

SMD-codes

SMD-codes.

4-pin, D-pak, I-pak, MELF,
SOT-89, SOT-223 cases
active SMD semiconductor
components marking codes.

- 42.000 semiconductor components SMD-codes:
- Diodes, Transistors, Integrated circuits
- Case pin assignment
- Pinout
- Marking style
- Schematic diagram
- Additional SMD info
- Case drawings
- Manufacturers

DATABOOK



2024-2025 EDITION



<http://www.turuta.md>

ELECTRONICS COMPONENTS

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SMD-codes.

**4-pin, D-pak, I-pak, MELF, SOT-89, SOT-223 cases
active SMD semiconductor components
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DATABOOK

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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 section 19 are submitted the logos 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, upper 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")

Column 2 ("Type")

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

Column 3 ("Function")

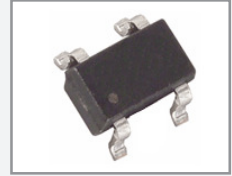
Short definition of the semiconductor component.

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
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
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
LVR-IC	Linear voltage regulator integrated circuit
LVR/Vdet-IC	Linear voltage regulator/Voltage detector combined integrated circuit
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
p-	p-channel junction transistor
PDS-IC	Power distribution switch integrated circuit
PHEMT	Pseudomorphic high electron mobility transistors
PIN-diode	Diode with a wide, undoped intrinsic semiconductor region
PSW-IC	Power Switch IC
Si-diode	Silicon diode
SiGe-diode	Silicon/Germanium diode
Si-npn	Silicon npn transistor
Si-n/p	Silicon npn and pnp transistors area
Si-npn-Darl	Silicon npn Darlington transistor

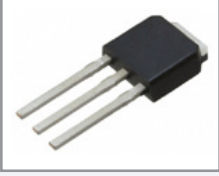
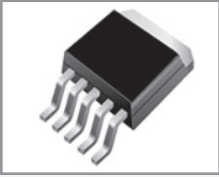
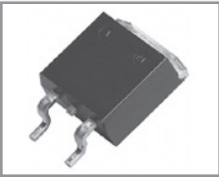
SECTION 1
4-pin case SMD semiconductor components



SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
-	ELM7548CCB	Vdet-IC	SC-82AB	5ca	4.8V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
-	ELM7548NCB	Vdet-IC	SC-82AB	5ca	4.8V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
#	ELM7541CCB	Vdet-IC	SC-82AB	5ca	4.1V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
#	ELM7541NCB	Vdet-IC	SC-82AB	5ca	4.1V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
%	ELM7543CCB	Vdet-IC	SC-82AB	5ca	4.3V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
%	ELM7543NCB	Vdet-IC	SC-82AB	5ca	4.3V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
%MY	BF1100	n-MOSFET	SOT-143	5h	Dual gate, VHF, UHF, 14V, 30mA, 200mW	-	-	24fd	-	Phi
%MZ	BF1100R	n-MOSFET	SOT-143R	5h	Dual gate, VHF, UHF, 14V, 30mA, 200mW	-	-	26fm	-	Phi
*	ELM7513CCB	Vdet-IC	SC-82AB	5ca	1.3V±2%,+Reset PPO	D09	23	26vdl	VD7	Elm
*	ELM7513NCB	Vdet-IC	SC-82AB	5ca	1.3V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
/	ELM7554CCB	Vdet-IC	SC-82AB	5ca	5.4V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
/	ELM7554NCB	Vdet-IC	SC-82AB	5ca	5.4V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
?	ELM7517CCB	Vdet-IC	SC-82AB	5ca	1.7V±2%,+Reset PPO	D09	23	26vdl	VD7	Elm
?	ELM7517NCB	Vdet-IC	SC-82AB	5ca	1.7V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
?	ELM7546CCB	Vdet-IC	SC-82AB	5ca	4.6V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
?	ELM7546NCB	Vdet-IC	SC-82AB	5ca	4.6V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
?	ELM7551CCB	Vdet-IC	SC-82AB	5ca	5.1V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
?	ELM7551NCB	Vdet-IC	SC-82AB	5ca	5.1V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
?	ELM7552CCB	Vdet-IC	SC-82AB	5ca	5.2V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
?	ELM7552NCB	Vdet-IC	SC-82AB	5ca	5.2V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
+	ELM7547CCB	Vdet-IC	SC-82AB	5ca	4.7V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
+	ELM7547NCB	Vdet-IC	SC-82AB	5ca	4.7V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
<	ELM7553CCB	Vdet-IC	SC-82AB	5ca	5.3V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
<	ELM7553NCB	Vdet-IC	SC-82AB	5ca	5.3V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
=	ELM7544CCB	Vdet-IC	SC-82AB	5ca	4.4V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
=	ELM7544NCB	Vdet-IC	SC-82AB	5ca	4.4V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
>	ELM7549CCB	Vdet-IC	SC-82AB	5ca	4.9V±2%, +Reset PPO	D09	23	26vdl	VD7	Elm
>	ELM7549NCB	Vdet-IC	SC-82AB	5ca	4.9V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
0	ELM7509CCB	Vdet-IC	SC-82AB	5ca	0.9V±2%,+Reset PPO	D09	23	26vdl	VD7	Elm
0	ELM7509NCB	Vdet-IC	SC-82AB	5ca	0.9V±2%, +Reset ODO	D09	06	26vdl	VD6	Elm
00	AP8822C-40GI	Vdet-IC	SC-82	5g	4.0V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	26vdl	VD7	Anw
00	AP8822C-40GS	Vdet-IC	SC-82S	5g	4.0V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	90vdl	VD7	Anw
00	AP8822C-40PI	Vdet-IC	SC-82	5g	4.0V±2%, -Reset PPO, Rdt=200ms	D11	-	26vdl	VD7	Anw
00	AP8822C-40PS	Vdet-IC	SC-82S	5g	4.0V±2%, -Reset PPO, Rdt=200ms	D11	-	90vdl	VD7	Anw
00	EC95810C40C7I	Vdet-IC	SC-82-4L	5p	4.0V±2%, -Reset PPO, Td=200ms	D18a	24	26vdl	VD7	Ecm
