15-60E	78	BUK9237-55A	77	BUK9K6R2-40E	75
BSS138PW	85	BUK762R6-60E	76	BUK7M17-80E	79	BUK9240-100A	80	BUK9K6R8-40E	75
BSS63	14, 18	BUK762R7-30B	74	BUK7M19-60E	78	BUK9245-55A	77	BUK9K89-100E	81
BSS84AK	85, 101	BUK762R9-40E	75	BUK7M21-40E	76	BUK9275-100A	80	BUK9K8R7-40E	75
BSS84AKM	85, 94, 101	BUK7631-100E	80	BUK7M22-80E	79	BUK9277-55A	77	BUK9M10-30E	74
BSS84AKMB	94, 101	BUK7635-55A	76	BUK7M27-80E	79	BUK953R5-60E	76	BUK9M11-40E	76
BSS84AKS	85, 103	BUK763R1-60E	76	BUK7M33-60E	78	BUK954R8-60E	76	BUK9M12-60E	78
BSS84AKV	85, 103	BUK763R4-30B	74	BUK7M42-60E	78	BUK9607-30B	74	BUK9M120-100E	81
BSS84AKW	85, 101	BUK763R8-80E	79	BUK7M45-40E	76	BUK9611-80E	79	BUK9M14-40E	76
BST39	18	BUK763R9-60E	76	BUK7M67-60E	78	BUK9614-60E	76	BUK9M15-60E	78
BST50	19	BUK764R0-40E	75	BUK7M6R3-40E	76	BUK9615-100E	80	BUK9M156-100E	81
BST51	19	BUK764R2-80E	79	BUK7M8R0-40E	76	BUK9616-75B	79	BUK9M17-30E	74
BST52	19	BUK764R4-60E	76	BUK7M9R9-60E	78	BUK96180-100A	80	BUK9M19-60E	78
BST60	19	BUK765R0-100E	80	BUK7Y07-30B	74	BUK961R6-40E	75	BUK9M23-80E	79
BST61	19	BUK765R3-40E	75	BUK7Y10-30B	74	BUK9620-55A	76	BUK9M24-40E	76
BST62	19	BUK7660-100A	80	BUK7Y113-100E	80	BUK9624-55A	76	BUK9M24-60E	78
BUK6D23-40E	83	BUK766R0-60E	76	BUK7Y12-100E	80	BUK9628-55A	76	BUK9M28-80E	79
BUK6D43-40P	83	BUK7675-100A	80	BUK7Y12-40E	75	BUK962R5-60E	76	BUK9M34-100E	81
BUK6D43-60E	83	BUK7675-55A	76	BUK7Y14-80E	79	BUK962R6-40E	75	BUK9M35-80E	79
BUK6Y12-30P	81	BUK768R1-100E	80	BUK7Y15-100E	80	BUK962R8-30B	74	BUK9M42-60E	78
BUK6Y15-40P	81	BUK768R1-40E	75	BUK7Y15-60E	77	BUK962R8-60E	76	BUK9M43-100E	81
BUK6Y20-30P	81	BUK768R3-60E	76	BUK7Y153-100E	80	BUK9635-55A	76	BUK9M52-40E	76
BUK6Y25-40P	81	BUK769R6-80E	79	BUK7Y19-100E	80	BUK9637-100E	80	BUK9M53-60E	78
BUK6Y32-60P	81	BUK78150-55A/CU	78	BUK7Y1R7-40H	10, 75	BUK963R1-40E	75	BUK9M5R2-30E	74
BUK6Y57-60P	81	BUK7880-55A/CU	78	BUK7Y20-30B	74	BUK963R3-60E	76	BUK9M6R6-30E	74
BUK7208-40B	75	BUK7D25-40E	83	BUK7Y21-40E	75	BUK964R1-40E	75	BUK9M7R2-40E	76
BUK7210-55B	77	BUK7E13-60E	77	BUK7Y22-100E	80	BUK964R2-60E	76	BUK9M85-60E	78
BUK7212-55B	77	BUK7E1R8-40E	75	BUK7Y25-60E	77	BUK964R2-80E	79	BUK9M9R1-40E	76
BUK7214-75B	79	BUK7E1R9-40E	75	BUK7Y25-80E	79	BUK964R7-80E	79	BUK9Y07-30B	74
BUK7215-55A	77	BUK7E2R3-40E	75	BUK7Y29-40E	75	BUK964R8-60E	76	BUK9Y107-80E	79
BUK72150-55A	77	BUK7E2R6-60E	77	BUK7Y2R0-40H	10, 75	BUK965R4-40E	75	BUK9Y11-30B	74
BUK7219-55A	77	BUK7E3R1-40E	75	BUK7Y2R5-40H	10, 75	BUK965R8-100E	80	BUK9Y11-80E	79
BUK7222-55A	77	BUK7E3R5-60E	77	BUK7Y38-100E	80	BUK9660-100A	80	BUK9Y113-100E	80
BUK7225-55A	77	BUK7E4R6-60E	77	BUK7Y3R0-40H	10, 75	BUK966R5-60E	76	BUK9Y12-100E	80
BUK7226-75A	79	BUK7E5R2-100E	80	BUK7Y3R5-40E	75	BUK9675-100A	80	BUK9Y12-40E	75
BUK7227-100B	80	BUK7E8R3-40E	75	BUK7Y41-80E	79	BUK9675-55A	76	BUK9Y14-80E	79
BUK7230-55A	77	BUK7J1R4-40H	10, 75	BUK7Y43-60E	77	BUK969R0-60E	76	BUK9Y15-100E	80
BUK7237-55A	77	BUK7K12-60E	78	BUK7Y4R4-40E	75	BUK969R3-100E	80	BUK9Y15-60E	77
BUK7240-100A	80	BUK7K13-60E	78	BUK7Y4R8-60E	77	BUK98150-55A/CU	78	BUK9Y153-100E	80
BUK7275-100A	80	BUK7K134-100E	81	BUK7Y59-60E	77	BUK98180-100A/CU	81	BUK9Y19-100E	80
BUK7277-55A	77	BUK7K15-80E	79	BUK7Y65-100E	80	BUK9832-55A/CU	78	BUK9Y21-40E	75
BUK751R8-40E	75	BUK7K17-60E	78	BUK7Y6R0-60E	77	BUK9875-100A/CU	81	BUK9Y22-100E	80
BUK752R3-40E	75	BUK7K17-80E	79	BUK7Y72-80E	79	BUK9880-55A/CU	78	BUK9Y22-30B	74

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
BUK9Y2S-60E	77	ES2DVR	9, 40	HEF4081B	148	NCR401U	18	PBHV8560Z	28
BUK9Y2S-80E	79	ES3DP	9, 40	HEF4081B-Q100	115	NCR402T	18	PBHV9040T	28
BUK9Y29-40E	75	HEF4000	161	HEF4082B	148	NCR402U	18	PBHV9040X	28
BUK9Y38-100E	80	HEF4001B	152	HEF4082B-Q100	115	NCR405U	18	PBHV9040Z	28
BUK9Y3R0-40E	75	HEF4001B-Q100	115	HEF4093B	140, 151	NMB2227A	16	PBHV9050T	28
BUK9Y3R5-40E	75	HEF4002B	152	HEF4094B-Q100	119	NPIC6C4894-Q100	119	PBHV9050Z	28
BUK9Y41-80E	79	HEF4007UB	149	HEF4104B	154	NPIC6C595-Q100	119	PBHV9115T	28
BUK9Y43-60E	77	HEF40098B	135	HEF4104B-Q100	116	NPIC6C596-Q100	119	PBHV9115TLH	28
BUK9Y4R4-40E	75	HEF40106B	140	HEF4518B	142	NPIC6C596A-Q100	119	PBHV9115X	28
BUK9Y4R8-60E	77	HEF40106B-Q100	117	HEF4520B	142	NUP1301	53	PBHV9115Z	28
BUK9Y59-60E	77	HEF4011B	151	HEF4520B-Q100	109	NUP1301QA	53	PBHV9215Z	28
BUK9Y65-100E	80	HEF4011B-Q100	115	HEF4521B	142	NUP1301U	53	PBHV9414Z	28
BUK9Y6R0-60E	77	HEF4013B	145	HEF4528B	155	NX1029X	102	PBHV9515QA	28
