SMD-codes

DATABOOK

SMD semiconductor components marking codes.
MELF case
SOT-223 case
DPAK & IPAK case
SOT-89-5 case
BGA& DFN case

- 530.000 SMD-codes:
- Diodes, Thyristors, Protection elements, Transistors, Integrated circuits
- Case pin assignment
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VOLUME III, 2026 EDITION

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ELECTRONICS COMPONENTS

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SMD semiconductor components marking codes.

VOLUME III

MELF case

SOT-223 case

DPAK & IPAK case

SOT-89-5 case

BGA & DFN case

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CONTENT

Introduction

At earlier eighties began a trend to replace a traditional through-hole technique with the surface mounted technology (SMT) using surface mounted devices (SMD). The SMT, although intended in principle for automatic manufacturing only expand more and more, even into a hobby world. This trend will continue, because many new components are available in SMD versions only. The SMT technique opens advantages and new applications through miniaturising of the components and increasing of reliability. The industry standard unfortunately allows that most of the SMD components does not have a clear description. Since a tiny size of the components, they are labelled with one, two or more character or graphic SMD code. Thus it is necessary to take into account that the colour and (or) placing of alphanumeric or graphic symbols are also important. Therefore a sure identification of the components is impossible without appropriate technical documentation. Moreover the polarity and pin - outs of different components could be not identified without data sheets.

Identifying the manufacturers type number of an SMD device from the package code can be a difficult task. Unfortunately, each device code is not necessarily unique.

For various manufacturers it is possible to place different devices in the same case with the same SMD-code. For example, with a **6H** SMD-code in a SOT-23 case might be either a npn-transistor **BC818** (CDIL) or a capacitance-diode **FMMV2104** (Zetex) or a n-channel jFET transistor **MMBF5486** (Motorola) or a pnp-digital transistor **MUN2131** (Motorola) or a pnp-digital transistor **UN2117** (Panasonic) or a CMOS-integrated circuit- voltage detector with reset output **R3131N36EA** (Ricoh). Even the same manufacturer may use the same code for different devices.

To identify a particular SMD device, is necessary to identify the manufacturer, package type and note the SMD code printed on the device.

The identification of the manufacturer is possible only if on the case are printed the manufacturer's logos, but it not always happens. Besides, sometimes, it is possible to determine the manufacturer with indirect tags. Many recent ON Semiconductor devices have a small superscript letter after the device code, such as **SA^{C}** (this smaller letter is merely a month of manufacture code). Infineon devices usually have a lower case **'s'** (ATs, LOs). NXP (Philips) devices usually have a lower case **'p'** (AHp, Z1p, pB0) or **'-'** (DQ-, -ZS) for the devices made in Hong Kong, **'t'** (tT9, Y7t) for the devices made in Malaysia, "W" (WT9, Y7W) for the devices made in China. In the last section are submitted the logos and web site URL of the SMD devices manufacturers.

The package type is another problem for the identification of SMD devices. The different manufacturers can designate identical cases concerning by the various standards (or concerning by the internal system). Besides, the various cases can have an identical kind (form) and differ only by sizes. This distinction of sizes so it is not enough, that can be is measured only by special measuring devices.

Compliance with the name and type of cases from different manufacturers is solved by applying in the column "Case" an equivalent type name for equivalent cases.

In addition to SMD-code, uper case may be put padding alpha-numeric information (usually by another font or size of characters, also may be by other arrangement). Relationship position of the SMD-code and padding information have defined as style and show in the column "Style"

In the following tables sections the SMD semiconductor components - irrelevant as to whether it is dealing with transistors, diodes, integrated circuits etc. are placed in separate tables according to numbers of terminals and (or) type of cases and are listed in alpha-numeric order by SMD-codes.

Column 1 ("SMD-Code")

(BSC)	Backside coating

Column 2 ("Type")

The type designations correspond to those of the respective manufacturer documentations.

Column 3 ("Function")

Short definition of the semiconductor component.
Used abbreviations:

BM-IC	Battery Management integrated circuit
BR	Bridge Rectifier
C-diode	Capacitance diode (varactor, varicap)
CMOS-Log	CMOS logic integrated circuit
Comp-IC	Voltage comparator integrated circuit
CPE	Circuit Protector Element
CP-IC	Charge pump integrated circuit
DC/DC-IC	DC/DC voltage converter integrated circuit
ESDP-diode	ElectroStatic Discharge Protection diode
ESD-Prot	ElectroStatic Discharge Protection thyristor
-FET	Field Effect Transistor
HEMT	High electron mobility transistors
H-IC	Hall-effect sensor integrated circuit
HSPS-IC	High-side power switch integrated circuit
Id-IC	Ideal diode integrated circuit
IGBT	Insulated Gate Bipolar Transistor
IGBT+Di	Insulated Gate Bipolar Transistor with antiparallel diode
LDR-IC	LED driver integrated circuit
Lin-IC	Linear integrated circuit
LSW-IC	Load switch Integrated Circuit
LVR-IC	Linear voltage regulator integrated circuit
LVR/Vdet-IC	Linear voltage regulator/Voltage detector combined integrated circuit
Match resnet	Matched resistor network
MMIC	Monolithic Microwave Integrated Circuit
-MOSFET	Metal-Oxide-Semiconductor FET
-MESFET	MEtal-Semiconductor FET
n-	n-channel junction transistor
n/p-	n-channel and p-channel transistors area
Op-IC	Operational amplifier integrated circuit
OVP IC	Overvoltage Protection integrated circuit
p-	p-channel junction transistor
PB-IC	Push button integrated circuit
PDS-IC	Power distrubution switch integrated circuit
PHEMT	Pseudomorphic high electron mobility transistors
PIN-diode	Diode with a wide, undoped intrinsic

	semiconductor region
PM-IC	Power management integratd circuit
PSW-IC	Power switch integrated circuit
Res. div.	Resistor divider
SGP	Spark Gap Protector
Si-diode	Silicon diode
SiC-diode	Silicon-carbid diode
SiGe-diode	Silicon/Germanium diode
SiGe-npn	Silicon/Germanium npn transistor
Si-npn	Silicon npn transistor
Si-n/p	Silicon npn and pnp transistors area
Si-npn-Darl	Silicon npn Darlington transistor
Si-npn-Digi	Silicon npn “digital” transistor
Si-npn-Digi+Di	Silicon npn “digital” transistor with internal diode
Si-pnp	Silicon pnp transistor
Si-pnp-Darl	Silicon pnp Darlington transistor
Si-pnp-Digi	Silicon pnp “digital” transistor
Si-npn-Digi+Di	Silicon pnp “digital” transistor with internal diode
Si-pnpn-UJT	Si-pnpn unijunction transistor
SiC-diode	Silicon-Carbide diode
SIDAC	Silicon unilateral voltage triggered switch
SiGeC-npn	Silicon-Germanium-Carbon npn transistor
Si-Stab	Silicon stabistor
Si-Var	Silicon varistor
SGP	Spark Gap Protector
SSD	Surge supressor diode
SVR-IC	Switching Voltage Regulator integrated circuit
T-sensor	Temperature sensor
Tdet-IC	Thermal detector integrated circuit
Thy-SCR	Thyristor-controlled rectifier
Thy-SPD	Thyristor-surge protector device
Triac	Triode for alternating current
TVS	Transient voltage suppressor
Vdet-IC	Voltage Detector integrated circuit
Vmon-IC	Voltage monitor integrated circuit
Vref-IC	Voltage Reference integrated circuit
Vreg/OVP IC	Voltage regualtor/Overvoltage Protector IC
WDT-IC	Watchdog timer integrated circuit
Z-diode	Zener diode
Z-diode/SPD	Zener diode-surge protector device

Column 4 (“Case”) Manufacturer case designation (section 13).

Column 5 (“Style”) “Style” (upercase placement of the SMD-code and additional infomation drawing). All styles drawings are placed in the section 8.

Column 6 (“Short description”)
Short data or description of function of each type.
Used abbreviations:

Adj.	Adjust, adjustable
AF	Audio Frequency
AGC	Automatic Gain Control
ALC	Automatic Level Control
AM	Amplitude Modulation (AM range)
Amp	Amplifier
Ant	Antenna
APA	Audio Power Amplifier
Att	Attenuator
Avl	Avalanshe
Disc.	Internal CL discharge
BISS	Breakthrough In Small Signal
BTL	Bridge Tied Loads
Bat	Battery
Buck-Boost	B-boost
Buff	Buffer
CATV	Broad band cable amplifier
+CE	Active HIGH Chip Enable
-CE	Active LOW Chip Enable
Cap	Capacitance
Cell	Cellular
CL	Internal CL discharge resistor
Conv	Converter
Cordl	Cordless
Ctrl	Controlled, Controller
CRD	Current Regulator Diode
CrL	Current Limiter
CrLL	Current Limiter with integral Latch
CV	Constant Voltage
ChV	Charge voltage
-d, D-MOS	Depletion mode MOSFET
DBS	Direct Broadcast Satellite
DECT	Digital Enhanced Cordless Telecommunications
Det	Detector
DG	Dual Gate
Diff	Differential
Dr, Drv	Driver
-e	Enhancemet mode MOSFET
EN	Enable
Ext.	External
FD	Fast Discharge
Fdb-Pr.	Foldback protection
FM	Frequency Modulation (FM range)
FPWM	Forced Pulse-width modulation
Fst	Fast
GaAs	Gallium Arsenide
GBP	Gain-Bandwidth Product
GNSS	Global Navigation Satellite System (GLONASS)
GP	General Purpose Applications
Green pack.	Green package
Green proc.	Green process
HF	High Frequency
H-fast	Hyperfast
H-Free	Halogen-free
HiSAT-COT	High Speed Transient Response Control
Hi-sp	High-speed
HSST	High-Speed Soft-Start
Hst.	Hysteresis
HV	High Voltage
I2C	I2C (Inter-Integrated Circuit) interface
I2S	I2S interface
ICL	Internal Current Limiter
ICP	Inrush Current Protection (Prevention)
IF	Intermediate frequency
Instrum.	Instrumental
InGaAs	Indium Gallium Arsenide
Int.	Internal
I-O-Bps	Input-to-Output Bypass
Ipp	Maximal Peak Pulse Current
ISM band	Industrial, scientific, and medical rado band
Latch-Pr.	Latch protection
LCON	Output Current Limit Setting
LDO	Low drop voltage
LED	Light-emitting diode
L-Free	Lead-free
LLD	Lov-leakage diode
LLS	Logic Level Shifter
LN	Low Noise
LNA	Low Noise Amplifier
LNB	Low Noise Block
LogL	Logic Level (Uth >0,8...2V)
Lo-sat	Low collector-emitter saturation voltage

LRip	Low Ripple voltage
LSST	Low-Speed Soft-Start
LTE	Long Term Evolution
Mix	Mixer
Mon.	Monitoring
MR	Manual Reset
Nix	Nixie tube driver
OCB	Fault indication output
OCL	Output Current Limiter
ODO	Open Drain Output
OCO	Open Collector Output
Ovd	Over volatage detection
OVIn	Over Voltage Reset Input (negative)
OVP	Over Voltage Protection
Osc	Oscillator
OTP	Over Temperature Protection
Out	Output
OV	OverVoltage function
PA	Power Amplifier
PAD	Pico-Amper Diode
Pb-free	Plumb-free
PCA	Pulse Current Amplitude modulation
PDR	Internal pull-down resistor
PECL	Positive Emitter-Coupled Logic
Prot	Protect, protection
PFM	Pulse-frequency modulation
PG	Power Good
PGain	Power Gain
PM	Power management
POR	Power-on-reset
Pow	Power
PPO	Push-Pull Output
Prog	Programmable
PSM	Pulse-skip modulation
PUR	Internal pull-up resistor
PWM	Pulse-width modulation
Rdt	Reset delay time
Rectif.	Rectifier
Reg.	Regulated
Res.	Resistor
Rst	Reset
Reset-Pr.	Reset protection
RF	Radio Frequency applications
Rin	Input resistance
RUN	Enable of DC/DC converter
SATV	Satellite television
S-band	RF band switching
SB	Schottky Barrier
SBD	Schottky Barrier Diode
SBR	Schottky Barrier Rectifier
SCK	Clock Input Pin
SDQ	Serial Data and Quality interface
S-dwn	Shutdown
S-fast	Super-Fast
SHF	Super High Frequency
ShPr	Short Circuit Protection
SiGe	Silicon/Germanium structure
SMPS	Switch Mode Power Supply
SPDT	Single-pole double-throw
SPI	Serial Peripheral Interface
SPST	Single-pole single-throw
SS	Soft start
STB	Set-Top Boxes
St-dwn	Step-down
St-up	Step-up
Supress.	Suppressor
Sw.	Switching
Sync.	Synchronous
Td	Delay time
Tcy	Overcharge Detection Delay Time
TMBSR	Trench MOS Barrier Schottky Rectifier
T-MOS	Trench-FET MOSFET
Tmr	Manual Reset Setup Period
Tun	Tuner
Ucu	Overcharge Detection Voltage
U-Sp.	Ultra-speed
UHF	RF applications (>250 MHz)
UV	UnderVoltage function
ULN	Ultra Low-Noise
USB	Universal Serial Bus
UV	Latched UperVoltage function
Uvd	Under voltage detection
UVLO	Under voltage lock output
Var	Variable
Vbr	Breakdown Voltage
VCO	Voltage controlled oscillator
Vdet	Dectection volatge
Vdi	Input volatge detection
Vdo	Output volatge detection
Vfb	Feedback voltage
VHF	RF applications (100...250MHz)
VFM	Voltage-Frequency Modulation
Vid	Video output stages
V-MOS	Vertical Metal Oxide Semiconductor
Vrls	Release voltage
Vrwm	Reverse Standoff Voltage
VR	Voltage Regulator
Vth+	Power-on lockout voltage
Vth-	Forced power-off voltage
Vthr	Vthresold
Vuot	Undervoltage/Overvoltage threshold
WB	Wide Band
WD	Watchdog
WDEN	Watchdog Enable
WDI	Watchdog Input
Wdt	Watchdog timeout
Wta	Watchdog active time
WLAN	Wireless Local Area Network
WiMAX	Worldwide Interoperability for Microwave Access
Wdt	Watchdog timeout
uPower	Micro Power
uWave	Microwave
ZBD	Zero bias detector

Column 7 (“Atr”)
Additional SMD-codes attribute such as subscipt bar, uperscipt bar, reverse symbol and other (section 9).