00	EC95810C40C7S	Vdet-IC	SC-82-4L	5p	4.0V±2%, -Reset PPO, Td=200ms	D18b	24	90vdl	VD7	Ecm
00	IXD5127N55ANR	Vdet-IC	SSOT-24	5k	5.5V±0.8%, -Reset ODO, -MR, Rdt=50ms	D02	05	26cr	VD4	Ixs
00	XC6127N55ANR	Vdet-IC	SSOT-24	5k	5.5V±0.8%, -Reset ODO, -MR, Rdt=50ms	D02	05	26cr	VD4	Tor
00	XC6129C55ANR-G	Vdet-IC	SSOT-24	5a	5.5V±0.8%, -Reset PPO, Releasy Delay	D16	05	26ra	VD3a	Tor
00	XC6129N55ANR-G	Vdet-IC	SSOT-24	5a	5.5V±0.8%, -Reset ODO, Releasy Delay	D17	05	26ra	VD1a	Tor
00	XC6221C081NR	LVR-IC	SSOT-24	5m	LDO, 0.8V±20mV, 200mA, +CE, PDR	-	05	26vn	VR4	Tor
00	XC6225A12ANR-G	LVR-IC	SSOT-24	5a	LDO, 1.25V±30mV, 30mA, +CE	-	05	26vn	VR4	Tor
01	AP8822C-41GI	Vdet-IC	SC-82	5g	4.1V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	26vdl	VD7	Anw
01	AP8822C-41GS	Vdet-IC	SC-82S	5g	4.1V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	90vdl	VD7	Anw
01	AP8822C-41PI	Vdet-IC	SC-82	5g	4.1V±2%, -Reset PPO, Rdt=200ms	D11	-	26vdl	VD7	Anw
01	AP8822C-41PS	Vdet-IC	SC-82S	5g	4.1V±2%, -Reset PPO, Rdt=200ms	D11	-	90vdl	VD7	Anw
01	EC95810C41C7I	Vdet-IC	SC-82-4L	5p	4.1V±2%, -Reset PPO, Td=200ms	D18a	24	26vdl	VD7	Ecm
01	EC95810C41C7S	Vdet-IC	SC-82-4L	5p	4.1V±2%, -Reset PPO, Td=200ms	D18b	24	90vdl	VD7	Ecm
01	MRF9011	Si-npn	SOT-143	5c	UHF, 25V, 30mA, 300mW, B=30..200, 3.8GHz	-	-	24tc	-	Mot
01	XC6221C091NR	LVR-IC	SSOT-24	5m	LDO, 0.9V±20mV, 200mA, +CE, PDR	-	05	26vn	VR4	Tor
01	XC6225A132NR-G	LVR-IC	SSOT-24	5a	LDO, 1.3V±30mV, 30mA, +CE	-	05	26vn	VR4	Tor
02	AP8822C-42GI	Vdet-IC	SC-82	5g	4.2V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	26vdl	VD7	Anw
02	AP8822C-42GS	Vdet-IC	SC-82S	5g	4.2V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	90vdl	VD7	Anw
02	AP8822C-42PI	Vdet-IC	SC-82	5g	4.2V±2%, -Reset PPO, Rdt=200ms	D11	-	26vdl	VD7	Anw
02	AP8822C-42PS	Vdet-IC	SC-82S	5g	4.2V±2%, -Reset PPO, Rdt=200ms	D11	-	90vdl	VD7	Anw
02	EC95810C42C7I	Vdet-IC	SC-82-4L	5p	4.2V±2%, -Reset PPO, Td=200ms	D18a	24	26vdl	VD7	Ecm
02	EC95810C42C7S	Vdet-IC	SC-82-4L	5p	4.2V±2%, -Reset PPO, Td=200ms	D18b	24	90vdl	VD7	Ecm
02	MRF5711	Si-npn	SOT-143	5c	UHF, 20V, 80mA, 580mW, B=50..300, 8GHz	-	-	24tc	-	Mot
02	XC6221C101NR	LVR-IC	SSOT-24	5m	LDO, 1.0V±20mV, 200mA, +CE, PDR	-	05	26vn	VR4	Tor
02	XC6225A13ANR-G	LVR-IC	SSOT-24	5a	LDO, 1.35V±30mV, 30mA, +CE	-	05	26vn	VR4	Tor
03	AP8822C-43GI	Vdet-IC	SC-82	5g	4.3V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	26vdl	VD7	Anw
03	AP8822C-43GS	Vdet-IC	SC-82S	5g	4.3V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	90vdl	VD7	Anw
03	AP8822C-43PI	Vdet-IC	SC-82	5g	4.3V±2%, -Reset PPO, Rdt=200ms	D11	-	26vdl	VD7	Anw
03	AP8822C-43PS	Vdet-IC	SC-82S	5g	4.3V±2%, -Reset PPO, Rdt=200ms	D11	-	90vdl	VD7	Anw
03	EC95810C43C7I	Vdet-IC	SC-82-4L	5p	4.3V±2%, -Reset PPO, Td=200ms	D18a	24	26vdl	VD7	Ecm
03	EC95810C43C7S	Vdet-IC	SC-82-4L	5p	4.3V±2%, -Reset PPO, Td=200ms	D18b	24	90vdl	VD7	Ecm
03	VAM-3	MMIC	SOT-143	5c	RF amplifier, DC..2GHz, 7.5dB (50 Ω)	-	-	24aa	A1	Mc
03	XC6221C111NR	LVR-IC	SSOT-24	5m	LDO, 1.1V±20mV, 200mA, +CE, PDR	-	05	26vn	VR4	Tor
03	XC6225A142NR-G	LVR-IC	SSOT-24	5a	LDO, 1.4V±30mV, 30mA, +CE	-	05	26vn	VR4	Tor
04	AP8822C-44GI	Vdet-IC	SC-82	5g	4.4V±2%, -Reset PPO, Rdt=200ms, H-free	D11d	-	26vdl	VD7	Anw