BUK9Y72-80E	79	HEF4013B-Q100	113	HEF4528B-Q100	11, 116	NX138AK	99	pbhv9540x	8, 28
BUK9Y7R2-60E	77	HEF4014B-Q100	119	HEF4538B	155	NX138AKS	103	PBHV9540Z	28
BUK9Y7R6-40E	75	HEF4016B	160	HEF4538B-Q100	116	NX138AKW	99	PBHV9560Z	28
BUK9Y8R5-80E	79	HEF40175B	145	HEF4541B	142	NX138BK	99	PBLS1501Y	27
BUK9Y8R7-60E	77	HEF4017B	142	HEF4541B-Q100	109	NX138BKS	103	PBLS1502Y	27
BZA408B	59	HEF4017B-Q100	109	HEF4543B	158	NX138BKW	99	PBLS1503Y	27
BZA420A	59	HEF4020B	142	HEF4555B	158	NX2301P	83, 101	PBLS1504Y	27
BZA456A	59	HEF4020B-Q100	109	HEF4555B-Q100	110	NX3008CBKS	102	PBLS2001D	27
BZA856A	59	HEF4021B-Q100	119	HEF4794B-Q100	119	NX3008CBKV	102	PBLS2002D	27
BZB100A	36	HEF40244B	135	HEF4894B-Q100	119	NX3008NBK	85, 99	PBLS2003D	27
BZB784 series	36	HEF4024B	142	IP3319CX6	64, 168	NX3008NBKS	85, 103	PBLS2004D	27
BZB84 series	36	HEF4027B	145	IP4220CZ6	54, 63	NX3008NBKV	85, 103	PBLS2021D	27
BZB984 series	36	HEF4027B-Q100	113	IP4251CZ16-8-TTL	65	NX3008NBKW	85, 99	PBLS2022D	27
BZT52 series	36	HEF4028B	158	IP4252CZ16-8-TTL	65	NX3008PBK	85, 101	PBLS2023D	27
BZT52H series	36	HEF4030	150	IP4252CZ8-4 -TTL	65	NX3008PBKS	85, 103	PBLS2024D	27
BZV49 series	36	HEF4030B-Q100	115	IP4254CZ16-8-TTL	65	NX3008PBKV	85, 103	PBLS4001D	27
BZV55 series	36	HEF40373B	147	IP4254CZ8-4-TTL	65	NX3008PBKW	85, 101	PBLS4001Y	27
BZV85 series	36	HEF4040B	142	IP4264CZ8-20-TTL	66	NX3020NAK	99	PBLS4002D	27
BZV90 series	36	HEF4040B-Q100	109	IP4283CZ10-TBR	54, 62	NX3020NAKS	103	PBLS4002Y	27
BZX100A	36	HEF4043B	147	IP4292CZ10-TBR	62, 66	NX3020NAKV	103	PBLS4003D	27
BZX384 series	36	HEF4043B-Q100	115	IP4294CZ10-TBR	55, 62, 66	NX3020NAKW	99	PBLS4003Y	27
BZX585 series	36	HEF4046B	156	IP4786CZ32	65	NX7002AK	99	PBLS4004D	27
BZX79 series	36	HEF4047B	155	IP4788CZ32	65	NX7002AKS	103	PBLS4004Y	27
BZX84 series	36	HEF4049B	135	IP4856CX25/C	65	NX7002AKW	99	PBLS4005D	27
BZX84J series	36	HEF4049B-Q100	108	MMBT2222A	16	NX7002BK	99	PBLS4005Y	27
BZX884 series	36	HEF4050B	135	MMBT3904	16	NX7002BKM	94, 99	PBLS6001D	27
CBT16210	157	HEF4050B-Q100	108	MMBT3906	16	NX7002BKMB	94, 99	PBLS6002D	27
CBT3125	157	HEF4051B	160	MMBZ10VAL	67	NX7002BKS	103	PBLS6003D	27
CBT3244A	157	HEF4051B-Q100	106	MMBZ12VAL	67	NX7002BKW	99	PBLS6004D	27
CBT3245A	157	HEF4052B	160	MMBZ12VDL	67	NX7002BKXB	95, 103	PBLS6005D	27
CBT3245A-Q100	110	HEF4052B-Q100	106	MMBZ15VAL	67	NXP3875G	14	PBLS6021D	27
CBT3251	157	HEF4053B	160	MMBZ15VDL	67	NXP3875Y	14	PBLS6022D	27
CBT3253	157	HEF4053B-Q100	106	MMBZ16VAL	10, 67	NZH series	36	PBLS6023D	27
CBT3253A	157	HEF4060B	142	MMBZ16VTAL	10, 67	NZX series	36, 37	PBLS6024D	27
CBT3257A	157	HEF4060B-Q100	109	MMBZ18VAL	67	PBHV2160Z	28	PBRN113ET	28
CBT3306	157	HEF4066B	160	MMBZ18VCL	67	PBHV3160Z	28	PBRN113ZT	28
CBT3306-Q100	121	HEF4066B-Q100	106	MMBZ20VAL	67	PBHV8115T	28	PBRN123ET	28
CBT3861	157	HEF4067B	160	MMBZ20VCL	67	PBHV8115TLH	28	PBRN123YT	28
CBTD16210	157	HEF4067B-Q100	106	MMBZ27VAL	67	PBHV8115X	28	PBRP113ET	28
CBTD3306	157	HEF4069UB	135	MMBZ27VCL	67	PBHV8115Z	28	PBRP113ZT	28
CBTD3384	157	HEF4069UB-Q100	108	MMBZ33VAL	67	PBHV8118T	28	PBRP123ET	28
CBTD3861	157	HEF4070	150	MMBZ33VCL	67	PBHV8140Z	28	PBRP123YT	28
ES1DR	9, 40	HEF4070B-Q100	115	MMBZ5V6AL	67	PBHV8215Z	28	PBSM5240PF	29
ES1DVR	9, 40	HEF4071	153	MMBZ6V2AL	67	PBHV8515QA	28	PBSM5240PFH	29
ES1GR	9, 40	HEF4073B	148	MMBZ6V8AL	67	PBHV8540T	28	PBSS2515M	23
ES2DP	9, 40	HEF4075	213	MMBZ9V1AL	67	PBHV8540X	28	PBSS2515MB	23
ES2DR	9, 40	HEF4077	150	NCR401T	18	PBHV8540Z	28	PBSS2515VPN	26

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PBSS2515VS	26	PBSS4032SP ³⁾	26	PBSS4540X	22	PBSS8110X	22	PDTA123YM	30
PBSS2540M	23	PBSS4032SPN ³⁾	26	PBSS4540Z	22	PBSS8110Y	23	PDTA123YMB	30
PBSS2540MB	23	PBSS4041NT	23	PBSS4560PA	22	PBSS8110Z	22	PDTA123YT	30
PBSS301ND	22	PBSS4041NX	22	PBSS4580PA	22	PBSS8510PA	22	PDTA123YU	30
PBSS301NX	22	PBSS4041NZ	22	PBSS4612PA	22	PBSS9110D	24	PDTA124EM	30
PBSS301NZ	22	PBSS4041PT	25	PBSS4620PA	22	PBSS9110T	25	PDTA124EMB	30
PBSS301PD	24	PBSS4041PX	24	PBSS4630PA	22	PBSS9110X	24	PDTA124EQA	30
PBSS301PX	24	PBSS4041PZ	24	PBSS5112PAP	26	PBSS9110Y	25	PDTA124ET	30
PBSS301PZ	24	PBSS4041SN	26	PBSS5120T	25	PBSS9110Z	24	PDTA124EU	30
PBSS302ND	22	PBSS4041SP	26	PBSS5130PAP	26	PBSS9410PA	24	PDTA124TM	30
PBSS302NX	22	PBSS4041SPN	26	PBSS5130QA	25	PCMF1HDMI2S	9, 64	PDTA124TMB	30