Column 8 (“A.d.”)
Additional information such as year, month, week or lot number designation (section 10).

Column 9 (“Pin”) Related conventional case drawing (section 6) and pinout assignement (from table, section 7). Example: 16vdb- conventional case drawing 16 (section 6) and pinout assignement vdb (section 7).

Column 10 (“Sch”) Sample schematic connection for some elements (ICs). All sample schematic connection drawings are placed in the section 12.

Column 11 (“Mnf”)
The name of the manufacturer are abbreviated (to save space). The complete name, logos, and URL of each manufacurer is listed alphabetically on section 13.

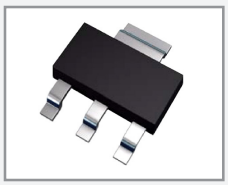
SECTION 1

SOD-80 (MELF) case SMD semiconductor components

SMD code	Type	Function	Case	Style	Short description	Atr	Pin	Mnf
10 PH	BZD27-C10	Z-diode	SOD87	2c	9.4..10.6V, Zzt=2Ω, Iz=50mA, 800mW	A83	15d	Phi
100 PH	BZD27-C100	Z-diode	SOD87	2c	94..106V, Zzt=60Ω, Iz=5mA, 800mW	A83	15d	Phi
100V-5	MZ1.0GM100V	Z-diode	MELF	2h	94..106V, Zzt=130Ω, Izt=7mA, 1W	A76	15d	Mic
10A	GLZ10A	Z-diode	SOD-80	2c	9.12..9.59V, Zzt=8Ω, Izt=20mA, 500mW	A78	15d	Pjt
10A	TLZ10A	Z-diode	SOD-80	2c	9.12..9.59V, Izt=20mA, Zzt=8Ω, 500mW	A78	15d	Ttr
10A	TLZ10A	Z-diode	SOD-80	2h	9.12..9.59V, Izt=20mA, Zzt=8Ω, 500mW	A77	15d	Vs
10B	GLZ10B	Z-diode	SOD-80	2c	9.41..9.90V, Zzt=8Ω, Izt=20mA, 500mW	A78	15d	Pjt
10B	ZMM10B	Z-diode	LL-34	2c	9.5..10.5V, Izt=5mA, 500mW	A78a	15d	Lrc
10B	TLZ10B	Z-diode	SOD-80	2c	9.41..9.90V, Izt=20mA, Zzt=8Ω, 500mW	A78	15d	Ttr
10B	TLZ10B	Z-diode	SOD-80	2h	9.41..9.9V, Izt=20mA, Zzt=8Ω, 500mW	A77	15d	Vs
10C	GLZ10C	Z-diode	SOD-80	2c	9.70..10.20V, Zzt=8Ω, Izt=20mA, 500mW	A78	15d	Pjt
10C	ZMM10C	Z-diode	LL-34	2c	9.8..10.2V, Izt=5mA, 500mW	A78a	15d	Lrc
10C	TLZ10C	Z-diode	SOD-80	2c	9.70..10.20V, Izt=20mA, Zzt=8Ω, 500mW	A78	15d	Ttr
10C	TLZ10C	Z-diode	SOD-80	2h	9.7..10.2V, Izt=20mA, Zzt=8Ω, 500mW	A77	15d	Vs
10D	GLZ10D	Z-diode	SOD-80	2c	9.94..10.44V, Zzt=8Ω, Izt=20mA, 500mW	A78	15d	Pjt
10D	TLZ10D	Z-diode	SOD-80	2c	9.94..10.44V, Izt=20mA, Zzt=8Ω, 500mW	A78	15d	Ttr
10D	ZMM10D	Z-diode	LL-34	2c	9.9..10.1V, Izt=5mA, 500mW	A78a	15d	Lrc
10D	TLZ10D	Z-diode	SOD-80	2h	9.94..10.44V, Izt=20mA, Zzt=8Ω, 500mW	A77	15d	Vs
10V	MZ0.5GN10V	Z-diode	SOD-80	2h	10V+-5%, Zzt=15Ω, Izt=40mA, 500mW	A77	15d	Mic
10V-20	MZ0.5GN10V-20	Z-diode	SOD-80	2h	10V+-5%, Zzt=17Ω, Izt=45mA, 500mW	A76	15d	Mic
10V-25	MZ1.0PM10V-25	Z-diode	DO-213AB	2h	10V+-5%, Zzt=7.0Ω, Irm=454mA, 1W	A76	15d	Mic
10V-50	MZ1.0GM10V	Z-diode	MELF	2h	9.4..10.6V, Zzt=2Ω, Izt=74mA, 1W	A76	15d	Mic
11 PH	BZD27-C11	Z-diode	SOD87	2c	10.4..11.6V, Zzt=4Ω, Iz=50mA, 800mW	A83	15d	Phi
110 PH	BZD27-C110	Z-diode	SOD87	2c	104..16V, Zzt=80Ω, Iz=5mA, 800mW	A83	15d	Phi
11A	GLZ11A	Z-diode	SOD-80	2c	10.18..10.71V, Zzt=10Ω, Izt=10mA, 500mW	A78	15d	Pjt
11A	TLZ11A	Z-diode	SOD-80	2h	10.18..10.71V, Izt=10mA, Zzt=10Ω, 500mW	A77	15d	Vs
11A	TLZ11A	Z-diode	SOD-80	2c	10.18..10.71V, Izt=10mA, Zzt=10Ω, 500mW	A78	15d	Ttr
11B	ZMM11B	Z-diode	LL-34	2c	10.45..11.55V, Izt=5mA, 500mW	A78a	15d	Lrc
11B	GLZ11B	Z-diode	SOD-80	2c	10.50..11.05V, Zzt=10Ω, Izt=10mA, 500mW	A78	15d	Pjt
11B	TLZ11B	Z-diode	SOD-80	2h	10.5..11.05V, Izt=10mA, Zzt=10Ω, 500mW	A77	15d	Vs
11B	TLZ11B	Z-diode	SOD-80	2c	10.50..11.05V, Izt=10mA, Zzt=10Ω, 500mW	A78	15d	Ttr
11C	ZMM11C	Z-diode	LL-34	2c	10.78..11.22V, Izt=5mA, 500mW	A78a	15d	Lrc
11C	GLZ11C	Z-diode	SOD-80	2c	10.82..11.38V, Zzt=10Ω, Izt=10mA, 500mW	A78	15d	Pjt
11C	TLZ11C	Z-diode	SOD-80	2h	10.82..11.38V, Izt=10mA, Zzt=10Ω, 500mW	A77	15d	Vs
11C	TLZ11C	Z-diode	SOD-80	2c	10.82..11.38V, Izt=10mA, Zzt=10Ω, 500mW	A78	15d	Ttr
11D	ZMM11D	Z-diode	LL-34	2c	10.89..11.11V, Izt=5mA, 500mW	A78a	15d	Lrc
11V	MZ0.5GN11V	Z-diode	SOD-80	2h	11V+-5%, Zzt=18Ω, Izt=36mA, 500mW	A77	15d	Mic
11V-20	MZ0.5GN11V-20	Z-diode	SOD-80	2h	11V+-5%, Zzt=22Ω, Izt=41mA, 500mW	A76	15d	Mic
11V-23	MZ1.0PM11V-23	Z-diode	DO-213AB	2h	11V+-5%, Zzt=8.0Ω, Irm=414mA, 1W	A76	15d	Mic
11V-50	MZ1.0GM11V	Z-diode	MELF	2h	10.4..11.6V, Zzt=3Ω, Izt=66mA, 1W	A76	15d	Mic
12 PH	BZD27-C12	Z-diode	SOD87	2c	11.4..12.7V, Zzt=4Ω, Iz=50mA, 800mW	A83	15d	Phi
120 PH	BZD27-C120	Z-diode	SOD87	2c	114..127V, Zzt=80Ω, Iz=5mA, 800mW	A83	15d	Phi
12A	GLZ12A	Z-diode	SOD-80	2c	11.13..11.71V, Zzt=12Ω, Izt=10mA, 500mW	A78	15d	Pjt
12A	TLZ12A	Z-diode	SOD-80	2h	11.13..11.71V, Izt=10mA, Zzt=12Ω, 500mW	A77	15d	Vs
12A	TLZ12A	Z-diode	SOD-80	2c	11.13..11.71V, Izt=10mA, Zzt=12Ω, 500mW	A78	15d	Ttr
12B	ZMM12B	Z-diode	LL-34	2c	11.4..12.6V, Izt=5mA, 500mW	A78a	15d	Lrc
12B	GLZ12B	Z-diode	SOD-80	2c	11.44..12.03V, Zzt=12Ω, Izt=10mA, 500mW	A78	15d	Pjt
12B	TLZ12B	Z-diode	SOD-80	2h	11.44..12.03V, Izt=10mA, Zzt=12Ω, 500mW	A77	15d	Vs
12B	TLZ12B	Z-diode	SOD-80	2c	11.44..12.03V, Izt=10mA, Zzt=12Ω, 500mW	A78	15d	Ttr
12C	ZMM12C	Z-diode	LL-34	2c	11.76..12.24V, Izt=5mA, 500mW	A78a	15d	Lrc
12C	GLZ12C	Z-diode	SOD-80	2c	11.74..12.35V, Zzt=12Ω, Izt=10mA, 500mW	A78	15d	Pjt
12C	TLZ12C	Z-diode	SOD-80	2h	11.74..12.35V, Izt=10mA, Zzt=12Ω, 500mW	A77	15d	Vs
12C	TLZ12C	Z-diode	SOD-80	2c	11.74..12.35V, Izt=10mA, Zzt=12Ω, 500mW	A78	15d	Ttr
12D	ZMM12D	Z-diode	LL-34	2c	11.88..12.12V, Izt=5mA, 500mW	A78a	15d	Lrc
12V	MZ0.5GN12V	Z-diode	SOD-80	2h	12V+-5%, Zzt=22Ω, Izt=32mA, 500mW	A77	15d	Mic
12V-20	MZ0.5GN12V-20	Z-diode	SOD-80	2h	12V+-5%, Zzt=30Ω, Izt=38mA, 500mW	A76	15d	Mic
12V-21	MZ1.0PM12V-21	Z-diode	DO-213AB	2h	12V+-5%, Zzt=9.0Ω, Irm=380mA, 1W	A76	15d	Mic
12V-50	MZ1.0GM12V	Z-diode	MELF	2h	11.4..12.7V, Zzt=3Ω, Izt=60mA, 1W	A76	15d	Mic
13 PH	BZD27-C13	Z-diode	SOD87	2c	12.4..14.1V, Zzt=5Ω, Iz=50mA, 800mW	A83	15d	Phi
130 PH	BZD27-C130	Z-diode	SOD87	2c	124..141V, Zzt=110Ω, Iz=5mA, 800mW	A83	15d	Phi
13A	GLZ13A	Z-diode	SOD-80	2c	12.11..12.75V, Zzt=14Ω, Izt=10mA, 500mW	A78	15d	Pjt
13A	TLZ13A	Z-diode	SOD-80	2h	12.11..12.75V, Izt=10mA, Zzt=14Ω, 500mW	A77	15d	Vs
13A	TLZ13A	Z-diode	SOD-80	2c	12.11..12.75V, Izt=10mA, Zzt=14Ω, 500mW	A78	15d	Ttr
13B	ZMM13B	Z-diode	LL-34	2c	12.35..13.65V, Izt=5mA, 500mW	A78a	15d	Lrc
13B	GLZ13B	Z-diode	SOD-80	2c	12.55..13.21V, Zzt=14Ω, Izt=10mA, 500mW	A78	15d	Pjt
13B	TLZ13B	Z-diode	SOD-80	2h	12.55..13.21V, Izt=10mA, Zzt=14Ω, 500mW	A77	15d	Vs
13B	TLZ13B	Z-diode	SOD-80	2c	12.55..13.21V, Izt=10mA, Zzt=14Ω, 500mW	A78	15d	Ttr
13C	ZMM13C	Z-diode	LL-34	2c	12.74..13.26V, Izt=5mA, 500mW	A78a	15d	Lrc
13C	GLZ13C	Z-diode	SOD-80	2c	12.99..13.66V, Zzt=14Ω, Izt=10mA, 500mW	A78	15d	Pjt
13C	TLZ13C	Z-diode	SOD-80	2h	12.99..13.66V, Izt=10mA, Zzt=14Ω, 500mW	A77	15d	Vs

SECTION 2

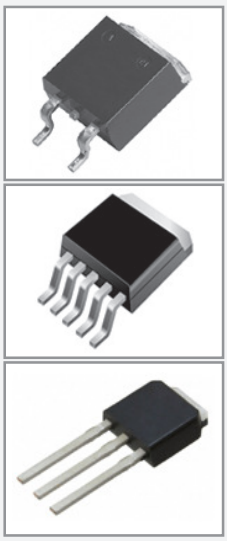
SOT-223 case SMD semiconductor components



SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
01N60C3	SPN01N60C3	n-MOSFET	SOT-223	4k	HV, LogL, 650V, 300mA, 1.8W, 5.5 Ω(500mA), 45/60ns	-	-	21f2	-	Inf
02N60C3	SPN02N60C3	n-MOSFET	SOT-223	4k	HV, LogL, 600V, 400mA, 1.8W, 2.0 Ω(1.1A), 6/68ns	-	-	21f2	-	Inf
02N60S5	SPN02N60S5	n-MOSFET	SOT-223	4k	HV, LogL, 600V, 400mA, 1.8W, 2.5 Ω(1.1A), 30/110ns	-	-	21f2	-	Inf
03N60C3	SPN03N60C3	n-MOSFET	SOT-223	4k	HV, LogL, 650V, 700mA, 1.8W, 1.2 Ω(2A), 7/64ns	-	-	21f2	-	Inf
03N60S5	SPN03N60S5	n-MOSFET	SOT-223	4k	HV, LogL, 600V, 700mA, 1.8W, 1.2 Ω(2A), 35/120ns	-	-	21f2	-	Inf
0410	SSM0410	n-MOSFET	SOT-223	4rb	Sw, 100V, 3.5A, 2.7W, Rds=220mΩ(2.6A), 9/26.8ns	-	-	21fi	nMOS2	Sec
04N60S5	SPN04N60S5	n-MOSFET	SOT-223	4k	HV, LogL, 600V, 800mA, 1.8W, 0.8 Ω(2.8A), 40/130ns	-	-	21f2	-	Inf
103MN	Z0103MN	Triac	SOT-223	4s	600V, 1A, 1W, Vtm<1.56V, <Igt>3mA	-	-	21hz	-	Ons
107MN	Z0107MN	Triac	SOT-223	4s	600V, 1A, 1W, Vtm<1.56V, Igt>5mA	-	-	21hz	-	Ons
109MN	Z0109MN	Triac	SOT-223	4s	600V, 1A, 1W, Vtm<1.56V, Igt>10mA	-	-	21hz	-	Ons
1116	GL1116	LVR-IC	SOT-223	4qd	LDO, Adj. 1.25..5V±2%, 600mA	-	57	21cn	VR20	Gtm
1116	SL1116VADJ	LVR-IC	SOT-223	4rb	LDO, Adjustable 1.25..13.8V, 600mA	-	-	21cn	VR20	Sec
111615	GL1116-15	LVR-IC	SOT-223	4qd	LDO, 1.5V±2%, 600mA	-	57	21cg	VR1	Gtm
111615	SL1116-1.5V	LVR-IC	SOT-223	4rb	LDO, 1.5V±1%, 600mA	-	-	21cg	VR1	Sec
111618	GL1116-18	LVR-IC	SOT-223	4qd	LDO, 1.8V±2%, 600mA	-	57	21cg	VR1	Gtm
111618	SL1116-1.8V	LVR-IC	SOT-223	4rb	LDO, 1.8V±1%, 600mA	-	-	21cg	VR1	Sec
111625	GL1116-25	LVR-IC	SOT-223	4qd	LDO, 2.5V±2%, 600mA	-	57	21cg	VR1	Gtm
111625	SL1116-2.5V	LVR-IC	SOT-223	4rb	LDO, 2.5V±1%, 600mA	-	-	21cg	VR1	Sec
111633	GL1116-33	LVR-IC	SOT-223	4qd	LDO, 3.3V±2%, 600mA	-	57	21cg	VR1	Gtm
111633	SL1116-3.3V	LVR-IC	SOT-223	4rb	LDO, 3.3V±1%V	-	-	21cg	VR1	Sec
111650	GL1116-50	LVR-IC	SOT-223	4qd	LDO, 5.0V±2%, 600mA	-	57	21cg	VR1	Gtm
111650	SL1116-5.0V	LVR-IC	SOT-223	4rb	LDO, 5.0V±1%, 600mA	-	-	21cg	VR1	Sec
1117	GL1117	LVR-IC	SOT-223	4qd	LDO, Adj. 1.25..5V±2%, 1A	-	57	21cn	VR20	Gtm
1117	LT1117CST	LVR-IC	SOT-223	4r	LDO, Adjustable 1.5..15V, 800mA	-	-	21wc	VR20	Ltc
111715	GL1117-15	LVR-IC	SOT-223	4qd	LDO, 1.5V±2%, 1A	-	57	21cg	VR1	Gtm
111718	GL1117-18	LVR-IC	SOT-223	4qd	LDO, 1.8V±2%, 1A	-	57	21cg	VR1	Gtm
11172	LT1117CST-2.85	LVR-IC	SOT-223	4r	LDO, 2.85V±1%V, 800mA	-	-	21wb	VR1	Ltc
111725	GL1117-25	LVR-IC	SOT-223	4qd	LDO, 2.5V±2%, 1A	-	57	21cg	VR1	Gtm
11173	LT1117CST-3.3	LVR-IC	SOT-223	4r	LDO, 3.3V±1%, 800mA	-	-	21wb	VR1	Ltc
111733	GL1117-33	LVR-IC	SOT-223	4qd	LDO, 3.3V±2%, 1A	-	57	21cg	VR1	Gtm
11175	LT1117CST-5	LVR-IC	SOT-223	4r	LDO, 5.0V±1%, 800mA	-	-	21wb	VR1	Ltc
111750	GL1117-50	LVR-IC	SOT-223	4qd	LDO, 5.0V±2%, 1A	-	57	21cg	VR1	Gtm
1117C1.2	LM1117S-1.2V	LVR-IC	SOT-223	4r	LDO, 1.2V±1%, 1A	-	-	21cg	VR1	Htc
1117C1.5	LM1117S-1.5V	LVR-IC	SOT-223	4r	LDO, 1.5V±1%, 1A	-	-	21cg	VR1	Htc
1117C1.8	LM1117S-1.8V	LVR-IC	SOT-223	4r	LDO, 1.8V±1%, 1A	-	-	21cg	VR1	Htc
1117C2.5	LM1117S-2.5V	LVR-IC	SOT-223	4r	LDO, 2.5V±1%, 1A	-	-	21cg	VR1	Htc
1117C2.85	LM1117S-2.85V	LVR-IC	SOT-223	4r	LDO, 2.85V±1%, 1A	-	-	21cg	VR1	Htc
1117C3.3	LM1117S-3.3V	LVR-IC	SOT-223	4r	LDO, 3.3V±1%, 1A	-	-	21cg	VR1	Htc
1117C5.0	LM1117S-5.0V	LVR-IC	SOT-223	4r	LDO, 5.0V±1%, 1A	-	-	21cg	VR1	Htc
1117CADJ	LM1117S-ADJ	LVR-IC	SOT-223	4r	LDO, Adjustable 1.25..13.8V, 1A	-	-	21cn	VR20	Htc
1117GC1.2	LM1117GS-1.2V	LVR-IC	SOT-223	4r	LDO, 1.2V±1%, 1A	-	-	21cg	VR1	Htc
1117GC1.5	LM1117GS-1.5V	LVR-IC	SOT-223	4r	LDO, 1.5V±1%, 1A	-	-	21cg	VR1	Htc
1117GC1.8	LM1117GS-1.8V	LVR-IC	SOT-223	4r	LDO, 1.8V±1%, 1A	-	-	21cg	VR1	Htc
1117GC2.5	LM1117GS-2.5V	LVR-IC	SOT-223	4r	LDO, 2.5V±1%, 1A	-	-	21cg	VR1	Htc
1117GC2.85	LM1117GS-2.85V	LVR-IC	SOT-223	4r	LDO, 2.85V±1%, 1A	-	-	21cg	VR1	Htc
1117GC3.3	LM1117GS-3.3V	LVR-IC	SOT-223	4r	LDO, 3.3V±1%, 1A	-	-	21cg	VR1	Htc
1117GC5.0	LM1117GS-5.0V	LVR-IC	SOT-223	4r	LDO, 5.0V±1%, 1A	-	-	21cg	VR1	Htc
1117GCADJ	LM1117GS-ADJ	LVR-IC	SOT-223	4r	LDO, Adjustable 1.25..13.8V, 1A	-	-	21cn	VR20	Htc
1117Q1.2	LM1117QS-1.2V	LVR-IC	SOT-223	4r	LDO, 1.2V±1%, 1A	-	-	21cg	VR1	Htc
1117Q1.5	LM1117QS-1.5V	LVR-IC	SOT-223	4r	LDO, 1.5V±1%, 1A	-	-	21cg	VR1	Htc
1117Q1.8	LM1117QS-1.8V	LVR-IC	SOT-223	4r	LDO, 1.8V±1%, 1A	-	-	21cg	VR1	Htc
1117Q2.5	LM1117QS-2.5V	LVR-IC	SOT-223	4r	LDO, 2.5V±1%, 1A	-	-	21cg	VR1	Htc
1117Q2.85	LM1117QS-2.85V	LVR-IC	SOT-223	4r	LDO, 2.85V±1%, 1A	-	-	21cg	VR1	Htc
1117Q3.3	LM1117QS-3.3V	LVR-IC	SOT-223	4r	LDO, 3.3V±1%, 1A	-	-	21cg	VR1	Htc
1117Q5.0	LM1117QS-5.0V	LVR-IC	SOT-223	4r	LDO, 5.0V±1%, 1A	-	-	21cg	VR1	Htc
1117QADJ	LM1117QS-ADJ	LVR-IC	SOT-223	4r	LDO, Adjustable 1.25..13.8V, 1A	-	-	21cn	VR20	Htc
1118	GL1118	LVR-IC	SOT-223	4qd	LDO, Adj. 1.25..5V±2%, 800mA	-	57	21cn	VR20	Gtm
1118	SL1118ADJ	LVR-IC	SOT-223	4rb	LDO, Adjustable 0.8..5.0V±2%, 800mA	-	-	21cn	VR20	Sec
111815	GL1118-15	LVR-IC	SOT-223	4qd	LDO, 1.5V±2%, 800mA	-	57	21cg	VR1	Gtm
111815	SL1118-1.5	LVR-IC	SOT-223	4rb	LDO, 1.5V±2%, 800mA	-	-	21cg	VR1	Sec
111818	GL1118-18	LVR-IC	SOT-223	4qd	LDO, 1.8V±2%, 800mA	-	57	21cg	VR1	Gtm
111818	SL1118-1.8	LVR-IC	SOT-223	4rb	LDO, 1.8V±2%, 800mA	-	-	21cg	VR1	Sec
111825	GL1118-25	LVR-IC	SOT-223	4qd	LDO, 2.5V±2%, 800mA	-	57	21cg	VR1	Gtm
111825	SL1118-2.5	LVR-IC	SOT-223	4rb	LDO, 2.5V±2%, 800mA	-	-	21cg	VR1	Sec
111833	GL1118-33	LVR-IC	SOT-223	4qd	LDO, 3.3V±2%, 800mA	-	57	21cg	VR1	Gtm
111833	SL1118-3.3	LVR-IC	SOT-223	4rb	LDO, 3.3V±2%, 800mA	-	-	21cg	VR1	Sec
111850	GL1118-50	LVR-IC	SOT-223	4qd	LDO, 5.0V±2%, 800mA	-	57	21cg	VR1	Gtm
111850	SL1118-5.0	LVR-IC	SOT-223	4rb	LDO, 5.0V±2%, 800mA	-	-	21cg	VR1	Sec
112113	LT1121CST-3.3	LVR-IC	SOT-223	4rc	LDO, 3.3V±2%, 200mA	-	-	21eu	VR1	Ltc
112115	LT1121CST-5	LVR-IC	SOT-223	4rc	LDO, 5.0V±2%, 200mA	-	-	21eu	VR1	Ltc

SECTION 3

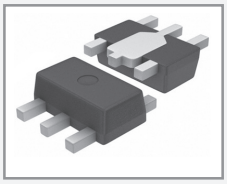
D-PAK and I-PAK case SMD semiconductor components



SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
100	XC6503P121JR-G	LVR-IC	TO-252	10aa	LDO, 1.2V±20mV, 500mA	M02	05	68eu	VR1	Tor
100A	3PMT100A	TVS	POWERMITE	10aa	Vvm=100V, Vbr=111V, Vcl=162V, 9.3A, 1500W(1ms)	-	-	68dh	-	Msc
100CA	3PMT100CA	TVS	POWERMITE	10aa	Vvm=100V, Vbr=111V, Vcl=162V, 9.3A, 1500W(1ms), Bidir.	-	-	68dp	-	Msc
101	XC6503P131JR-G	LVR-IC	TO-252	10aa	LDO, 1.3V±20mV, 500mA	M02	05	68eu	VR1	Tor
10100SD	EBRT10100SD	Si-diode	TO-252	10s	SBR, 100V, 10.0A, Vf<0.67V(10.0A)	-	03	68dm	-	Ers
102	XC6503P141JR-G	LVR-IC	TO-252	10aa	LDO, 1.4V±20mV, 500mA	M02	05	68eu	VR1	Tor
103	XC6503P151JR-G	LVR-IC	TO-252	10aa	LDO, 1.5V±20mV, 500mA	M02	05	68eu	VR1	Tor
104	XC6503P161JR-G	LVR-IC	TO-252	10aa	LDO, 1.6V±20mV, 500mA	M02	05	68eu	VR1	Tor
105	XC6503P171JR-G	LVR-IC	TO-252	10aa	LDO, 1.7V±20mV, 500mA	M02	05	68eu	VR1	Tor
106	XC6503P181JR-G	LVR-IC	TO-252	10aa	LDO, 1.8V±20mV, 500mA	M02	05	68eu	VR1	Tor
107	XC6503P191JR-G	LVR-IC	TO-252	10aa	LDO, 1.9V±20mV, 500mA	M02	05	68eu	VR1	Tor
108	XC6503P201JR-G	LVR-IC	TO-252	10aa	LDO, 2.0V±1%, 500mA	M02	05	68eu	VR1	Tor
108418	LC1084CM3TR18	LVR-IC	TO-263-3L	10j	LDO, 1.8V±2%, 5A	-	-	84cg	VR1	Lch
108418	LC1084CMTR18	LVR-IC	TO-263-2L	10j	LDO, 1.8V±2%, 5A	-	-	68cg	VR1	Lch
108418	LC1084COTR18	LVR-IC	TO-252	10j	LDO, 1.8V±2%, 5A	-	-	68cg	VR1	Lch
108425	LC1084CM3TR25	LVR-IC	TO-263-3L	10j	LDO, 2.5V±2%, 5A	-	-	84cg	VR1	Lch
108425	LC1084CMTR25	LVR-IC	TO-263-2L	10j	LDO, 2.5V±2%, 5A	-	-	68cg	VR1	Lch
108425	LC1084COTR25	LVR-IC	TO-252	10j	LDO, 2.5V±2%, 5A	-	-	68cg	VR1	Lch
108433	LC1084CM3TR33	LVR-IC	TO-263-3L	10j	LDO, 3.3V±2%, 5A	-	-	84cg	VR1	Lch
108433	LC1084CMTR33	LVR-IC	TO-263-2L	10j	LDO, 3.3V±2%, 5A	-	-	68cg	VR1	Lch
108433	LC1084COTR33	LVR-IC	TO-252	10j	LDO, 3.3V±2%, 5A	-	-	68cg	VR1	Lch
108450	LC1084CM3TR50	LVR-IC	TO-263-3L	10j	LDO, 5.0V±2%, 5A	-	-	84cg	VR1	Lch
108450	LC1084CMTR50	LVR-IC	TO-263-2L	10j	LDO, 5.0V±2%, 5A	-	-	68cg	VR1	Lch
108450	LC1084COTR50	LVR-IC	TO-252	10j	LDO, 5.0V±2%, 5A	-	-	68cg	VR1	Lch
1084AD	LC1084CM3TRAD	LVR-IC	TO-263-3L	10j	LDO, Adjustable 1.8V..5.0V±2%, 5A	-	-	84cn	VR20	Lch
1084AD	LC1084CMTRAD	LVR-IC	TO-263-2L	10j	LDO, Adjustable 1.8V..5.0V±2%, 5A	-	-	68cn	VR20	Lch
1084AD	LC1084COTRAD	LVR-IC	TO-252	10j	LDO, Adjustable 1.8V..5.0V±2%, 5A	-	-	68cn	VR20	Lch
108518	LC1085CM3TR18	LVR-IC	TO-263-3L	10j	LDO, 1.8V±2%, 3A	-	-	84cg	VR1	Lch
108518	LC1085CMTR18	LVR-IC	TO-263-2L	10j	LDO, 1.8V±2%, 3A	-	-	68cg	VR1	Lch
108518	LC1085COTR18	LVR-IC	TO-252	10j	LDO, 1.8V±2%, 3A	-	-	68cg	VR1	Lch
108525	LC1085CM3TR25	LVR-IC	TO-263-3L	10j	LDO, 2.5V±2%, 3A	-	-	84cg	VR1	Lch
108525	LC1085CMTR25	LVR-IC	TO-263-2L	10j	LDO, 2.5V±2%, 3A	-	-	68cg	VR1	Lch
108525	LC1085COTR25	LVR-IC	TO-252	10j	LDO, 2.5V±2%, 3A	-	-	68cg	VR1	Lch
108533	LC1085CM3TR33	LVR-IC	TO-263-3L	10j	LDO, 3.3V±2%, 3A	-	-	84cg	VR1	Lch
108533	LC1085CMTR33	LVR-IC	TO-263-2L	10j	LDO, 3.3V±2%, 3A	-	-	68cg	VR1	Lch
108533	LC1085COTR33	LVR-IC	TO-252	10j	LDO, 3.3V±2%, 3A	-	-	68cg	VR1	Lch
108550	LC1085CM3TR50	LVR-IC	TO-263-3L	10j	LDO, 5.0V±2%, 3A	-	-	84cg	VR1	Lch
108550	LC1085CMTR50	LVR-IC	TO-263-2L	10j	LDO, 5.0V±2%, 3A	-	-	68cg	VR1	Lch
108550	LC1085COTR50	LVR-IC	TO-252	10j	LDO, 5.0V±2%, 3A	-	-	68cg	VR1	Lch
1085AD	LC1085CM3TRAD	LVR-IC	TO-263-3L	10j	LDO, Adjustable 1.8V..5.0V±2%, 3A	-	-	84cn	VR20	Lch
1085AD	LC1085CMTRAD	LVR-IC	TO-263-2L	10j	LDO, Adjustable 1.8V..5.0V±2%, 3A	-	-	68cn	VR20	Lch
1085AD	LC1085COTRAD	LVR-IC	TO-252	10j	LDO, Adjustable 1.8V..5.0V±2%, 3A	-	-	68cn	VR20	Lch
109	XC6503P211JR-G	LVR-IC	TO-252	10aa	LDO, 2.1V±1%, 500mA	M02	05	68eu	VR1	Tor
10A	3PMT10A	TVS	POWERMITE	10aa	Vvm=10V, Vbr=11.1V, Vcl=17.0V, 88.2A, 1500W(1ms)	-	-	68dh	-	Msc
10A	XC6503P221JR-G	LVR-IC	TO-252	10aa	LDO, 2.2V±1%, 500mA	M02	05	68eu	VR1	Tor
10B	XC6503P231JR-G	LVR-IC	TO-252	10aa	LDO, 2.3V±1%, 500mA	M02	05	68eu	VR1	Tor
10C	XC6503P241JR-G	LVR-IC	TO-252	10aa	LDO, 2.4V±1%, 500mA	M02	05	68eu	VR1	Tor
10CA	3PMT10CA	TVS	POWERMITE	10aa	Vvm=10V, Vbr=11.1V, Vcl=17.0V, 88.2A, 1500W(1ms), Bidir.	-	-	68dp	-	Msc
10D	XC6503P251JR-G	LVR-IC	TO-252	10aa	LDO, 2.5V±1%, 500mA	M02	05	68eu	VR1	Tor
10E	XC6503P261JR-G	LVR-IC	TO-252	10aa	LDO, 2.6V±1%, 500mA	M02	05	68eu	VR1	Tor
10F	XC6503P271JR-G	LVR-IC	TO-252	10aa	LDO, 2.7V±1%, 500mA	M02	05	68eu	VR1	Tor
10H	XC6503P281JR-G	LVR-IC	TO-252	10aa	LDO, 2.8V±1%, 500mA	M02	05	68eu	VR1	Tor
10K	XC6503P291JR-G	LVR-IC	TO-252	10aa	LDO, 2.9V±1%, 500mA	M02	05	68eu	VR1	Tor
10L	XC6503P301JR-G	LVR-IC	TO-252	10aa	LDO, 3.0V±1%, 500mA	M02	05	68eu	VR1	Tor
10L200CD2	EBRP10L200CD2	Si-diode	D2-PAK	10s	Dual, SBR, 200V, 10A, Vf<0.87V(5A), 80pF	-	03	68bs	-	Ers
10L250CD2	EBRP10L250CD2	Si-diode	D2-PAK	10s	Dual, SBR, 250V, 10A, Vf<0.9V(5A), 65pF	-	03	68bs	-	Ers
10M	XC6503P311JR-G	LVR-IC	TO-252	10aa	LDO, 3.1V±1%, 500mA	M02	05	68eu	VR1	Tor
10N	XC6503P321JR-G	LVR-IC	TO-252	10aa	LDO, 3.2V±1%, 500mA	M02	05	68eu	VR1	Tor
10N03LA	IPD10N03LA	n-MOSFET	TO-252	10b	LogL, DC/DC-conv, 25V, 30A, 52W, Rds=10.4mΩ(10V), 6.3/18ns	-	-	68fw	-	Inf
10N03LA	IPF10N03LA	n-MOSFET	TO-252	10b	LogL, DC/DC-conv, 25V, 30A, 52W, Rds=10.4mΩ(10V), 6.3/18ns	-	-	68fw	-	Inf
10N03LA	IPS10N03LA	n-MOSFET	TO-251	10b	LogL, DC/DC-conv, 25V, 30A, 52W, Rds=10.4mΩ(10V), 6.3/18ns	-	-	137fw	-	Inf
10N03LA	IPU10N03LA	n-MOSFET	TO-251	10b	LogL, DC/DC-conv, 25V, 30A, 52W, Rds=10.4mΩ(10V), 6.3/18ns	-	-	137fw	-	Inf
10P	XC6503P331JR-G	LVR-IC	TO-252	10aa	LDO, 3.3V±1%, 500mA	M02	05	68eu	VR1	Tor
10R	XC6503P341JR-G	LVR-IC	TO-252	10aa	LDO, 3.4V±1%, 500mA	M02	05	68eu	VR1	Tor
10S	XC6503P351JR-G	LVR-IC	TO-252	10aa	LDO, 3.5V±1%, 500mA	M02	05	68eu	VR1	Tor
10T	XC6503P361JR-G	LVR-IC	TO-252	10aa	LDO, 3.6V±1%, 500mA	M02	05	68eu	VR1	Tor
10U	XC6503P371JR-G	LVR-IC	TO-252	10aa	LDO, 3.7V±1%, 500mA	M02	05	68eu	VR1	Tor
10V	XC6503P381JR-G	LVR-IC	TO-252	10aa	LDO, 3.8V±1%, 500mA	M02	05	68eu	VR1	Tor
10X	XC6503P391JR-G	LVR-IC	TO-252	10aa	LDO, 3.9V±1%, 500mA	M02	05	68eu	VR1	Tor
10Y	XC6503P401JR-G	LVR-IC	TO-252	10aa	LDO, 4.0V±1%, 500mA	M02	05	68eu	VR1	Tor

SECTION 4

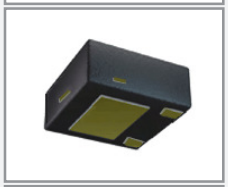
SOT-89-5 CASE SMD SEMICONDUCTOR COMPONENTS