SECTION 2
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	D2PAK	10s	SBR, Dual, 200V, 10A, Vf<0.87V(5A), 80pF	-	03	68bs	-	Ers
10L250CD2	EBRP10L250CD2	Si-diode	D2PAK	10s	SBR, Dual, 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 3

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



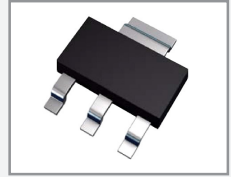
SECTION 4
SOT-89 case SMD semiconductor components



SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin.	Sch.	Mnf.
000	ELM85101A	LVR-IC	SOT-89	4c	LDO, 1.0V±2%, 800mA	-	-	20vl	VR1	Elm
008	ELM85081A	LVR-IC	SOT-89	4c	LDO, 0.8V±2%, 800mA	-	-	20vl	VR1	Elm
009	ELM85091A	LVR-IC	SOT-89	4c	LDO, 0.9±2%, 800mA	-	-	20vl	VR1	Elm
00A	ELM85111A	LVR-IC	SOT-89	4c	LDO, 1.1V±2%, 800mA	-	-	20vl	VR1	Elm
00B	ELM85121A	LVR-IC	SOT-89	4c	LDO, 1.2V±2%, 800mA	-	-	20vl	VR1	Elm
00B	ELM85121A	LVR-IC	SOT-89	4ca	LDO, 1.2V±2%, 600mA	-	20	20vl	VR1	Elm
00C	ELM85131A	LVR-IC	SOT-89	4c	LDO, 1.3V±2%, 800mA	-	-	20vl	VR1	Elm
00C	ELM85131A	LVR-IC	SOT-89	4ca	LDO, 1.3V±2%, 600mA	-	20	20vl	VR1	Elm
00D	ELM85141A	LVR-IC	SOT-89	4c	LDO, 1.4V±2%, 800mA	-	-	20vl	VR1	Elm
00D	ELM85141A	LVR-IC	SOT-89	4ca	LDO, 1.4V±2%, 600mA	-	20	20vl	VR1	Elm
00E	ELM85151A	LVR-IC	SOT-89	4c	LDO, 1.5V±2%, 800mA	-	-	20vl	VR1	Elm
00E	ELM85151A	LVR-IC	SOT-89	4ca	LDO, 1.5V±2%, 600mA	-	20	20vl	VR1	Elm
00E	ELM85261A	LVR-IC	SOT-89	4ca	LDO, 2.6V±2%, 600mA	-	20	20vl	VR1	Elm
00F	ELM85161A	LVR-IC	SOT-89	4c	LDO, 1.6V±2%, 800mA	-	-	20vl	VR1	Elm
00F	ELM85161A	LVR-IC	SOT-89	4ca	LDO, 1.6V±2%, 600mA	-	20	20vl	VR1	Elm
00G	ELM85171A	LVR-IC	SOT-89	4c	LDO, 1.7V±2%, 800mA	-	-	20vl	VR1	Elm
00G	ELM85171A	LVR-IC	SOT-89	4ca	LDO, 1.7V±2%, 600mA	-	20	20vl	VR1	Elm
00H	ELM85181A	LVR-IC	SOT-89	4c	LDO, 1.8V±2%, 800mA	-	-	20vl	VR1	Elm
00H	ELM85181A	LVR-IC	SOT-89	4ca	LDO, 1.8V±2%, 600mA	-	20	20vl	VR1	Elm