PBSS302NZ	22	PBSS4112PAN	26	PBSS5130T	25	PCMF1USB3S	55, 64, 66, 168	PDTA124TT	30
PBSS302PD	24	PBSS4112PANP	26	PBSS5140T	25	PCMF2HDMI2S	9, 64	PDTA124TU	30
PBSS302PX	24	PBSS4120T	23	PBSS5140U	25	PCMF2USB3S	55, 64, 168	PDTA124XM	30
PBSS302PZ	24	PBSS4130PAN	26	PBSS5160DS	26	PCMF3HDMI2S	9, 64	PDTA124XMB	30
PBSS303ND	22	PBSS4130PANP	26	PBSS5160PAP	26	PCMF3USB3S	55, 64, 168	PDTA124XT	30
PBSS303NX	22	PBSS4130QA	23	PBSS5160PAPS	26	PDI1284P11	156	PDTA124XU	30
PBSS303NZ	22	PBSS4130T	23	PBSS5160QA	25	PDTA113EM	30	PDTA143EM	30
PBSS303PD	24	PBSS4140DPN	26	PBSS5160T	25	PDTA113EMB	30	PDTA143EMB	30
PBSS303PX	24	PBSS4140T	23	PBSS5160U	25	PDTA113ET	30	PDTA143EQA	30
PBSS303PZ	24	PBSS4160DPN	26	PBSS5220PAPS	26	PDTA113EU	30	PDTA143ET	30
PBSS304ND	22	PBSS4160DS	26	PBSS5220T	25	PDTA113ZM	30	PDTA143EU	30
PBSS304NX	22	PBSS4160PAN	26	PBSS5230PAP	26	PDTA113ZMB	30	PDTA143TM	30
PBSS304NZ	22	PBSS4160PANP	26	PBSS5230QA	25	PDTA113ZT	30	PDTA143TMB	30
PBSS304PD	24	PBSS4160PANPS	26	PBSS5230T	25	PDTA113ZU	30	PDTA143TT	30
PBSS304PX	24	PBSS4160PANS	26	PBSS5240T	25	PDTA114EM	30	PDTA143TU	30
PBSS304PZ	24	PBSS4160QA	23	PBSS5240X	24	PDTA114EMB	30	PDTA143XM	30
PBSS305ND	22	PBSS4160T	23	PBSS5240Y	25	PDTA114EQA	30	PDTA143XMB	30
PBSS305NX	22	PBSS4160X	8, 22	PBSS5250T	25	PDTA114ET	30	PDTA143XQA	30
PBSS305NZ	22	PBSS4220PANS	26	PBSS5250TH	8, 25	PDTA114EU	30	PDTA143XT	30
PBSS305PD	24	PBSS4230PAN	26	PBSS5250X	24	PDTA114TM	30	PDTA143XU	30
PBSS305PX	24	PBSS4230PANP	26	PBSS5260PAP	26	PDTA114TMB	30	PDTA143ZM	30
PBSS305PZ	24	PBSS4230QA	23	PBSS5260PAPS	26	PDTA114TT	30	PDTA143ZMB	30
PBSS306NX	22	PBSS4230T	23	PBSS5260QA	25	PDTA114TU	30	PDTA143ZQA	30
PBSS306NZ	22	PBSS4240DPN	26	PBSS5320D	24	PDTA114YM	30	PDTA143ZT	30
PBSS306PX	24	PBSS4240T	23	PBSS5320T	25	PDTA114YMB	30	PDTA143ZU	30
PBSS306PZ	24	PBSS4240X	22	PBSS5320X	24	PDTA114YQA	30	PDTA144EM	30
PBSS3515M	25	PBSS4240Y	23	PBSS5330PA	24	PDTA114YT	30	PDTA144EMB	30
PBSS3515MB	25	PBSS4250X	22	PBSS5330PAS	24	PDTA114YU	30	PDTA144EQA	30
PBSS3515VS	26	PBSS4260PAN	26	PBSS5330X	24	PDTA115EM	30	PDTA144ET	30
PBSS3540M	25	PBSS4260PANP	26	PBSS5350D	24	PDTA115EMB	30	PDTA144EU	30
PBSS3540MB	25	PBSS4260PANPS	26	PBSS5350SS	26	PDTA115ET	30	PDTA144TM	30
PBSS4021NT	23	PBSS4260PANS	26	PBSS5350T	25	PDTA115EU	30	PDTA144TMB	30
PBSS4021NX	22	PBSS4260QA	23	PBSS5350TH	8, 25	PDTA115TM	30	PDTA144TT	30
PBSS4021NZ	22	PBSS4320T	23	PBSS5350X	24	PDTA115TMB	30	PDTA144TU	30
PBSS4021PT	25	PBSS4320X	22	PBSS5350Z	24	PDTA115TT	30	PDTA144VM	30
PBSS4021PX	24	PBSS4330PA	22	PBSS5360PAS	24	PDTA115TU	30	PDTA144VMB	30
PBSS4021PZ	24	PBSS4330PAS	22	PBSS5360X	8, 24	PDTA123EM	30	PDTA144VT	30
PBSS4021SN	26	PBSS4330X	22	PBSS5360Z	24	PDTA123EMB	30	PDTA144VU	30
PBSS4021SP	26	PBSS4350D	22	PBSS5480X	24	PDTA123ET	30	PDTA144WM	30
PBSS4021SPN	26	PBSS4350SPN	26	PBSS5520X	24	PDTA123EU	30	PDTA144WMB	30
PBSS4032ND ³⁾	22	PBSS4350SS	26	PBSS5540X	24	PDTA123JM	30	PDTA144WT	30
PBSS4032NT ³⁾	23	PBSS4350T	23	PBSS5540Z	24	PDTA123JMB	30	PDTA144WU	30
PBSS4032NX ³⁾	22	PBSS4350X	22	PBSS5560PA	24	PDTA123JT	30	PDTB113ET	31
PBSS4032NZ ³⁾	22	PBSS4350Z	22	PBSS5580PA	24	PDTA123JU	30	PDTB113EU	31
PBSS4032PD ³⁾	24	PBSS4360PAS	22	PBSS5612PA	24	PDTA123TM	30	PDTB113ZQA	31
PBSS4032PT	25	PBSS4360X	8, 22	PBSS5620PA	24	PDTA123TMB	30	PDTB113ZT	31
PBSS4032PX ³⁾	24	PBSS4360Z	22	PBSS5630PA	24	PDTA123TT	30	PDTB113ZU	31
PBSS4032PZ ³⁾	24	PBSS4480X	22	PBSS8110D	22	PDTA123TU	30	PDTB114EQA	31
PBSS4032SN ³⁾	26	PBSS4520X	22	PBSS8110T	23	PDTA123XQA	30	PDTB114ET	31

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PDTB114EU	31	PDTC124TT	30	PDTD143EU	31	PEMZ1	15	PESD2IVN27-U	61
PDTB123EQA	31	PDTC124TU	30	PDTD143XQA	31	PEMZ7	15	PESD2NFC-L	63
PDTB123ET	31	PDTC124XM	30	PDTD143XT	31	PESD12VL1BA	57	PESD2NFC-SF	63
PDTB123EU	31	PDTC124XMB	30	PDTD143XU	31	PESD12VL2BT	58	PESD2USB3S	55, 64, 168
PDTB123TT	31	PDTC124XT	30	PDZ-B series	36	PESD12VS1UA	56, 62	PESD36VS1UJ	56
PDTB123YQA	31	PDTC124XU	30	PDZ-GW series	36	PESD12VS1UB	56	PESD36VS1UL	56
PDTB123YT	31	PDTC143EM	30	PEMB1	31	PESD12VS1UJ	56, 62	PESD36VS2UT	58
PDTB123YU	31	PDTC143EMB	30	PEMB10	31	PESD12VS1UL	56	PESD3USB3S	55, 64, 168
PDTB143EQA	31	PDTC143EQA	30	PEMB11	31	PESD12VS1ULD	56	PESD3V3C1BSF	52, 55, 66
PDTB143ET	31	PDTC143ET	30	PEMB13	31	PESD12VS2UQ	58	PESD3V3L1BA	57
PDTB143EU	31	PDTC143EU	30	PEMB14	31	PESD12VS2UT	58	PESD3V3L1UB	56
PDTB143XQA	31	PDTC143TM	30	PEMB15	31	PESD12VU1UT	52	PESD3V3L1UL	56