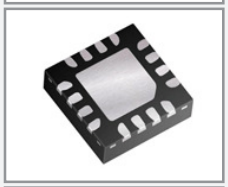


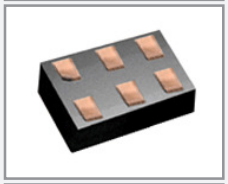
SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
00E	XC6505A151PR	LVR-IC	SOT-89-5	6n	LDO, 1.5V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00F	XC6505A161PR	LVR-IC	SOT-89-5	6n	LDO, 1.6V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00H	XC6505A171PR	LVR-IC	SOT-89-5	6n	LDO, 1.7V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00K	XC6505A181PR	LVR-IC	SOT-89-5	6n	LDO, 1.8V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00L	XC6505A191PR	LVR-IC	SOT-89-5	6n	LDO, 1.9V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00M	XC6505A201PR	LVR-IC	SOT-89-5	6n	LDO, 2.0V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00N	XC6505A211PR	LVR-IC	SOT-89-5	6n	LDO, 2.1V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00P	XC6505A221PR	LVR-IC	SOT-89-5	6n	LDO, 2.2V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00R	XC6505A231PR	LVR-IC	SOT-89-5	6n	LDO, 2.3V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00S	XC6505A241PR	LVR-IC	SOT-89-5	6n	LDO, 2.4V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00T	XC6505A251PR	LVR-IC	SOT-89-5	6n	LDO, 2.5V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00U	XC6505A261PR	LVR-IC	SOT-89-5	6n	LDO, 2.6V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00V	XC6505A271PR	LVR-IC	SOT-89-5	6n	LDO, 2.7V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00X	XC6505A281PR	LVR-IC	SOT-89-5	6n	LDO, 2.8V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00Y	XC6505A291PR	LVR-IC	SOT-89-5	6n	LDO, 2.9V±1%, 200mA, +CE	-	05	32um	VR4	Tor
00Z	XC6505A301PR	LVR-IC	SOT-89-5	6n	LDO, 3.0V±1%, 200mA, +CE	-	05	32um	VR4	Tor
010	XC6505A311PR	LVR-IC	SOT-89-5	6n	LDO, 3.1V±1%, 200mA, +CE	-	05	32um	VR4	Tor
011	XC6505A321PR	LVR-IC	SOT-89-5	6n	LDO, 3.2V±1%, 200mA, +CE	-	05	32um	VR4	Tor
012	XC6505A331PR	LVR-IC	SOT-89-5	6n	LDO, 3.3V±1%, 200mA, +CE	-	05	32um	VR4	Tor
013	XC6505A341PR	LVR-IC	SOT-89-5	6n	LDO, 3.4V±1%, 200mA, +CE	-	05	32um	VR4	Tor
014	XC6505A351PR	LVR-IC	SOT-89-5	6n	LDO, 3.5V±1%, 200mA, +CE	-	05	32um	VR4	Tor
015	XC6505A361PR	LVR-IC	SOT-89-5	6n	LDO, 3.6V±1%, 200mA, +CE	-	05	32um	VR4	Tor
016	XC6505A371PR	LVR-IC	SOT-89-5	6n	LDO, 3.7V±1%, 200mA, +CE	-	05	32um	VR4	Tor
017	XC6505A381PR	LVR-IC	SOT-89-5	6n	LDO, 3.8V±1%, 200mA, +CE	-	05	32um	VR4	Tor
018	XC6505A391PR	LVR-IC	SOT-89-5	6n	LDO, 3.9V±1%, 200mA, +CE	-	05	32um	VR4	Tor
019	XC6505A401PR	LVR-IC	SOT-89-5	6n	LDO, 4.0V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01A	XC6505A411PR	LVR-IC	SOT-89-5	6n	LDO, 4.1V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01B	XC6505A421PR	LVR-IC	SOT-89-5	6n	LDO, 4.2V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01C	XC6505A431PR	LVR-IC	SOT-89-5	6n	LDO, 4.3V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01D	XC6505A441PR	LVR-IC	SOT-89-5	6n	LDO, 4.4V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01E	XC6505A451PR	LVR-IC	SOT-89-5	6n	LDO, 4.5V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01F	XC6505A461PR	LVR-IC	SOT-89-5	6n	LDO, 4.6V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01H	XC6505A471PR	LVR-IC	SOT-89-5	6n	LDO, 4.7V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01K	XC6505A481PR	LVR-IC	SOT-89-5	6n	LDO, 4.8V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01L	XC6505A491PR	LVR-IC	SOT-89-5	6n	LDO, 4.9V±1%, 200mA, +CE	-	05	32um	VR4	Tor
01M	XC6505A501PR	LVR-IC	SOT-89-5	6n	LDO, 5.0V±1%, 200mA, +CE	-	05	32um	VR4	Tor
020	ELM85103A	LVR-IC	SOT-89-5	6h	LDO, 1.0V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
020	XC6505A611PR	LVR-IC	SOT-89-5	6n	LDO, 6.1V±1%, 200mA, +CE	-	05	32um	VR4	Tor
021	XC6505A621PR	LVR-IC	SOT-89-5	6n	LDO, 6.2V±1%, 200mA, +CE	-	05	32um	VR4	Tor
022	XC6505A631PR	LVR-IC	SOT-89-5	6n	LDO, 6.3V±1%, 200mA, +CE	-	05	32um	VR4	Tor
023	XC6505A641PR	LVR-IC	SOT-89-5	6n	LDO, 6.4V±1%, 200mA, +CE	-	05	32um	VR4	Tor
024	XC6505A651PR	LVR-IC	SOT-89-5	6n	LDO, 6.5V±1%, 200mA, +CE	-	05	32um	VR4	Tor
025	XC6505A661PR	LVR-IC	SOT-89-5	6n	LDO, 6.6V±1%, 200mA, +CE	-	05	32um	VR4	Tor
026	XC6505A671PR	LVR-IC	SOT-89-5	6n	LDO, 6.7V±1%, 200mA, +CE	-	05	32um	VR4	Tor
027	XC6505A681PR	LVR-IC	SOT-89-5	6n	LDO, 6.8V±1%, 200mA, +CE	-	05	32um	VR4	Tor
028	ELM85083A	LVR-IC	SOT-89-5	6h	LDO, 0.8V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
028	XC6505A691PR	LVR-IC	SOT-89-5	6n	LDO, 6.9V±1%, 200mA, +CE	-	05	32um	VR4	Tor
029	ELM85093A	LVR-IC	SOT-89-5	6h	LDO, 0.9V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
029	XC6505A701PR	LVR-IC	SOT-89-5	6n	LDO, 7.0V±1%, 200mA, +CE	-	05	32um	VR4	Tor
02A	ELM85113A	LVR-IC	SOT-89-5	6h	LDO, 1.1V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02B	ELM85123A	LVR-IC	SOT-89-5	6ha	LDO, 1.2V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02B	ELM85123A	LVR-IC	SOT-89-5	6h	LDO, 1.2V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02C	ELM85133A	LVR-IC	SOT-89-5	6h	LDO, 1.3V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02C	ELM85133A	LVR-IC	SOT-89-5	6ha	LDO, 1.3V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02D	ELM85143A	LVR-IC	SOT-89-5	6h	LDO, 1.4V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02D	ELM85143A	LVR-IC	SOT-89-5	6ha	LDO, 1.4V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02E	ELM85153A	LVR-IC	SOT-89-5	6ha	LDO, 1.5V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02E	ELM85153A	LVR-IC	SOT-89-5	6h	LDO, 1.5V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02E	ELM85263A	LVR-IC	SOT-89-5	6ha	LDO, 2.6V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02F	ELM85163A	LVR-IC	SOT-89-5	6ha	LDO, 1.6V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02F	ELM85163A	LVR-IC	SOT-89-5	6h	LDO, 1.6V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02G	ELM85173A	LVR-IC	SOT-89-5	6ha	LDO, 1.7V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02G	ELM85173A	LVR-IC	SOT-89-5	6h	LDO, 1.7V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02H	ELM85183A	LVR-IC	SOT-89-5	6ha	LDO, 1.8V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02H	ELM85183A	LVR-IC	SOT-89-5	6h	LDO, 1.8V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02J	ELM85193A	LVR-IC	SOT-89-5	6ha	LDO, 1.9V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02J	ELM85193A	LVR-IC	SOT-89-5	6h	LDO, 1.9V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02K	ELM85203A	LVR-IC	SOT-89-5	6h	LDO, 2.0V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02K	ELM85203A	LVR-IC	SOT-89-5	6ha	LDO, 2.0V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02L	ELM85213A	LVR-IC	SOT-89-5	6ha	LDO, 2.1V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm

SECTION 5

BGA, DFN and QFN case SMD semiconductor components



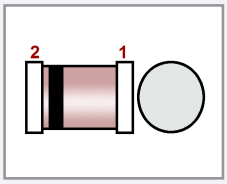


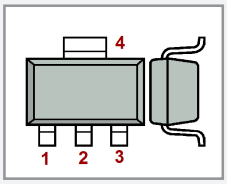


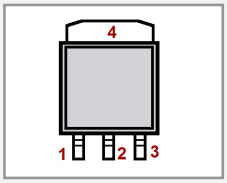
SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
+AAT	MAX9724AETC+	Lin-IC	QFN-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+AAU	MAX9724BETC+	Lin-IC	QFN-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+AAW	MAX9718BETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
+AAX	MAX9718CETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
+AAY	MAX9718DETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
+ABJ	MAX9724CETC+	Lin-IC	QFN-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+ABK	MAX9724DETC+	Lin-IC	QFN-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+ACB	MAX98307EWC+	Lin-IC	BGA-12	9ad	APA, BTL, class-D, 2.7..6.6V, 3.3W(5V/3Ω), s-dwn.	-	-	39a5	-	Max
+ACP	MAX9830AETA+	Lin-IC	TDFN-8	9ad	APA, 2.6..5.5V, 2W(5V/4Ω), s-dwn.	-	-	92a5	-	Max
+ADB	MAX98300ETA+T	Lin-IC	TDFN-8	9ad	APA, BTL, class-D, 2.7..5.5V, 2.6W(5V/4Ω), s-dwn.	-	-	92a5	-	Max
+ADH	MAX9724AEBC+T	Lin-IC	BGA-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	39a5	-	Max
+ADI	MAX9724BEBC+T	Lin-IC	BGA-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	39a5	-	Max
+ADX	MAX9718BEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+ADZ	MAX9718CEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+AEA	MAX9718DEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+AEH	MAX9724DEBC+T	Lin-IC	BGA-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	39a5	-	Max
+AER	MAX98302ETD+	Lin-IC	TDFN-14	9ad	APA, BTL, class-D, 2.7..5.5V, 2x2.4W(5V/4Ω), s-dwn.	-	-	37	-	Max
+AEV	MAX98306ETD+	Lin-IC	TDFN-14	9ad	APA, BTL, 2.7..5.5V, 2x3.7W(5V/4Ω), s-dwn.	-	-	37	-	Max
+AFB	MAX9718EEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+AFC	MAX9718FEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+AFD	MAX9718GEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+AFE	MAX9718HEBL+TG45	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	39/AFP54	AFP54	Max
+AGE	MAX9724CEBC+T	Lin-IC	BGA-12	9ad	APA, 2.7..5.5V, 2x60mW(3V/32Ω), s-dwn.	-	-	39a5	-	Max
+AIF	MAX97220AETE+	Lin-IC	QFN-16	9ad	APA, 2.4..5.5V, 2x125mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+AIG	MAX97220BETE+	Lin-IC	QFN-16	9ad	APA, 2.4..5.5V, 2x125mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+AIH	MAX97220CETE+	Lin-IC	QFN-16	9ad	APA, 2.4..5.5V, 2x125mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+AIH	MAX98300EWL+	Lin-IC	BGA-9	9ad	APA, BTL, class-D, 2.7..5.5V, 2.6W(5V/4Ω), s-dwn.	-	-	39a5	-	Max
+AII	MAX97220DETE+	Lin-IC	QFN-16	9ad	APA, 2.4..5.5V, 2x125mW(3V/32Ω), s-dwn.	-	-	38	-	Max
+AIN	MAX98307ETE+	Lin-IC	TQFN-16	9ad	APA, BTL, class-D, 2.7..6.6V, 3.3W(5V/3Ω), s-dwn.	-	-	38	-	Max
+AIY	MAX98309EWL+	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), s-dwn.	-	-	39a5	-	Max
+AIZ	MAX98310EWL+	Lin-IC	BGA-9	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), s-dwn.	-	-	39a5	-	Max
+ASY	MAX9718EETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
+ASZ	MAX9718FETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
+ATA	MAX9718GETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
+ATB	MAX9718HETB+T	Lin-IC	DFN-10	9ad	APA, BTL, 2.7..5.5V, 1.4W(5V/4Ω), select s-dwn.	-	-	37/AFP20	AFP20	Max
0	FP6121-AWDG	LVR-IC	TDFN-6	9m	LDO, 2-out, Vout1/Vout2=3.3V/2.8V±2%, 150mA, +CEV, Green pack.	-	-	56xv	VR19	Fit
0	TCR3UG30A	LVR-IC	WCSP4F	9m	LDO, 3.0V±1%, 300mA, +CE, CL	H16a	-	63bc*	VR4	Tos
0	TCR3UG30B	LVR-IC	WCSP4F	9m	LDO, 3.0V±1%, 300mA, +CE	H16b	-	63bc*	VR4	Tos
0	TCR4DG30	LVR-IC	WCSP4E	9m	LDO, 3.0V±1%, 420mA, +CE	H16a	-	63bc*	VR4	Tos
0	TCR5RG30A	LVR-IC	WCSP4F	9ur	LDO, 3.0V±1.5%, 500mA, +CE	H16d	-	63bc*	VR4	Tos
00	74LVC1G74XVS8G	CMOS-Log	XTDFN-1.4x1-8L	9us	Positive edge-triggered D-type flip-flop, set & reset, H-free	-	-	157/Log59	Log59	Sgm
00	RP110L081B	LVR-IC	DFN1010-4	9ac	LDO, 0.8V±1%, 150mA, +CE	-	-	115vm	VR4	Ric
00	XC6129C55A9R-G	Vdet-IC	USPQ-4B05	9ad	5.5V±0.8%, -Reset PPO, Rel. Delay	H33b	05	115r2	VD3a	Tor
00	XC6129N55A9R-G	Vdet-IC	USPQ-4B05	9ad	5.5V±0.8%, -Reset ODO, Rel. Delay	H33a	05	115r2	VD1a	Tor
00	XC6224A0817R	LVR-IC	USPN-4B02	9e	LDO, 0.8V±20mV, 150mA, +CE	-	05	58vm	VR4	Tor
00	XC6229D1211R-G	LVR-IC	BGA-4	9ac	LDO, 1.2V±20mV, 300mA, +CE	-	09	63ba*	VR4	Tor
00	XCL104A181H2-G	DC/DC-IC	DFN3030-10B	9ad	PWM st-up, 1.8V±2%, 1.4A, 1.2MHz, +CE, CL	-	05	188a5	DC30	Tor
00	XD6239D1216R-Q	LVR-IC	DFN1010-4C	9ad	LDO, 1.2V±20mV, 300mA, +CE	-	05	117vm	VR4	Tor
00 00 01	PDTB113EQA	Si-pnp-Digi	DFN1010D-3	9zb	Sw., 50V, 500mA, 325mW, R1/R2=1k/1k	-	-	138t3	-	Nxp
00 00 10	PBSS5230QA	Si-pnp	DFN1010D-3	9zb	PM, BISS, 50V, 2A, 360mW, B>200, >100MHz	-	-	138t3	-	Nxp
00 00 11	PBHV8515QA	Si-npn	DFN1010D-3	9zb	HV, 150V, 500mA, 325mW, B=100..215, 75MHz	-	-	138t3	-	Nxp
00 01 00	BC847QAS	Si-npn	DFN1010B-6	9zd	Dual, GP, 50V, 100mA, 230mW, B=200..450, 100MHz	-	-	186/T37	T37	Nxp
00 01 01	NX7002BKXB	n-MOSFET-e	DFN1010B-6	9zd	Dual, T-MOS, 60V, 330mA, 285mW, Rds=2.2Ω(200mA), 4.7/6.9ns	-	-	168/t52	T52	Nxp
00 10 01	BC847AQA	Si-npn	DFN1010D-3	9zb	GP, 50V, 100mA, 280mW, B=110..220, 100MHz	-	-	138t3	-	Nxp
00 10 11	BC847BQA	Si-npn	DFN1010D-3	9zb	GP, 50V, 100mA, 280mW, B=200..450, 100MHz	-	-	138t3	-	Nxp
00 10 10	PBSS5130QA	Si-pnp	DFN1010D-3	9zb	PM, BISS, 30V, 1A, 325mW, B=130..425, 170MHz	-	-	138t3	-	Nxp
00 11 00	BC807-40QA	Si-pnp	DFN1010D-3	9zb	GP, 50V, 500mA, 300mW, 80MHz, B=250..600	-	-	138t3	-	Nxp
00 11 01	BC847CQA	Si-npn	DFN1010D-3	9zb	GP, 50V, 100mA, 280mW, B=420..800, 100MHz	-	-	138t3	-	Nxp
00 11 10	BC857AQA	Si-pnp	DFN1010D-3	9zb	GP, 50V, 100mA, 280mW, B=125..250, >100MHz	-	-	138t3	-	Nxp
00 11 11	BC857AQB	Si-pnp	DFN1010D-3	9zb	GP, 50V, 100mA, 280mW, B=220..475, >100MHz	-	-	138t3	-	Nxp
000	XCL109A181H2-G	DC/DC-IC	CL-2025-02	9ac	PWM st-up, 1.8V±2%, 1.0A, 3.0MHz, +CE, CL	-	13	67kx	DC30	Tor
0000 0011	NX3008NBKMB	n-MOSFET-e	DFN1006B-3	9za	T-MOS, 30V, 530mA, 360mW, Rds=1Ω(350mA), 15/69ns	-	-	22ta	nMOS1	Nxp
0000 0100	NX3008PBKMB	p-MOSFET-e	DFN1006B-3	9za	T-MOS, 30V, 300mA, 360mW, Rds=2.8Ω(200mA), 19/65ns	-	-	22ta	pMOS2	Nxp
0000 1101	2PA1774RMB	Si-pnp	DFN1006B-3	9za	LN, 50V, 100mA, 250mW, >100MHz, B=180..390	-	-	172ta	-	Nxp
0000 1110	2PA1774SMB	Si-pnp	DFN1006B-3	9za	LN, 50V, 100mA, 250mW, >100MHz, B=270..560	-	-	172ta	-	Nxp
0000 1111	2PC4617QMB	Si-npn	DFN1006B-3	9za	GP, 50V, 100mA, 250mW, >100MHz, B=120..270	-	-	22ta	-	Nxp
0001 0000	2PC4617RMB	Si-npn	DFN1006B-3	9za	GP, 50V, 100mA, 250mW, >100MHz, B=180..390	-	-	22ta	-	Nxp
0001 0001	NX138AKH	n-MOSFET-e	DFN0606-3	9zh	T-MOS, 60V, 260mA, 360mW, Rds=2.8Ω(190mA), 1/3ns	-	-	197fh	nMOS1	Nxp
0001 0001	PBSS2515MB	Si-npn	DFN1006B-3	9za	DC/DC-Conv., BISS, 15V, 500mA, 250mW, B>90, 420MHz	-	-	22ta	-	Nxp
0001 0010	PBSS2540MB	Si-npn	DFN1006B-3	9za	DC/DC-Conv., BISS, 40V, 500mA, 250mW, B=50..150, 450MHz	-	-	22ta	-	Nxp