00J	ELM85191A	LVR-IC	SOT-89	4c	LDO, 1.9V±2%, 800mA	-	-	20vl	VR1	Elm
00J	ELM85191A	LVR-IC	SOT-89	4ca	LDO, 1.9V±2%, 600mA	-	20	20vl	VR1	Elm
00K	ELM85201A	LVR-IC	SOT-89	4c	LDO, 2.0V±2%, 800mA	-	-	20vl	VR1	Elm
00K	ELM85201A	LVR-IC	SOT-89	4ca	LDO, 2.0V±2%, 600mA	-	20	20vl	VR1	Elm
00L	ELM85211A	LVR-IC	SOT-89	4c	LDO, 2.1V±2%, 800mA	-	-	20vl	VR1	Elm
00L	ELM85211A	LVR-IC	SOT-89	4ca	LDO, 2.1V±2%, 600mA	-	20	20vl	VR1	Elm
00M	ELM85221A	LVR-IC	SOT-89	4c	LDO, 2.2V±2%, 800mA	-	-	20vl	VR1	Elm
00M	ELM85221A	LVR-IC	SOT-89	4ca	LDO, 2.2V±2%, 600mA	-	20	20vl	VR1	Elm
00N	ELM85231A	LVR-IC	SOT-89	4c	LDO, 2.3V±2%, 800mA	-	-	20vl	VR1	Elm
00N	ELM85231A	LVR-IC	SOT-89	4ca	LDO, 2.3V±2%, 600mA	-	20	20vl	VR1	Elm
00P	ELM85241A	LVR-IC	SOT-89	4c	LDO, 2.4V±2%, 800mA	-	-	20vl	VR1	Elm
00P	ELM85241A	LVR-IC	SOT-89	4ca	LDO, 2.4V±2%, 600mA	-	20	20vl	VR1	Elm
00Q	ELM85251A	LVR-IC	SOT-89	4c	LDO, 2.5V±2%, 800mA	-	-	20vl	VR1	Elm
00Q	ELM85251A	LVR-IC	SOT-89	4ca	LDO, 2.5V±2%, 600mA	-	20	20vl	VR1	Elm
00R	ELM85261A	LVR-IC	SOT-89	4c	LDO, 2.6V±2%, 800mA	-	-	20vl	VR1	Elm
00S	ELM85271A	LVR-IC	SOT-89	4c	LDO, 2.7V±2%, 800mA	-	-	20vl	VR1	Elm
00S	ELM85271A	LVR-IC	SOT-89	4ca	LDO, 2.7V±2%, 600mA	-	20	20vl	VR1	Elm
00T	ELM85281A	LVR-IC	SOT-89	4c	LDO, 2.8V±2%, 800mA	-	-	20vl	VR1	Elm
00T	ELM85281A	LVR-IC	SOT-89	4ca	LDO, 2.8V±2%, 600mA	-	20	20vl	VR1	Elm
00U	ELM85291A	LVR-IC	SOT-89	4c	LDO, 2.9V±2%, 800mA	-	-	20vl	VR1	Elm
00U	ELM85291A	LVR-IC	SOT-89	4ca	LDO, 2.9V±2%, 600mA	-	20	20vl	VR1	Elm
00V	ELM85301A	LVR-IC	SOT-89	4c	LDO, 3.0V±2%, 800mA	-	-	20vl	VR1	Elm
00V	ELM85301A	LVR-IC	SOT-89	4ca	LDO, 3.0V±2%, 600mA	-	20	20vl	VR1	Elm
01	Gali-1	MMIC	SOT-89	4b	RF amplifier, DC..8GHz, 11dB (50 Ω)	-	-	20aa	A1	Mc
010	ELM85401A	LVR-IC	SOT-89	4c	LDO, 4.0V±2%, 800mA	-	-	20vl	VR1	Elm