PDTB143XT	31	PDTC143TMB	30	PEMB16	31	PESD12VV1BL	57, 60	PESD3V3L2BT	58
PDTB143XU	31	PDTC143TT	30	PEMB17	31	PESD15VL1BA	57	PESD3V3L2UM	58
PDTC114EM	30	PDTC143TU	30	PEMB18	31	PESD15VL2BT	58	PESD3V3L4UF	59
PDTC114EMB	30	PDTC143XM	30	PEMB19	31	PESD15VS1UB	56	PESD3V3L4UG	59
PDTC114EQA	30	PDTC143XMB	30	PEMB2	31	PESD15VS1UL	56	PESD3V3L4UW	59
PDTC114ET	30	PDTC143XQA	30	PEMB20	31	PESD15VS1ULD	56	PESD3V3L5UF	59
PDTC114EU	30	PDTC143XT	30	PEMB24	31	PESD15VS2UAT	58	PESD3V3L5UK	59
PDTC114TM	30	PDTC143XU	30	PEMB3	31	PESD15VS2UQ	58	PESD3V3L5UV	59
PDTC114TMB	30	PDTC143ZM	30	PEMB30	31	PESD15VS2UT	58	PESD3V3L5UY	59
PDTC114TT	30	PDTC143ZMB	30	PEMB4	31	PESD15VU1UT	52	PESD3V3S1UB	56
PDTC114TU	30	PDTC143ZQA	30	PEMB9	31	PESD16VX1UL	52	PESD3V3S1UL	56
PDTC114YM	30	PDTC143ZT	30	PEMD10	31	PESD18VF1BL	63	PESD3V3S2UAT	58
PDTC114YMB	30	PDTC143ZU	30	PEMD12	31	PESD18VF1BSF	52, 63	PESD3V3S2UQ	58
PDTC114YQA	30	PDTC144EM	30	PEMD13	31	PESD1CAN	61	PESD3V3S2UT	58
PDTC114YT	30	PDTC144EMB	30	PEMD14	31	PESD1CAN-U	61	PESD3V3S4UD	59
PDTC114YU	30	PDTC144EQA	30	PEMD15	31	PESD1FLEX	61	PESD3V3S4UF	59
PDTC115EM	30	PDTC144ET	30	PEMD16	31	PESD1IVN-U	61	PESD3V3S5UD	59
PDTC115EMB	30	PDTC144EU	30	PEMD17	31	PESD1IVN24-A	61	PESD3V3T1BL	9, 57, 60
PDTC115ET	30	PDTC144TM	30	PEMD18	31	PESD1IVN27-A	61	PESD3V3U1BCSF	57
PDTC115EU	30	PDTC144TMB	30	PEMD19	31	PESD1IVN27-U	61	PESD3V3U1UA	56
PDTC115TM	30	PDTC144TT	30	PEMD2	31	PESD1LIN	61	PESD3V3U1UB	56
PDTC115TMB	30	PDTC144TU	30	PEMD20	31	PESD1LVDS	61	PESD3V3U1UL	56
PDTC115TT	30	PDTC144VM	30	PEMD24	31	PESD1NFC-L	63	PESD3V3U1UT	52
PDTC115TU	30	PDTC144VMB	30	PEMD3	31	PESD1NFC-SF	63	PESD3V3V1BCSF	57
PDTC123EM	30	PDTC144VT	30	PEMD30	31	PESD1USB3S	55, 64, 66, 168	PESD3V3V4UW	59
PDTC123EMB	30	PDTC144VU	30	PEMD4	31	PESD24VF1BL	52, 63	PESD3V3W1BSF	59
PDTC123ET	30	PDTC144WM	30	PEMD48	31	PESD24VF1BSF	52, 63	PESD3V3X1BCSF	52
PDTC123EU	30	PDTC144WMB	30	PEMD6	31	PESD24VL1BA	57	PESD3V3X1BL	52
PDTC123JM	30	PDTC144WT	30	PEMD9	31	PESD24VL2BT	58	PESD3V3Z1BSF	52, 55, 66
PDTC123JMB	30	PDTC144WU	30	PEMH1	31	PESD24VS1UA	56	PESD4V0W1BSF	52, 55, 66
PDTC123JT	30	PDTD113EQA	31	PEMH10	31	PESD24VS1UB	56	PESD5V0C1BSF	52, 55, 66
PDTC123JU	30	PDTD113ET	31	PEMH11	31	PESD24VS1UL	56	PESD5V0C1USF	52, 55, 66
PDTC123TM	30	PDTD113EU	31	PEMH13	31	PESD24VS1ULD	56	PESD5V0F1BL	52
PDTC123TMB	30	PDTD113ZQA	31	PEMH14	31	PESD24VS2UAT	58	PESD5V0F1BLD	52
PDTC123TT	30	PDTD113ZT	31	PEMH15	31	PESD24VS2UQ	58	PESD5V0F1BRLD	52
PDTC123TU	30	PDTD113ZU	31	PEMH16	31	PESD24VS2UT	58	PESD5V0F1BRSF	52
PDTC123XQA	30	PDTD114EQA	31	PEMH17	31	PESD24VS4UD	59	PESD5V0F1BSF	52
PDTC123YM	30	PDTD114ET	31	PEMH18	31	PESD24VS5UD	59	PESD5V0F1BSH	52
PDTC123YMB	30	PDTD114EU	31	PEMH19	31	PESD24VU1UT	52	PESD5V0F1USF	52
PDTC123YT	30	PDTD123EQA	31	PEMH2	31	PESD2CAN	61	PESD5V0H1BSF	52, 55, 66
PDTC123YU	30	PDTD123ET	31	PEMH20	31	PESD2ETH-AD	9, 61	PESD5V0L1BA	57
PDTC124EM	30	PDTD123EU	31	PEMH24	31	PESD2ETH-AX	61	PESD5V0L1BSF	57
PDTC124EMB	30	PDTD123TT	31	PEMH30	31	PESD2ETH-D	9, 61	PESD5V0L1UA	56
PDTC124EQA	30	PDTD123YQA	31	PEMH4	31	PESD2ETH-X	61	PESD5V0L1UB	56
PDTC124ET	30	PDTD123YT	31	PEMH7	31	PESD2IVN-U	61	PESD5V0L1UL	56
PDTC124EU	30	PDTD123YU	31	PEMH9	31	PESD2IVN24-T	61	PESD5V0L1ULD	56
PDTC124TM	30	PDTD143EQA	31	PEMT1	15	PESD2IVN24-U	61	PESD5V0L1USF	56
PDTC124TMB	30	PDTD143ET	31	PEMX1	15	PESD2IVN27-T	61	PESD5V0L2BT	58

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PESD5V0L2UM	58	PESD5V0X1UAB	52	PHPT61003PY	29	PMCM6501UPE	10, 97	PMEG1030EJ	47
PESD5V0L2UMB	58	PESD5V0X1UALD	52	PHPT61006NY	29	PMCM6501VNE	97	PMEG2002AESF	44
PESD5V0L2UU	58	PESD5V0X1UB	52	PHPT61006PY	29	PMCM6501VPE	97	PMEG2002AESFB	44
PESD5V0L4UF	59	PESD5V0X1ULD	52	PHPT61010NY	29	PMCPB5530X	96, 102	PMEG2002ESF	44
PESD5V0L4UG	59	PESD5V0X2UAM	53	PHPT61010PY	29	PMCXB1000UE	95, 102	PMEG2005AEA	47
PESD5V0L4UW	59	PESD5V0X2UAMB	53	PIMC31	31	PMCXB900UE	95, 102	PMEG2005AEL	45
PESD5V0L5UF	59	PESD5V0X2UM	53	PIMN31	31	PMCXB900UEL	95, 102	PMEG2005AELD	45
PESD5V0L5UV	59	PESD5V0X2UMB	53	PIMT1	15	PMD2001D	21	PMEG2005AESF	44
PESD5V0L5UY	59	PESD5V2S2UT	58	PIMZ2	15	PMD3001D	21	PMEG2005AEV	47
PESD5V0R1BSF	52, 55, 66	PESD5VOL5UK	59	PLVA600A series	36	PMDPB30XN	96, 103	PMEG2005BELD	45
PESD5V0S1BA	57	PESD5VOS2UAT	58	PMBD353	43	PMDPB55XP	96, 103	PMEG2005CT	48
PESD5V0S1BB	57	PESD5Z12	56	PMBD354	43	PMDPB56XNEA	83, 85, 96, 103	PMEG2005EB	47