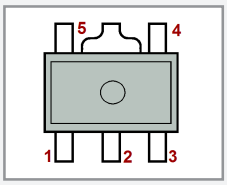
SECTION 6

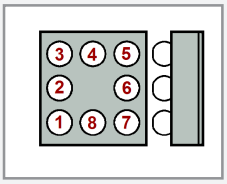
Conventional case drawings. Pin assignment

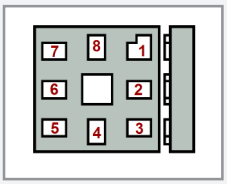


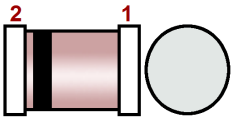












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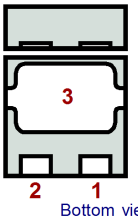
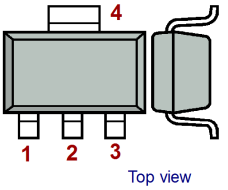


17 Bottom view



Top view

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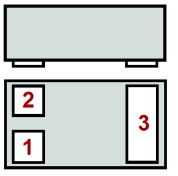

Bottom view

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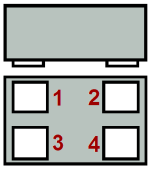

Bottom view

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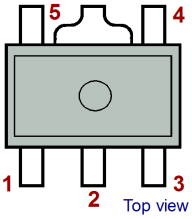

Top view

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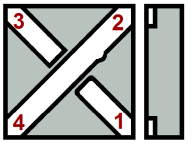

Bottom view

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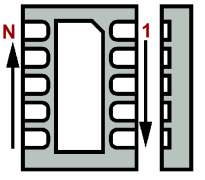

Bottom view

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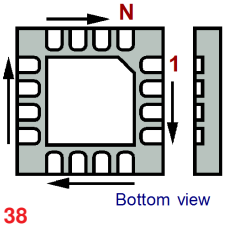

Bottom view

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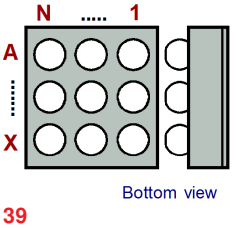

Bottom view

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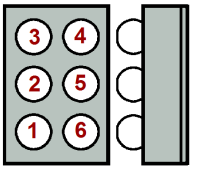

Bottom view

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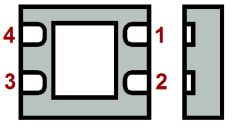

Bottom view

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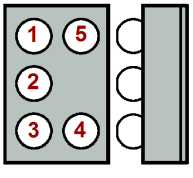

Bottom view

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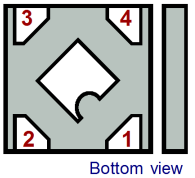

Bottom view

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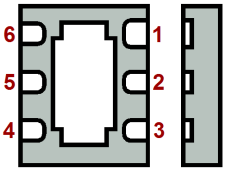

Bottom view

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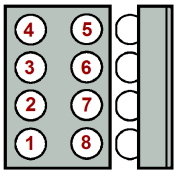

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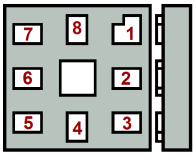

Bottom view

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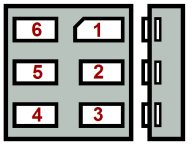

Bottom view

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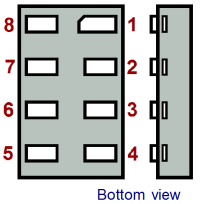

Bottom view

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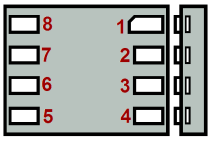

Bottom view

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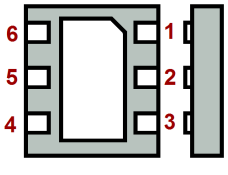

Bottom view

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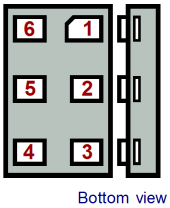

Bottom view

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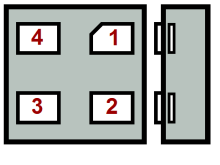

Bottom view

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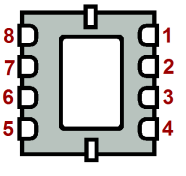

Bottom view

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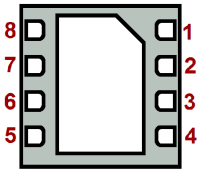

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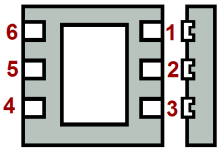

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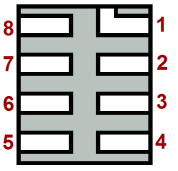

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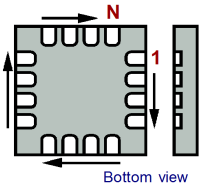

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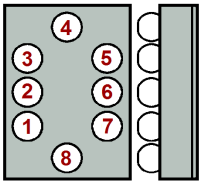

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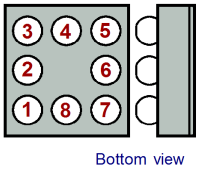

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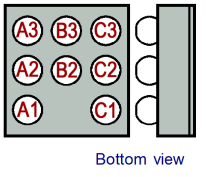

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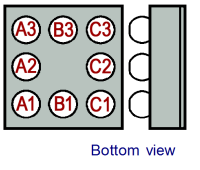

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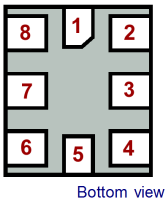

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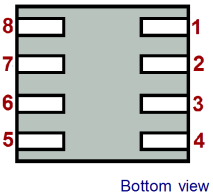

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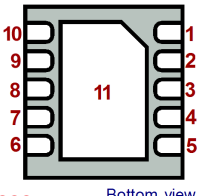

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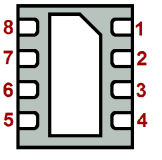

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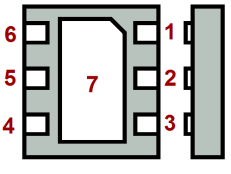

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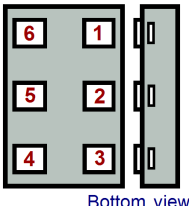

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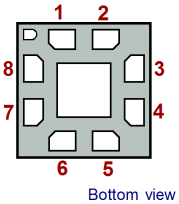

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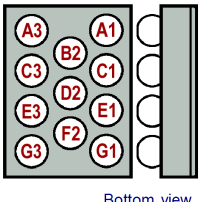

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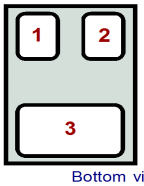

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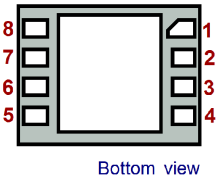

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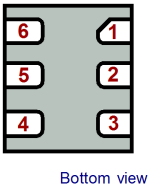

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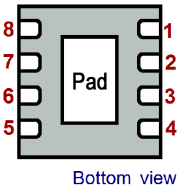


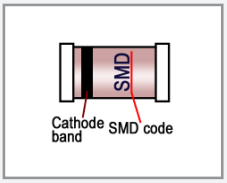
242

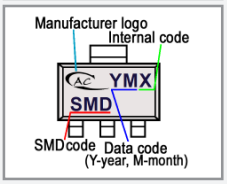
SECTION 6

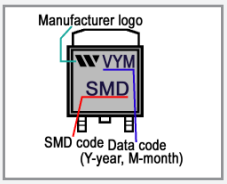
Pinout

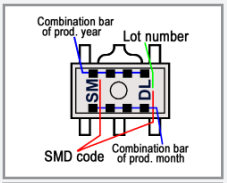
	PIN 1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8
a0	GND	Output	Vcc	+Input	-Input	-	-	-
a1	GND	GND	RF input	GND	GND	RFout/Vcc	-	-
a2	N/C	Anode	Cathode	N/C	Adjust	-	-	-
a3	CE	GND	Vinput	Voutput	Adjust	N/C	-	-
a4	CE	Vinput	Voutput	Switch	GND	Feedback	-	-
a5	No data.	See dsheet.	See sch	-	-	-	-	-
a7	CE	GND	SSC	Vinput	Voutput	-	-	-
a8	Test	GND	Tdet	N/C	Vcc	-	-	-
a9	Tdet	GND	Test	Vcc	-	-	-	-
aa	RF input	GND	RFout/Vcc	-	-	-	-	-
aa*	A1=CE/MODE	A3=Voutput	B2=Lx	C1=Vinput	C3=GND	-	-	-
ab	RF input	GND	GND	RF output	GND	Vcc	-	-
ab*	A1=CE/MODE	A3=Feedb.	B2=Lx	C1=Vinput	C3=GND	-	-	-
ac	Vcc	GND	RF input	GND	GND	RF output	GND	GND
ac*	A1=CE	A2=Vinput	B1=GND	B2=Voutput	-	-	-	-
ad	Input	GND	Vcc	Output	GND	-	-	-
ad*	A1=CE	A3=Vinput	B2=Lx	C1=Voutput	C3=GND	-	-	-
ae	RF input	CTRL	Vcc	RF output	GND	GND	-	-
ae*	A1=Gate	A2=Source	B1=Drain	B2=Source	-	-	-	-
af	N/C	Vinput	N/C	GND	N/C	Voutput	N/C	N/C
af*	A1=Vinput	A3=Vout	B2=GND	C1=CE	C3=Pow. God	-	-	-
ag	Contact	Contact	N/C	-	-	-	-	-
ah	Emitter	Emitter	Base	Emitter	Emitter	Collector	-	-
ai	GND	Vcc	RF input	RF output	-	-	-	-
aj	GND	RFout/Vcc	GND	RF input	-	-	-	-
ak	N/C	Cathode	Anode	-	-	-	-	-
am	RFout/Vcc	GND	RF input	CTRL	-	-	-	-
am1	CTRL	RF input	GND	GND	RF output	Vcc	GND	-
am2	RF input	CE	GND	RF out	Vcc	-	-	-
an	Output	GND	Input	Vcc	GND	-	-	-
ao	Cath.(Anode)	N/C	Cath.(Anode)	An.(Cath.)	-	-	-	-
ap	Cathode	N/C	Cathode	Anode	-	-	-	-
aq	Contact	N/C	Contact	-	-	-	-	-
ar	Contact	Contact	-	-	-	-	-	-
as	Emitter	Emitter	N/C	Base	Collector	Collector	Collector	Collector
at	Cathode	Gate	Anode	-	-	-	-	-
au	CE	SS	Voutput	Vinput	GND	Vbias	-	-
av	Vbias	GND	Vinput	Voutput	SS	CE	-	-
aw	CE	Ilim	Voutput	Vinput	GND	Vbias	-	-
ax	Vbias	GND	Vinput	Voutput	Ilim	CE	-	-
ax*	A1=CE1	A2=Vout1	B1=GND	B2=Vinput	C1=CE2	C2=Voutput2	-	-
ay	GND	GND	RF input	Vcc	Enable	RF output	-	-
az	Vinput	N/C	Voutput	N/C	N/C	N/C	GND	CE
b0	IN1	POS	Vin	Vout	CE	GND	IN2	NEG
b1	Terminal	Gate	Terminal	-	-	-	-	-
b2	Cathode	Anode	GND	-	-	-	-	-
b3	Lx	GND	Voutput	N/C	N/C	-	-	-
ba	An./Cath.	An./Cath.	-	-	-	-	-	-
ba*	A1=GND	A2=Vout	B1=CE	B2=Vin	-	-	-	-
bb	Cathode1	Cathode2	Cathode3	Anode3	Anode2	Anode1	-	-
bb*	A1=GND	A2=CE	B1=Voutput	B2=Vinput	-	-	-	-
bc*	A1=Vinput	A2=Voutput	B1=CE	B2=GND	-	-	-	-
bd	Cathode	Cathode	Anode	-	-	-	-	-
bd*	A1=GND	A2=Vcc	B1=Reset	B2=MR	-	-	-	-
be*	A1=CE	A3=Cb	B2=GND	C1=Voutput	C3=Vinput	-	-	-
bg	Cathode1	Cathode2	Anode2	N/C	Anode1	-	-	-
bg*	A1=Voutput	A2=Vinput	B1=Adj	B2=CE	C1=GND	C2=Vbias	-	-
bh	Anode1	Common Cath.		Anode2	Anode3	Anode4	-	- -
bh*	A1=GND	A3=CE	B2=Cb	C1=Voutput	C3=Vinput	-	-	-
bi	Anode	Cathode	Anode	Anode	Cathode	Anode	-	-
bj*	A1=Voutput	A2=Vinput	B2=GND	C1=CE	C2= Vbias	-	-	-
bk*	A1=Voutput	A2=Vinput	B1=GND	B2=CE	-	-	-	-