010	ELM85401A	LVR-IC	SOT-89	4ca	LDO, 4.0V±2%, 800mA	-	20	20vl	VR1	Elm
011	ELM85311A	LVR-IC	SOT-89	4c	LDO, 3.1V±2%, 800mA	-	-	20vl	VR1	Elm
011	ELM85311A	LVR-IC	SOT-89	4ca	LDO, 3.1V±2%, 800mA	-	20	20vl	VR1	Elm
012	ELM85321A	LVR-IC	SOT-89	4c	LDO, 3.2V±2%, 800mA	-	-	20vl	VR1	Elm
012	ELM85321A	LVR-IC	SOT-89	4ca	LDO, 3.2V±2%, 800mA	-	20	20vl	VR1	Elm
013	ELM85331A	LVR-IC	SOT-89	4c	LDO, 3.3V±2%, 800mA	-	-	20vl	VR1	Elm
013	ELM85331A	LVR-IC	SOT-89	4ca	LDO, 3.3V±2%, 800mA	-	20	20vl	VR1	Elm
014	ELM85341A	LVR-IC	SOT-89	4c	LDO, 3.4V±2%, 800mA	-	-	20vl	VR1	Elm
014	ELM85341A	LVR-IC	SOT-89	4ca	LDO, 3.4V±2%, 800mA	-	20	20vl	VR1	Elm
015	ELM85351A	LVR-IC	SOT-89	4c	LDO, 3.5V±2%, 800mA	-	-	20vl	VR1	Elm
015	ELM85351A	LVR-IC	SOT-89	4ca	LDO, 3.5V±2%, 800mA	-	20	20vl	VR1	Elm
016	ELM85361A	LVR-IC	SOT-89	4c	LDO, 3.6V±2%, 800mA	-	-	20vl	VR1	Elm
016	ELM85361A	LVR-IC	SOT-89	4ca	LDO, 3.6V±2%, 800mA	-	20	20vl	VR1	Elm
017	ELM85371A	LVR-IC	SOT-89	4c	LDO, 3.7V±2%, 800mA	-	-	20vl	VR1	Elm
017	ELM85371A	LVR-IC	SOT-89	4ca	LDO, 3.7V±2%, 800mA	-	20	20vl	VR1	Elm
018	ELM85381A	LVR-IC	SOT-89	4c	LDO, 3.8V±2%, 800mA	-	-	20vl	VR1	Elm
018	ELM85381A	LVR-IC	SOT-89	4ca	LDO, 3.8V±2%, 800mA	-	20	20vl	VR1	Elm
019	ELM85391A	LVR-IC	SOT-89	4c	LDO, 3.9V±2%, 800mA	-	-	20vl	VR1	Elm
019	ELM85391A	LVR-IC	SOT-89	4ca	LDO, 3.9V±2%, 800mA	-	20	20vl	VR1	Elm
01A	ELM85411A	LVR-IC	SOT-89	4c	LDO, 4.1V±2%, 800mA	-	-	20vl	VR1	Elm
01B	ELM85421A	LVR-IC	SOT-89	4c	LDO, 4.2V±2%, 800mA	-	-	20vl	VR1	Elm
01C	ELM85431A	LVR-IC	SOT-89	4c	LDO, 4.3V±2%, 800mA	-	-	20vl	VR1	Elm
01D	ELM85441A	LVR-IC	SOT-89	4c	LDO, 4.4V±2%, 800mA	-	-	20vl	VR1	Elm
01E	ELM85451A	LVR-IC	SOT-89	4c	LDO, 4.5V±2%, 800mA	-	-	20vl	VR1	Elm
01F	ELM85461A	LVR-IC	SOT-89	4c	LDO, 4.6V±2%, 800mA	-	-	20vl	VR1	Elm
01G	ELM85471A	LVR-IC	SOT-89	4c	LDO, 4.7V±2%, 800mA	-	-	20vl	VR1	Elm