PESD5V0S1BL	57	PESD5Z2.5	56	PMBS3904	16			PMEG2005EGW	47
PESD5V0S1BLD	57, 60	PESD5Z3.3	56	PMBS3906	16	PMDPB58UPE	96, 103	PMEG2005EH	47
PESD5V0S1BSF	57	PESD5Z5.0	56	PMBT2222	16	PMDPB70XP	96, 103	PMEG2005EJ	47
PESD5V0S1UA	56, 62	PESD5Z6.0	56	PMBT2222A	16	PMDPB70XPE	96, 103	PMEG2005EL	45
PESD5V0S1UB	56	PESD5Z7.0	56	PMBT2222AYS	16	PMDPB80XP	96, 103	PMEG2005ELD	45
PESD5V0S1UJ	56, 62	PESD6V0L2UU	58	PMBT2369	16	PMDPB85UPE	96, 103	PMEG2005EPK	45
PESD5V0S1UL	56	PESD6V5C1USF	9, 52, 66	PMBT2907	16	PMDPB95XNE2	96, 103	PMEG2005ESF	44
PESD5V0S1ULD	56	PESD7V0C1BSF	9, 52, 66	PMBT2907A	16	PMDT290UCE	102	PMEG2005ET	47
PESD5V0S1USF	56	PESD7V0H1BSF	9, 52, 66	PMBT2907AYS	16	PMDT290UNE	85, 103	PMEG2010AEB	47
PESD5V0S2BQA	58, 60, 62	PESD7V0R1BSF	9, 52, 66	PMBT3904	16	PMDT670UPE	85, 103	PMEG2010AEH	47
PESD5V0S2BT	58	PHB20NQ20T	91	PMBT3904M	16	PMDXB1200UPE	95, 103	PMEG2010AEJ	47
PESD5V0S2UQ	58	PHB33NQ20T	91	PMBT3904MB	16	PMDXB550UNE	95, 103	PMEG2010AET	47
PESD5V0S4UD	59	PHB45NQ15T	91	PMBT3904VS	16	PMDXB600UNE	95, 103	PMEG2010BEA	47
PESD5V0S4UF	59	PHD9NQ20T	91	PMBT3904YS	16	PMDXB600UNEL	95	PMEG2010BELD	45
PESD5V0S5UD	59	PHDMI2AB4	9, 55, 62	PMBT3906	16	PMDXB950UPE	95, 103	PMEG2010BER	46
PESD5V0T1BLD	9	PHDMI2F4	55, 62	PMBT3906M	16	PMDXB950UPEL	95	PMEG2010BEV	47
PESD5V0U1BA	57	PHDMI2FR4	9, 55, 62	PMBT3906MB	16	PMEG030V030EPD	46	PMEG2010EA	47
PESD5V0U1BB	57	PHP18NQ11T	90	PMBT3906VS	16	PMEG030V050EPD	46	PMEG2010EH	47
PESD5V0U1BL	57	PHP20NQ20T	90	PMBT3906YS	16	PMEG040V030EPD	46	PMEG2010EJ	47
PESD5V0U1BLD	57	PHP23NQ11T	90	PMBT3946VPN	16	PMEG040V050EPD	46	PMEG2010EPA	45
PESD5V0U1UA	56	PHP27NQ11T	90	PMBT3946YPN	16	PMEG045T030EPD	9, 46	PMEG2010EPAS	45
PESD5V0U1UB	56	PHP28NQ15T	90	PMBT4401	16	PMEG045T050EPD	9, 46	PMEG2010EPK	45
PESD5V0U1UL	56	PHP30NQ15T	90	PMBT4401YS	16	PMEG045T100EPD	9, 46	PMEG2010ER	46
PESD5V0U1UT	52	PHP33NQ20T	90	PMBT4403	16	PMEG045T150EIPD	9, 46	PMEG2010ET	47
PESD5V0U2BM	58	PHP9NQ20T	90	PMBT4403YS	16	PMEG045T150EPD	46	PMEG2010EV	47
PESD5V0U2BMB	58	PHPT60406NY	29	PMBT5550	18	PMEG045V050EPD	46	PMEG2015EA	47
PESD5V0U2BT	58	PHPT60406PY	29	PMBT5551	18	PMEG045V100EPD	46	PMEG2015EH	47
PESD5V0U4BF	59	PHPT60410NY	29	PMBT6428	14	PMEG045V150EPD	46	PMEG2015EJ	47
PESD5V0U4BW	59	PHPT60410PY	29	PMBT6429	14	PMEG050T150EPD	46	PMEG2015EPK	45
PESD5V0U5BF	59	PHPT60415NY	29	PMBTA06	14	PMEG050V030EPD	46	PMEG2015EV	47
PESD5V0U5BV	59	PHPT60415PY	29	PMBTA13	19	PMEG050V150EPD	46	PMEG2020AEA	47
PESD5V0V1BA	57	PHPT60603NY	29	PMBTA14	19	PMEG060V030EPD	46	PMEG2020CPA	48
PESD5V0V1BB	57	PHPT60603PY	29	PMBTA42	19	PMEG060V050EPD	46	PMEG2020CPAS	48
PESD5V0V1BCSF	57	PHPT60606NY	29	PMBTA42DS	19	PMEG060V100EPD	46	PMEG2020EH	47
PESD5V0V1BDSF	57	PHPT60606PY	29	PMBTA44	18	PMEG10010ELR	46	PMEG2020EJ	47
PESD5V0V1BL	57, 60	PHPT60610NY	29	PMBTA45	28	PMEG10020AELP	46	PMEG2020EPA	45
PESD5V0V1BLD	57, 60	PHPT60610PY	29	PMBTA56	14	PMEG10020AELR	46	PMEG2020EPAS	45
PESD5V0V1BSF	57	PHPT61002NYC	29	PMBTA64	19	PMEG10020ELR	46	PMEG2020EPK	45
PESD5V0V2BM	58, 60	PHPT61002NYCLH	8, 29	PMBTA92	18	PMEG10030ELP	46	PMEG3002AEB	47
PESD5V0V2BMB	58, 60, 62	PHPT61002PYC	29	PMCM85XP	96	PMEG100V060ELPD	46	PMEG3002AEL	45
PESD5V0V4UW	59	PHPT61002PYCLH	8, 29	PMCM4401UNE	10, 97	PMEG100V080ELPD	46	PMEG3002AELD	45
PESD5V0X1BCAL	52	PHPT610030NK	29	PMCM4401UPE	97	PMEG100V100ELPD	46	PMEG3002AESF	44
PESD5V0X1BCL	52	PHPT610030PK	29	PMCM4401VNE	97, 168	PMEG1020EA	47	PMEG3002EJ	47
PESD5V0X1BCSF	52	PHPT610035NK	29	PMCM4401VPE	97, 168	PMEG1020EH	47	PMEG3002ESF	44
PESD5V0X1BL	52	PHPT610035PK	29	PMCM4402UPE	10, 97	PMEG1020EJ	47	PMEG3002TV	48
PESD5V0X1BQ	53	PHPT61003NPK	29	PMCM6501CUNE	10, 97	PMEG1020EV	47	PMEG3005AEA	47
PESD5V0X1BT	53	PHPT61003NY	29	PMCM6501UNE	10,97	PMEG1030EH	47	PMEG3005AESF	44

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PMEG3005AEV	47	PMEG4005EH	47	PMEG6010ESB	44	PMPB13XNE	96	PMV16XN	99
PMEG3005CT	48	PMEG4005EJ	47	PMEG6010ETR	46	PMPB13XNEA	83	PMV20EN	99
PMEG3005EB	47	PMEG4005EPK	45	PMEG6020AELP	46	PMPB15XN	96	PMV20XNE	99
PMEG3005EGW	47	PMEG4005ESF	44	PMEG6020AELR	46	PMPB15XP	96	PMV20XNEA	83, 99
PMEG3005EH	47	PMEG4005ET	47	PMEG6020ELR	46	PMPB15XPA	83	PMV230ENEA	83, 99
PMEG3005EJ	47	PMEG4010AESB	44	PMEG6020EP	46	PMPB19XP	96	PMV250EPEA	83, 101
PMEG3005EL	45	PMEG4010BEA	47	PMEG6020EPA	45	PMPB20EN	96	PMV25ENEA	83, 99
PMEG3005ELD	45	PMEG4010BEV	47	PMEG6020EPAS	45	PMPB20XNEA	96	PMV27UPE	101