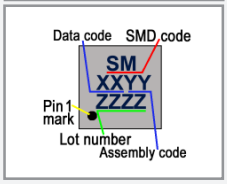
SECTION 8
SMD-code marking style

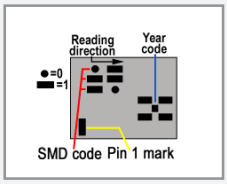












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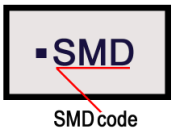

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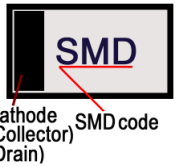

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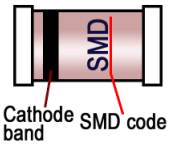

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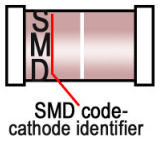

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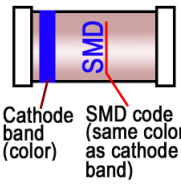
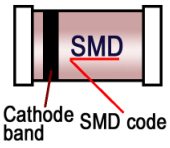


2h



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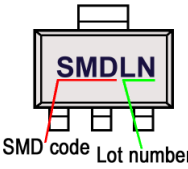

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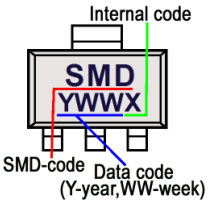

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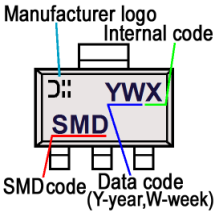

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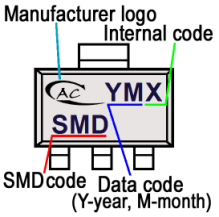

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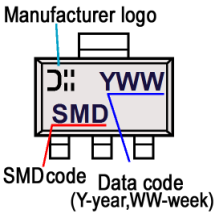

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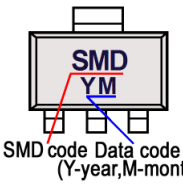

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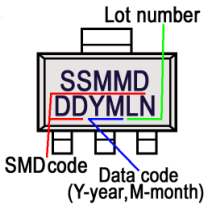

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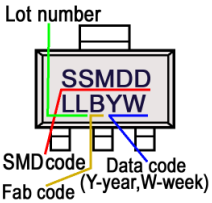

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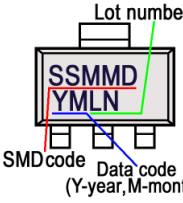

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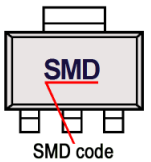

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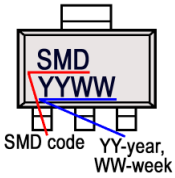

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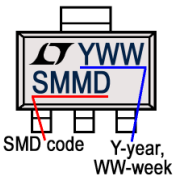

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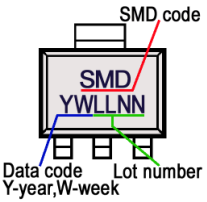

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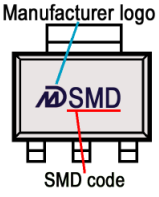

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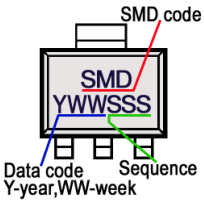

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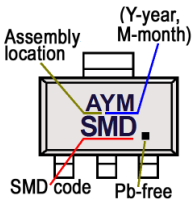

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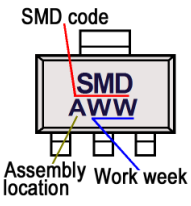

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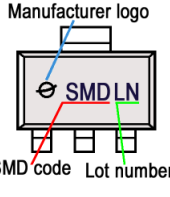
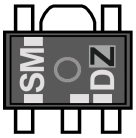
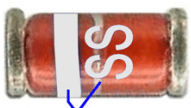


SECTION 9
SMD-code marking attribute



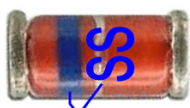
SMD-code and cathode band pink

A53



SMD-code and cathode band white

A54



SMD-code and cathode band blue

A55

A76

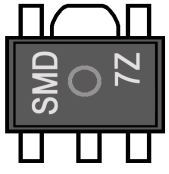
A77

A78

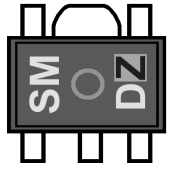
A78a

A83

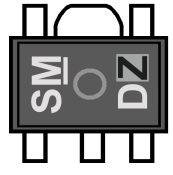
A83a



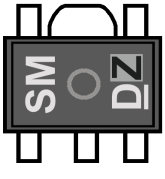
G01



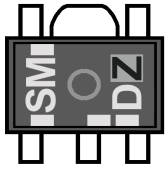
G02



G03



G03a



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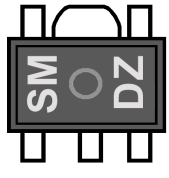

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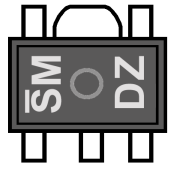
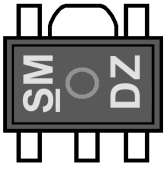
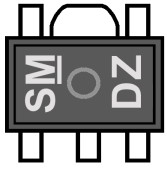


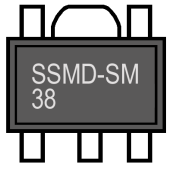
G05a



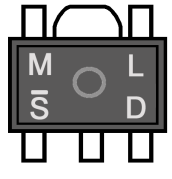
G05b



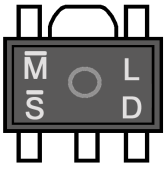
G06



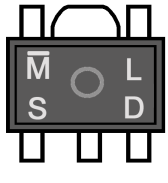
G07



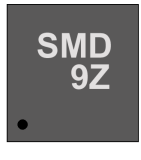
G08



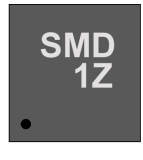
G08a



G08b

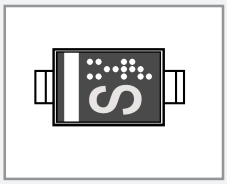


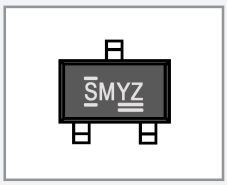
H01

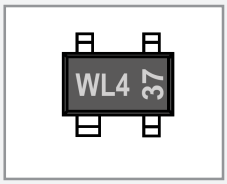


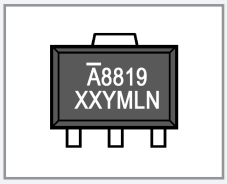
H02

SECTION 9
Additional production data info









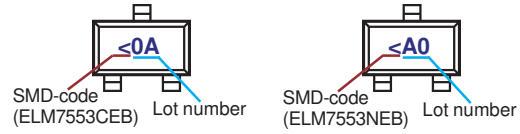
Besides SMD code, the manufacturers can place additional information such as internal production lot number, traceability code, data of production, assembly location etc. The adittional info is an arbitral position and arbitral content (depending of the manufacturer) and can be alphanumeric symbol (symbols) or graphic symbol.

Below we present some additional info.

Lot number.

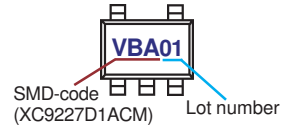
Manufacturer: Elm (ELM Technology Corporation):
Rules 1 (for ODO voltage detectors)
Symbol 1 - A to Z(I, O, X excepted)
Symbol 2 - 0 to 9
Rules 2 (for PPO voltage detectors)
Symbol 1 - 0 to 9
Symbol 2 - A to Z(I, O, X excepted)

Marking example:



Manufacturer: Tor (Torex Semiconductor LTD):
01~09, 0A~0Z, 11~9Z, A1~A9, AA~AZ, B1~ZZ repeated,
(G, I, J, O, Q, W excluded.) * No character inversion used.

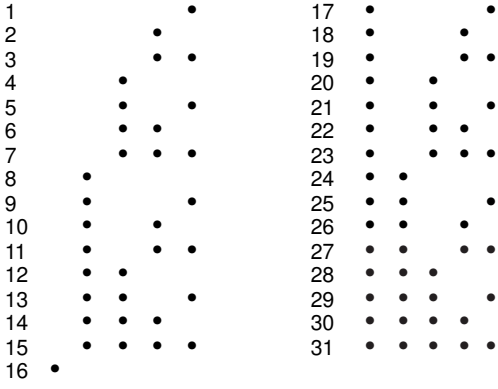
Marking example:



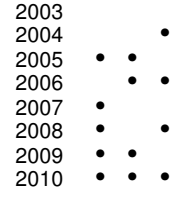
Production data

Manufacturer: Anw (Anwell Semiconductor Corp.)

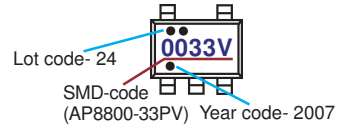
Dot above product code: Lot Code:



Dot under product code: Year Code:



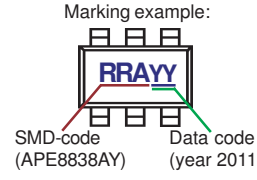
Marking example:



Manufacturer: Ape (Advanced Power Electronics Corp.)