PMEG3005ESF	44	PMEG4010CEA	47	PMEG6020ER	46	PMPB20XPE	96	PMV27UPEA	83
PMEG3005ET	47	PMEG4010CEGW	47	PMEG6020ETP	46	PMPB20XPEA	83	PMV280ENEA	10, 83, 99
PMEG3010AESA	45	PMEG4010CEH	47	PMEG6020ETR	46	PMPB215ENEA	83, 96	PMV28UNEA	83, 99
PMEG3010AESB	44	PMEG4010CEJ	47	PMEG6030ELP	46	PMPB23XNE	96	PMV30UN2	99
PMEG3010BEA	47	PMEG4010CPA	48	PMEG6030EP	46	PMPB27EP	96	PMV30XPEA	83, 101
PMEG3010BEP	46	PMEG4010CPAS	48	PMEG6030ETP	46	PMPB27EPA	83	PMV32UP	101
PMEG3010BER	46	PMEG4010EGW	47	PMEG6030EVP	46	PMPB29XNE	96	PMV33UPE	101
PMEG3010BEV	47	PMEG4010EH	47	PMEG6045ETP	46	PMPB29XNEA	83	PMV35EPE	101
PMEG3010CEH	47	PMEG4010EJ	47	PMEG60T20ELR	9, 46	PMPB29XPE	96	PMV37EN2	99
PMEG3010CEJ	47	PMEG4010EP	46	PMF170XP	101	PMPB29XPEA	83	PMV40UN2	99
PMEG3010EB	47	PMEG4010EPK	47	PMF250XNE	99	PMPB33XN	96	PMV42ENE	99
PMEG3010EGW	47	PMEG4010ER	46	PMF250XNEA	83	PMPB33XP	96	PMV450ENEA	83, 99
PMEG3010EH	47	PMEG4010ESB	44	PMF63UNE	99	PMPB43XPE	96	PMV45EN2	99
PMEG3010EJ	47	PMEG4010ET	47	PMF63UNEA	83	PMPB43XPEA	83	PMV48XP	101
PMEG3010EP	46	PMEG4010ETP	46	PMFPB8032XP	96	PMPB45EPA	83	PMV48XPA	83
PMEG3010ER	46	PMEG4010ETR	46	PMFPB8040XP	100	PMPB47XP	96	PMV50ENEA	83, 99
PMEG3010ESB	44	PMEG4015EPK	45	PMG85XP	101	PMPB48EP	96	PMV50EPEA	83
PMEG3010ET	47	PMEG4020EP	46	PMGD175XNE	103	PMPB50EPEA	83	PMV50UPE	101
PMEG3015EH	47	PMEG4020EPA	45	PMGD175XNEA	85	PMPB55ENEA	83, 96	PMV50XP	101
PMEG3015EJ	47	PMEG4020EPAS	45	PMGD290UCEA	85	PMPB85ENEA	83, 96	PMV55ENEA	83, 99
PMEG3015EV	47	PMEG4020EPK	45	PML260SN	92	PMPB95ENEA	83, 96	PMV65ENEA	83, 99
PMEG3020BEP	46	PMEG4020ER	46	PML340SN	92	PMSS3904	16	PMV65UNE	99
PMEG3020BER	46	PMEG4020ETP	46	PMMT491A	23	PMSS3906	16	PMV65UNEA	83
PMEG3020CEP	46	PMEG4020ETR	46	PMMT591A	25	PMST2222	16	PMV65XP	101
PMEG3020CPA	48	PMEG4030EP	46	PMN16XNE	99	PMST2222A	16	PMV65XPE	101
PMEG3020CPAS	48	PMEG4030ER	46	PMN27XPEA	83	PMST2369	16	PMV65XPEA	83
PMEG3020DEP	46	PMEG4030ETP	46	PMN30UN	99	PMST2907A	16	PMV75UP	101
PMEG3020EGW	47	PMEG4050EP	46	PMN30UNE	99	PMST3904	16	PMV90ENE	99
PMEG3020EH	47	PMEG4050ETP	46	PMN30XP	101	PMST3906	16	PMXB120EPE	95
PMEG3020EJ	47	PMEG40T10ER	9, 46	PMN40ENE	99	PMST4401	16	PMXB350UPE	95
PMEG3020EP	47	PMEG40T20EP	9, 46	PMN40UPEA	83	PMST4403	16	PMXB360ENEA	83, 95
PMEG3020EPA	45	PMEG40T20ER	9, 46	PMN42XPEA	83	PMST5088	14	PMXB40UNE	95
PMEG3020EPAS	45	PMEG40T30EP	9, 46	PMN48XP	101	PMST5089	14	PMXB43UNE	95
PMEG3020ER	46	PMEG40T30ER	9, 46	PMN52XP	101	PMST5550	18	PMXB56EN	95
PMEG3030BEP	46	PMEG40T50EP	9, 46	PMN70EPE	10, 101	PMST5551	18	PMXB65ENE	95
PMEG3030EP	46	PMEG45A10EPD	46	PMN70XP	101	PMST6428	14	PMXB65UPE	95
PMEG3050BEP	46	PMEG45T15EPD	46	PMN70XPE	101	PMST6429	14	PMXB75UPE	95
PMEG3050EP	46	PMEG6002EB	47	PMN70XPEA	83	PMSTA05	14	PMZ1200UPE	94, 101
PMEG4002AESF	44	PMEG6002EJ	47	PMP4201G	20	PMSTA06	14	PMZ130UNE	94, 99
PMEG4002EB	47	PMEG6002EL	45	PMP4201V	20	PMSTA42	18	PMZ200UNE	94, 99
PMEG4002EJ	47	PMEG6002ELD	45	PMP4201Y	20	PMSTA55	14	PMZ290UNE2	94, 99
PMEG4002EL	45	PMEG6002TV	48	PMP4501G	20	PMSTA56	14	PMZ320UPE	94, 101
PMEG4002ELD	45	PMEG6010AESB	44	PMP4501QAS	8, 20	PMSTA92	18	PMZ350UPE	94, 101
PMEG4002ESF	44	PMEG6010CEGW	47	PMP4501V	20	PMT200EPEA	83, 101	PMZ390UNE	94, 99
PMEG4005AEA	47	PMEG6010CEH	47	PMP4501Y	20	PMT280ENEA	83, 99	PMZ550UNE	94, 99
PMEG4005AESF	44	PMEG6010CEJ	47	PMP5501QAS	8, 20	PMT560ENEA	83, 99	PMZ600UNE	94, 99
PMEG4005AEV	47	PMEG6010CPA	48	PMPB10XNE	96	PMV100ENEA	83	PMZ600UNEL	95
PMEG4005CEA	47	PMEG6010CPAS	48	PMPB10XNEA	83	PMV100XPEA	83, 101	PMZ950UPE	94, 101
PMEG4005CEJ	47	PMEG6010ELR	46	PMPB11EN	96	PMV120ENEA	83, 99	PMZ950UPEL	95
PMEG4005CT	48	PMEG6010EP	46	PMPB12UNE	96	PMV130ENEA	83, 99	PMZB1200UPE	94, 101
PMEG4005EGW	47	PMEG6010ER	46	PMPB12UNEA	83	PMV160UP	101	PMZB150UNE	94, 99

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PMZB200UNE	94, 99	PSMN013-60YL	89	PSMN1R1-30PL	86	PSMN3R0-60ES	89	PSMN6R0-30YLB	87
PMZB290UNE2	94, 99	PSMN013-80YS	92	PSMN1R1-40BS	89	PSMN3R0-60PS	88	PSMN6R0-30YLD	87
PMZB320UPE	94, 101	PSMN014-40YS	89	PSMN1R2-25YL	86	PSMN3R2-30YLC	87	PSMN6R1-25MLD	88
PMZB350UPE	94, 101	PSMN014-80YL	92	PSMN1R2-25YLC	86	PSMN3R3-40YS	89	PSMN6R1-30YLD	87
PMZB390UNE	94, 99	PSMN015-100YL	92	PSMN1R2-25YLD	86	PSMN3R3-60PL	88	PSMN6R3-120ES	91
PMZB550UNE	94, 99	PSMN015-110P	90	PSMN1R2-30YLC	87	PSMN3R3-80ES	91	PSMN6R3-120PS	90
PMZB600UNE	94, 99	PSMN015-60BS	89	PSMN1R2-30YLD	87	PSMN3R3-80PS	90	PSMN6R4-30MLD	88