Code	Year
YY	2004, 2008, 2012
YY	2003, 2007, 2011
YY	2002, 2006, 2010
YY	2001, 2005, 2009

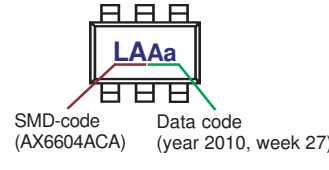
Marking example:



Manufacturer: Axl (AXElite Technology Co., Ltd)

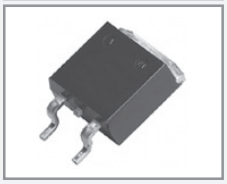
Code	Year	Code	Week
7	2007	A...Z	1...26
8	2008	a...z	27...52
9	2009		
A	2010		
B	2011		
C	2012		

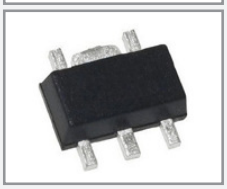
Marking example:



Manufacturer: Di (Diodes Inc.)
Y : Year : 0~9XXX
W : Week : A~Z : 1~26 week; a~z : 27~52 week; z represents 52 and 53 week

SECTION 11
Case drawings





2-1J1A
DFN1006-3L

2-7J1A

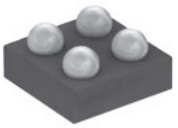
12-7B1A

12-7B2A

ADFN1.5x1.5-6

ADFN3x2-8
DFN2x3-8

AQFN1515-8
MicroPak-8



BGA-4
BGA-4A
CB-4-3

BGA-5
FC-5

BGA-6

BGA-8
DSBGA-8

BGA-8A

BGA-8B

BGA-8C

BGA-9

BGA-10

BGA-11

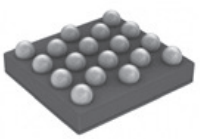
BGA-12

BGA-14

BGA-15

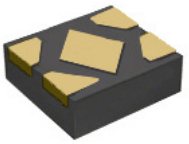
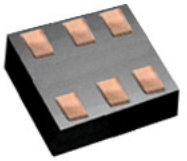
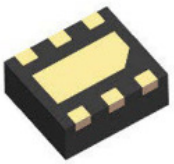
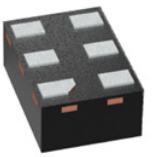
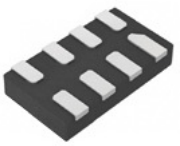
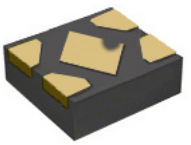
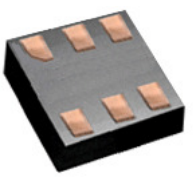
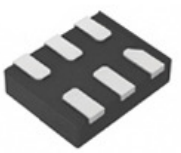
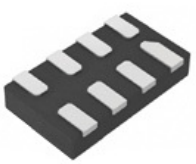
BGA-16

BGA-18



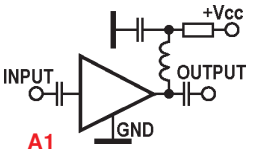
BGA-18A

BGA-20

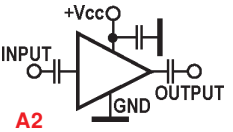
 X2-DFN0910-6	 X2-DFN1010-4 X2-DFN1010-4B	 X2DFN1010-6	 X2-DFN1210-8 X2-DFN2010-8
 X2-DFN1212-6	 X2-DFN1409-6	 X2-DFN1410-6 X2SON-6-1x1	 X2-DFN1612-8
 X2-DFN2010-8 X2SON-8 X2SON-8-1.8x1.2	 X2SON	 X2SON-5	 X2SON-6
 X2SON-DTM	 XDFN1.4x1-8	 XDFN1x1-6	 XDFN4-1x1
 XDFN4-1x1L	 XSON6-U	 XSON6-XF6	 XSON6-XM6
 XTDFN-0808-4AL	 XTDFN-1.4x1-8L		

SECTION 11

Sample schematic diagram



A1



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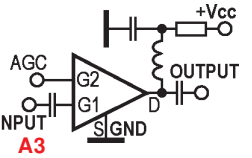

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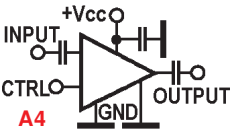

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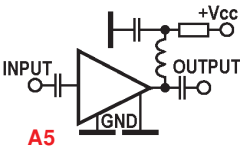

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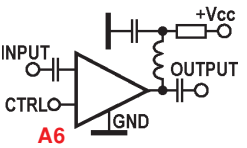

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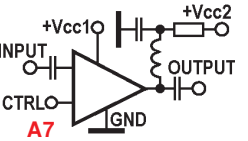

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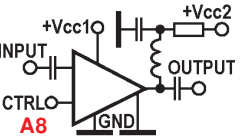
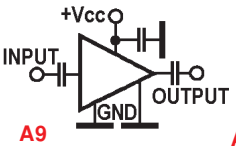


A8



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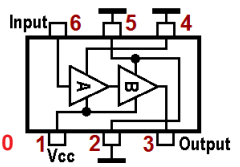

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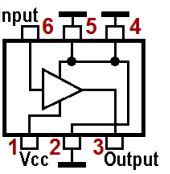

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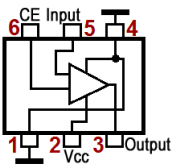

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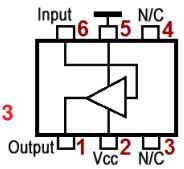
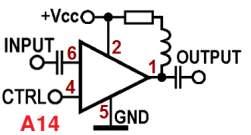


A13



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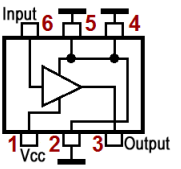

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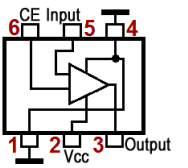

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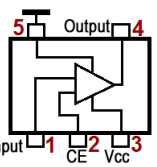

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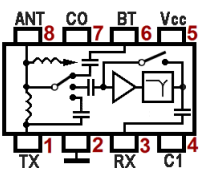
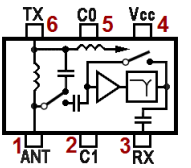
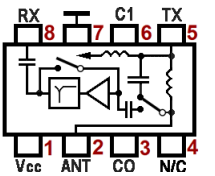


A18



A19



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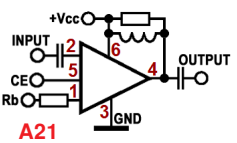

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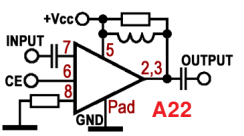

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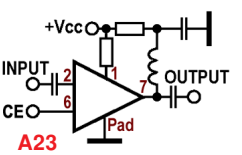
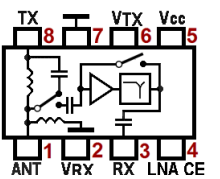


A23



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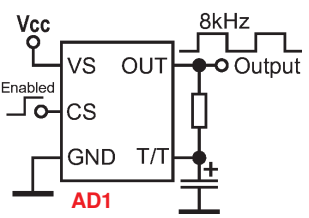

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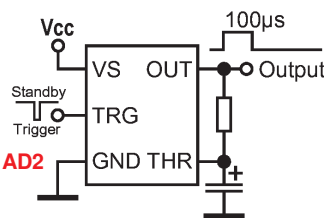

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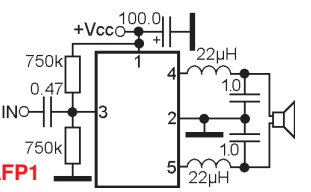

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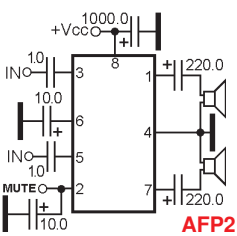

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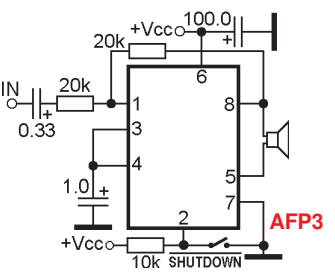

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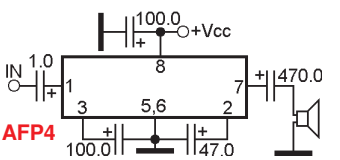

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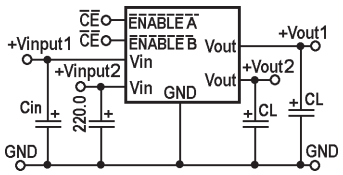

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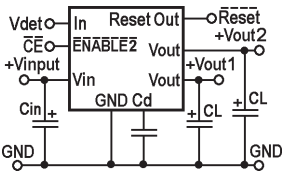

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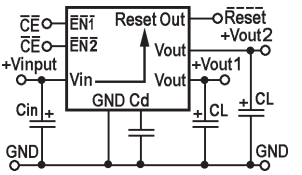

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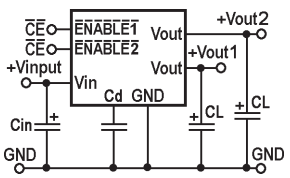

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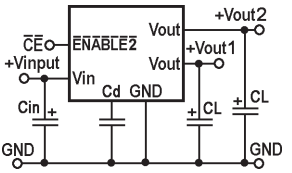

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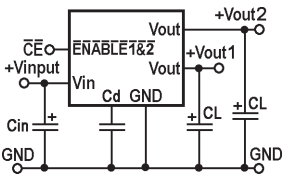

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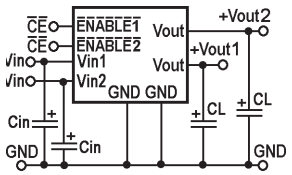

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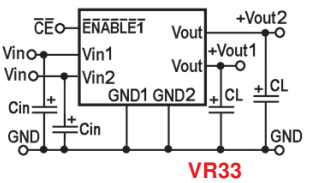

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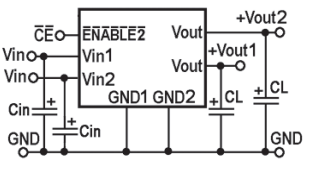

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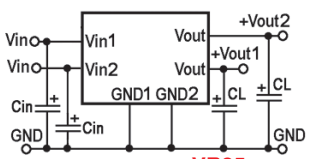

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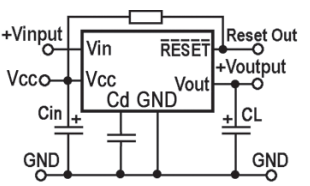

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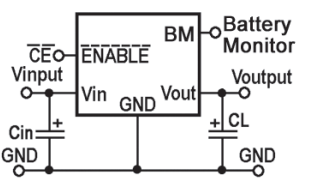

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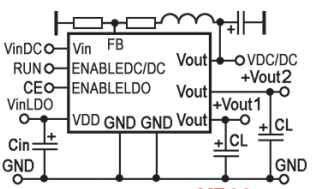

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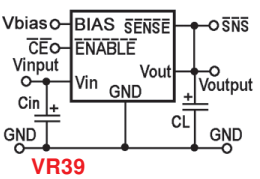

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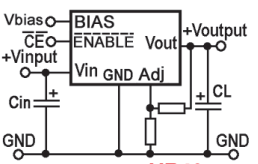

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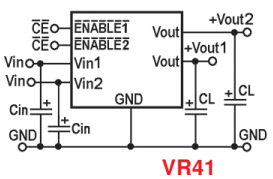

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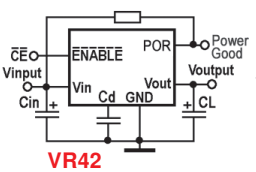

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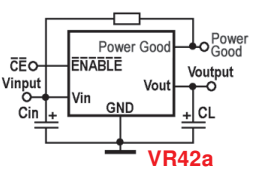

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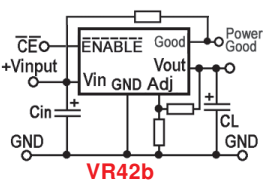

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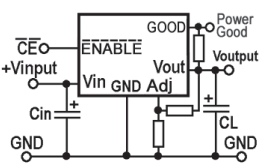

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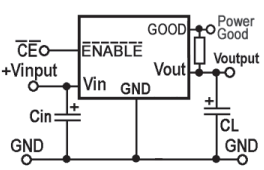

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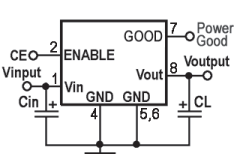

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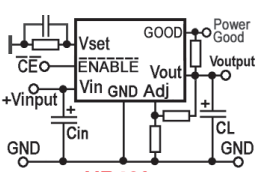

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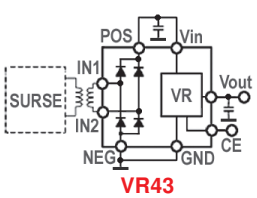

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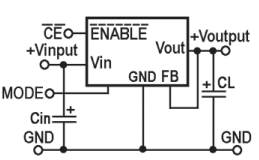

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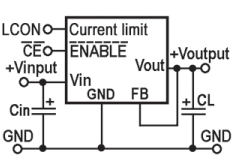

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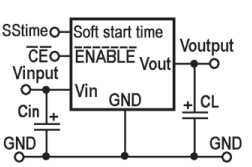

VR46

SECTION 10

Manufacturers logos and URL

3PK- 3PEAK Inc.
http://www.3peakic.com.cn

Aat- Advanced Analog Technology
http://www.aatech.com.tw/index.aspx

Abl- ABLIC Inc.
https://www.ablicinc.com/en/semicon/

Ad- Analog Devices
http://www.analog.com

Adt- ADDtek
http://www.addmtek.com/Index.htm

Afs- Analog Future Chip Co., Ltd.
http://www.afsemi.com/

Agi- Agilent Technologies
www.semiconductor.agilent.com

Agm- Agamem Microelectronic
http://www.agamem.com.tw

Aic- Analog Integrations Corporation
http://www.analog.com.tw

Ali- Alliance Semiconductor
http://www.alsc.com

All- Allegro MicroSystems Inc.
http://www.allegromicro.com

Alt- Aolittel Technology Co., Ltd
http://www.aolittel.com

Ame- AME, Inc.
www.ame.com.tw

Ams- AMOS Technology Limited
http://www.amos-tech.com

Amz- Amazing Microelectronic
http://www.amazingIC.com

Ana- Anachip Corp.
www.anachip.com.tw

Anb- Anbon Semiconductor Co., Ltd.
http://www.anbonsemi.com

Anp- Anpec Electronics Corp.
www.anpec.com.tw

Ans- AnaSem Inc.
http://www.anasem.net/

Ant- Advanced Analogic Technologies, Inc.
http://www.analogictech.com

Anv- Anova Technologies Co. Ltd
http://anova-semi.com/

Zbo- Zibo Micro Commercial Components Corp.
http://www.zbmcc.com/en/

Zbs- Zibo Seno Electronic Engineering Co., Ltd.
http://www.senocn.com/

Zhd- Zhide Electronics Co., Ltd
http://www.cz-zhide.com/

Zlg- Zilog, Inc.
http://www.zilog.com/

Zow- Zowie Technology Corporation
http://www.zowie.com.tw/

Zx- Zetex plc.
http://www.zetex.com