PMZB600UNEL	95	PSMN015-60PS	88	PSMN1R3-30YL	87	PSMN3R4-30BL	86	PSMN6R5-30MLD	88
PMZB950UPE	94, 101	PSMN016-100BS	91	PSMN1R4-30YLD	87	PSMN3R4-30BLE	86	PSMN6R5-80BS	91
PMZB950UPEL	95	PSMN016-100PS	90	PSMN1R4-40YLD	89	PSMN3R4-30PL	86	PSMN6R5-80PS	90
PNE20010ER	9, 41	PSMN016-100YS	92	PSMN1R5-25YL	86	PSMN3R5-25MLD	88	PSMN6R9-100YSF	92
PNE20020EP	9, 41	PSMN017-30BL	86	PSMN1R5-30BLE	86	PSMN3R5-30YL	87	PSMN7R0-100BS	91
PNE20020ER	9, 41	PSMN017-30EL	86	PSMN1R5-30YL	87	PSMN3R5-80ES	91	PSMN7R0-100BSF	91
PNE20030EP	9, 41	PSMN017-30PL	86	PSMN1R5-30YLC	87	PSMN3R5-80PS	90	PSMN7R0-100ES	91
PNS40010ER	41	PSMN017-60YS	89	PSMN1R5-40ES	89	PSMN3R8-100BS	91	PSMN7R0-100PS	90
PQMB11	31	PSMN017-80BS	91	PSMN1R5-40PS	88	PSMN3R9-25MLC	88	PSMN7R0-30MLC	88
PQMD10	31	PSMN017-80PS	90	PSMN1R6-30BL	86	PSMN3R9-60PS	88	PSMN7R0-30YL	87
PQMD12	31	PSMN018-100BSF	91	PSMN1R6-30MLH	88	PSMN4R0-25YLC	86	PSMN7R0-30YLC	87
PQMD13	31	PSMN018-100ESF	10, 91	PSMN1R6-30MLH	88	PSMN4R0-30YL	87	PSMN7R0-60YS	89
PQMD16	31	PSMN018-100PSF	10, 90	PSMN1R6-30PL	86	PSMN4R0-30YLD	87	PSMN7R5-30MLD	88
PQMD2	31	PSMN018-80YS	92	PSMN1R7-25YLD	86	PSMN4R0-40YS	89	PSMN7R5-30YLD	87
PQMD3	31	PSMN019-100YL	92	PSMN1R7-30YL	87	PSMN4R0-60YS	89	PSMN7R5-60YL	89
PQMH10	31	PSMN020-100YS	92	PSMN1R7-60BS	89	PSMN4R1-30YLC	87	PSMN7R6-100BSE	91
PQMH11	31	PSMN020-30MLC	88	PSMN1R8-30BL	86	PSMN4R1-60YL	89	PSMN7R6-60BS	89
PQMH13	31	PSMN021-100YL	92	PSMN1R8-30PL	86	PSMN4R2-30MLD	88	PSMN7R6-60PS	88
PQMH2	31	PSMN022-30BL	86	PSMN1R8-40YLC	89	PSMN4R2-60PL	88	PSMN7R8-100PSE	90
PQMH9	31	PSMN022-30PL	86	PSMN1R9-40PL	88	PSMN4R3-100ES	91	PSMN7R8-120ES	91
PRMB11	8, 31	PSMN025-80YL	92	PSMN2R0-25MLD	88	PSMN4R3-100PS	90	PSMN7R8-120PS	90
PRMD10	8, 31	PSMN026-80YS	92	PSMN2R0-25YLD	86	PSMN4R3-30BL	86	PSMN8R0-40BS	89
PRMD12	8, 31	PSMN027-100BS	91	PSMN2R0-30BL	86	PSMN4R3-30PL	86	PSMN8R0-40PS	88
PRMD13	8, 31	PSMN027-100PS	90	PSMN2R0-30PL	86	PSMN4R3-80ES	91	PSMN8R0-80YL	92
PRMD16	8, 31	PSMN028-100YS	92	PSMN2R0-30YL	87	PSMN4R3-80PS	90	PSMN8R2-80YS	92
PRMD2	8, 31	PSMN030-150P	90	PSMN2R0-30YLD	87	PSMN4R4-30MLC	88	PSMN8R3-40YS	89
PRMD3	8, 31	PSMN030-60YS	89	PSMN2R0-30YLE	87	PSMN4R4-80BS	90	PSMN8R5-100ES	91
PRMH10	8, 31	PSMN034-100BS	91	PSMN2R0-60ES	89	PSMN4R4-80PS	90	PSMN8R5-100ESF	10, 91
PRMH11	8, 31	PSMN034-100PS	90	PSMN2R0-60PS	88	PSMN4R5-30YLC	87	PSMN8R5-100PS	90
PRMH13	8, 31	PSMN038-100YL	92	PSMN2R0-60PSR	88	PSMN4R5-40BS	89	PSMN8R5-100PSF	10, 90
PRMH2	8, 31	PSMN039-100YS	92	PSMN2R1-40PL	88	PSMN4R5-40PS	88	PSMN8R5-60YS	89
PRMH9	8, 31	PSMN040-100MSE	92	PSMN2R2-30YLC	87	PSMN4R6-60BS	89	PSMN8R7-100YSF	10, 92
PRTR5V0U2AX	53, 63	PSMN041-80YL	92	PSMN2R2-40BS	89	PSMN4R6-60PS	88	PSMN8R7-80BS	91
PRTR5V0U2F	53, 63	PSMN045-80YS	92	PSMN2R2-40PS	88	PSMN4R8-100BSE	91	PSMN8R7-80PS	90
PRTR5V0U2X	53, 63	PSMN050-80BS	91	PSMN2R4-30MLD	88	PSMN4R8-100PSE	90	PSMN9R0-25MLC	88
PRTR5V0U4D	54, 61, 63	PSMN057-200B	91	PSMN2R4-30YLD	87	PSMN5R0-100ES	91	PSMN9R1-30YL	87
PSMN010-80YL	92	PSMN057-200P	90	PSMN2R5-30YL	87	PSMN5R0-100PS	90	PSMN9R5-100BS	91
PSMN011-30YLC	87	PSMN059-150Y	92	PSMN2R5-60PL	88	PSMN5R0-30YL	87	PSMN9R5-100PS	90
PSMN011-60ML	89	PSMN063-150D	91	PSMN2R6-30YLC	87	PSMN5R0-80BS	90	PSMN9R5-30YLC	87
PSMN011-60MS	89	PSMN069-100YS	92	PSMN2R6-40YS	89	PSMN5R0-80PS	90	PSMN9R8-30MLC	88
PSMN011-80YS	92	PSMN075-100MSE	92	PSMN2R6-60PS	88	PSMN5R2-60YL	89	PSMNR51-25YLH	86
PSMN012-100YL	92	PSMN0R7-25YLD	86	PSMN2R7-30BL	86	PSMN5R3-25MLD	88	PSMNR58-30YLH	87
PSMN012-100YS	92	PSMN0R9-25YLD	86	PSMN2R7-30PL	86	PSMN5R4-25YLD	86	PSMNR60-25YLH	86
PSMN012-60YS	89	PSMN0R9-30YLD	87	PSMN2R8-25MLC	88	PSMN5R5-60YS	89	PSMNR70-30YLH	87
PSMN012-80BS	91	PSMN102-200Y	92	PSMN2R8-40BS	89	PSMN5R6-100BS	91	PSMNR90-30BL	86
PSMN012-80PS	90	PSMN130-200D	91	PSMN2R8-40PS	88	PSMN5R6-100PS	90	PSMP012-30YE	92
PSMN013-100BS	91	PSMN1R0-25YLD	86	PSMN2R8-80BS	90	PSMN5R6-100YSF	10, 92	PSMP015-40YE	92
PSMN013-100ES	91	PSMN1R0-30YLC	87	PSMN2R9-25YLC	86	PSMN5R6-60YL	89	PSMP020-30YE	92
PSMN013-100PS	90	PSMN1R0-30YLD	87	PSMN3R0-30MLC	88	PSMN5R8-40YS	89	PSMP025-40YE	92
PSMN013-100YSE	92	PSMN1R0-40YLD	89	PSMN3R0-30YL	87	PSMN6R0-25YLB	86	PSMP032-60YE	92
PSMN013-30MLC	88	PSMN1R1-25YLC	86	PSMN3R0-30YLD	87	PSMN6R0-25YLD	86	PSMP057-60YE	92
PSMN013-30YLC	87	PSMN1R1-30EL	86	PSMN3R0-60BS	89	PSMN6R0-30YL	87	PSSI2021SAY	18

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PTVS10VP1UP	69	PTVS24VS1UTR	68	PTVS5V0P1UTP	69	PUMB9	31	PXTA42	18
PTVS10VP1UTP	69	PTVS24VU1UPA	10, 67	PTVS5V0S1UR	68	PUMD10	31	PXTA92	18
PTVS10VS1UR	68	PTVS26VP1UP	67	PTVS5V0S1UTR	68	PUMD12	31	PZT2222A	16
PTVS10VS1UTR	68	PTVS26VP1UTP	69	PTVS5V0Z1USK	67	PUMD13	31	PZT2907A	16
PTVS10VU1UPA	67	PTVS26VS1UR	68	PTVS5V0Z1USKP	10, 67	PUMD14	31	PZT4401	16
PTVS10VZ1USK	67	PTVS26VS1UTR	68	PTVS60VP1UP	69	PUMD15	31	PZT4403	16
PTVS11VP1UP	69	PTVS26VU1UPA	67	PTVS60VP1UTP	69	PUMD16	31	PZTA14	19
PTVS11VP1UTP	69	PTVS26VZ1USK	67	PTVS60VS1UR	68	PUMD17	31	PZTA42	18
PTVS11VS1UR	68	PTVS28VP1UP	69	PTVS60VS1UTR	68	PUMD18	31	PZTA44	18
PTVS11VS1UTR	68	PTVS28VP1UTP	69	PTVS64VP1UP	69	PUMD19	31	PZTA92	18
PTVS12VP1UP	69	PTVS28VS1UR	68	PTVS64VP1UTP	69	PUMD2	31	PZU10DB2 series	36
PTVS12VP1UTP	69	PTVS28VS1UTR	68	PTVS64VS1UR	68	PUMD20	31	PZUxB series	36
PTVS12VS1UR	68	PTVS30VP1UP	69	PTVS64VS1UTR	68	PUMD24	31	PZUxBA series	36
PTVS12VS1UTR	68	PTVS30VP1UTP	69	PTVS6V0P1UP	69	PUMD3	31	PZUxBL series	36
PTVS12VU1UPA	67	PTVS30VS1UR	68	PTVS6V0P1UTP	69	PUMD30	31	TDxJ series	36
PTVS12VZ1USK	67	PTVS30VS1UTR	68	PTVS6V0S1UR	68	PUMD4	31	TL431ACDBZR	32
PTVS13VP1UP	69	PTVS33VP1UP	69	PTVS6V0S1UTR	68	PUMD48	31	TL431AFDT	32
PTVS13VP1UTP	69	PTVS33VP1UTP	69	PTVS6V5P1UP	69	PUMD6	31	TL431AIDBZR	32
PTVS13VS1UR	68	PTVS33VS1UR	68	PTVS6V5P1UTP	69	PUMD9	31	TL431AMFDT	32
PTVS13VS1UTR	68	PTVS33VS1UTR	68	PTVS6V5S1UR	68	PUMH1	31	TL431AQDBZR	32
PTVS14VP1UP	69	PTVS36VP1UP	69	PTVS6V5S1UTR	68	PUMH10	31	TL431BCDBZR	32
PTVS14VP1UTP	69	PTVS36VP1UTP	69	PTVS7V0P1UP	69	PUMH11	31	TL431BFDT	32
PTVS14VS1UR	68	PTVS36VS1UR	68	PTVS7V0P1UTP	69	PUMH13	31	TL431BIDBZR	32
PTVS14VS1UTR	68	PTVS36VS1UTR	68	PTVS7V0S1UR	68	PUMH14	31	TL431BMFDT	32
PTVS15VP1UP	69	PTVS3V3P1UP	69	PTVS7V0S1UTR	68	PUMH15	31	TL431BQDBZR	32
PTVS15VP1UTP	69	PTVS3V3P1UTP	69	PTVS7V5P1UP	69	PUMH16	31	TL431CDBZR	32
PTVS15VS1UR	68	PTVS3V3S1UR	68	PTVS7V5P1UTP	69	PUMH17	31	TL431FDT	32
PTVS15VS1UTR	68	PTVS3V3S1UTR	68	PTVS7V5S1UR	68	PUMH18	31	TL431IDBZR	32
PTVS15VU1UPA	67	PTVS40VP1UP	69	PTVS7V5S1UTR	68	PUMH19	31	TL431MFDT	32
PTVS15VZ1USK	67	PTVS40VP1UTP	69	PTVS7V5U1UPA	67	PUMH2	31	TL431QDBZR	32
PTVS16VP1UP	69	PTVS40VS1UR	68	PTVS7V5Z1USK	67	PUMH20	31	TLVH431NACDBZR	32
PTVS16VP1UTP	69	PTVS40VS1UTR	68	PTVS8V0P1UP	69	PUMH24	31	TLVH431NAIDBZR	32
PTVS16VS1UR	68	PTVS43VP1UP	69	PTVS8V0P1UTP	69	PUMH30	31	TLVH431NAMQDBZR	32
PTVS16VS1UTR	68	PTVS43VP1UTP	69	PTVS8V0S1UR	68	PUMH4	31	TLVH431NAQDBZR	32
PTVS17VP1UP	69	PTVS43VS1UR	68	PTVS8V0S1UTR	68	PUMH7	31	TLVH431NCDBZR	32
PTVS17VP1UTP	69	PTVS43VS1UTR	68	PTVS8V5P1UP	69	PUMH9	31	TLVH431NIDBZR	32
PTVS17VS1UR	68	PTVS45VP1UP	69	PTVS8V5P1UTP	69	PUMT1	15	TLVH431NMQDBZR	32
PTVS17VS1UTR	68	PTVS45VP1UTP	69	PTVS8V5S1UR	68	PUMX1	15	TLVH431NQDBZR	32
PTVS18VP1UP	69	PTVS45VS1UR	68	PTVS8V5S1UTR	68	PUMX2	15	XC7SET02	152
PTVS18VP1UTP	69	PTVS45VS1UTR	68	PTVS9V0P1UP	69	PUMZ1	15	XC7SET04	135
PTVS18VS1UR	68	PTVS48VP1UP	69	PTVS9V0P1UTP	69	PUMZ2	15	XC7SET08	148
PTVS18VS1UTR	68	PTVS48VP1UTP	69	PTVS9V0S1UR	68	PUSB2X4D	54, 62, 63	XC7SET125	136
PTVS18VU1UPA	67	PTVS48VS1UR	68	PTVS9V0S1UTR	68	PUSB2X4Y	54, 62, 63	XC7SET14	136, 140
PTVS18VZ1USK	67	PTVS48VS1UTR	68	PUMB1	31	PUSB3AB4	55, 66	XC7SET32	153
PTVS20VP1UP	69	PTVS4V5D1BL	10, 57, 60, 62, 67	PUMB10	31	PUSB3AB6	9, 55, 66	XC7SET86	150
PTVS20VP1UTP	69	PTVS51VP1UP	69	PUMB11	31	PUSB3F96	55, 66	XC7SH02	152
PTVS20VS1UR	68	PTVS51VP1UTP	69	PUMB13	31	PUSB3F97	9, 66	XC7SH04	136
PTVS20VS1UTR	68	PTVS51VS1UR	68	PUMB14	31	PUSB3F99	66	XC7SH08	148
PTVS20VU1UPA	10, 67	PTVS51VS1UTR	68	PUMB15	31	PUSB3FA0	66	XC7SH125	136
PTVS20VZ1USK	67	PTVS54VP1UP	69	PUMB16	31	PUSB3FR4	55, 66	XC7SH14	136, 140
PTVS22VP1UP	69	PTVS54VP1UTP	69	PUMB17	31	PUSB3FR6	9, 55, 66	XC7SH32	153
PTVS22VP1UTP	69	PTVS54VS1UR	68	PUMB18	31	PUSB3TB6	55, 66	XC7SH86	150
PTVS22VS1UR	68	PTVS54VS1UTR	68	PUMB19	31	PUSBM12VX4-TL	63	XC7SHU04	136
PTVS22VS1UTR	68	PTVS58VP1UP	69	PUMB2	31	PUSBM5V5X4-TL	63	XC7WH126	136
PTVS22VU1UPA	10, 67	PTVS58VP1UTP	69	PUMB20	31	PXT2222A	16	XC7WH14	136, 140
PTVS22VZ1USK	67	PTVS58VS1UR	68	PUMB24	31	PXT2907A	16	XC7WT14	136, 140
PTVS24VP1UP	69	PTVS58VS1UTR	68	PUMB3	31	PXT4401	16		
PTVS24VP1UTP	69	PTVS5V0P1UP	69	PUMB30	31	PXT4403	16		
PTVS24VS1UR	68			PUMB4	31	PXTA14	19		



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Date of release:

January 2018

Printed:

In the Netherlands

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