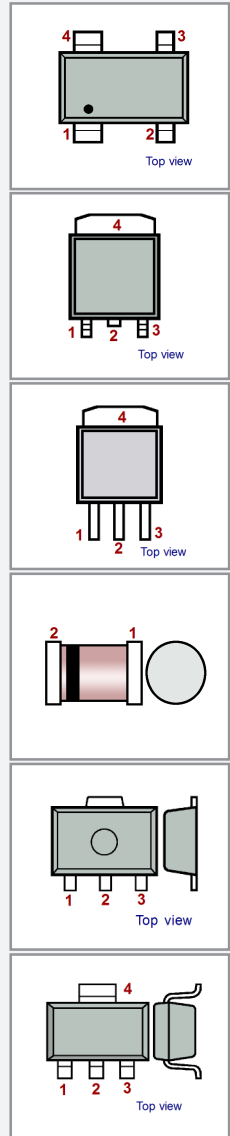
SECTION 5
SOT-223 case SMD semiconductor components

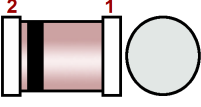
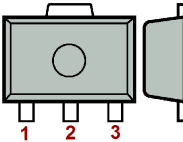
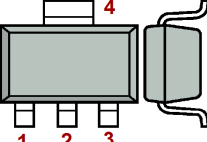
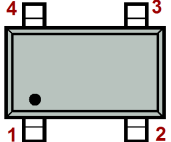
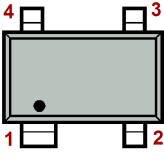
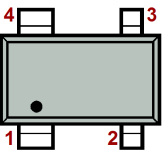
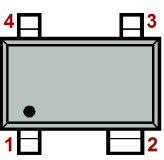
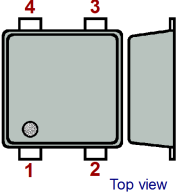
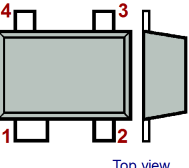
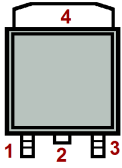
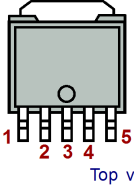
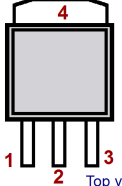
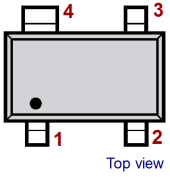
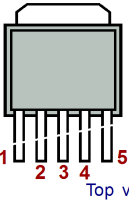
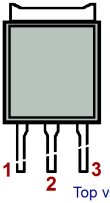
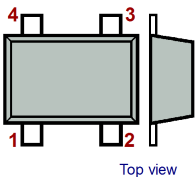


SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
01N60C3	SPN01N60C3	n-MOSFET	SOT-223	4k	HV, LogL, 650V, 300mA, 1.8W, 5.5 Ω(500mA), 45/60ns	-	-	21f2	-	Inf
02N60C3	SPN02N60C3	n-MOSFET	SOT-223	4k	HV, LogL, 600V, 400mA, 1.8W, 2.0 Ω(1.1A), 6/68ns	-	-	21f2	-	Inf
02N60S5	SPN02N60S5	n-MOSFET	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	-	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 6
Conventional case drawings. Pin assignment



 <p>15</p>	 <p>20</p>	 <p>21</p>	 <p>23</p>
 <p>24</p>	 <p>25</p>	 <p>26</p>	 <p>42</p>
 <p>59</p>	 <p>68</p>	 <p>69</p>	 <p>84</p>
 <p>90</p>	 <p>111</p>	 <p>137</p>	 <p>144</p>



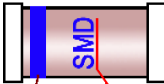

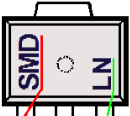
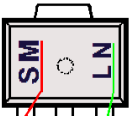
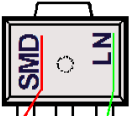
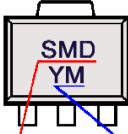
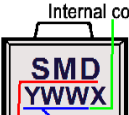
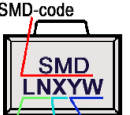




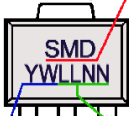
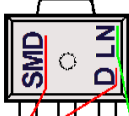
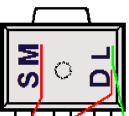

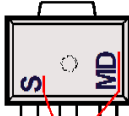
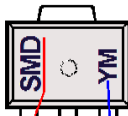


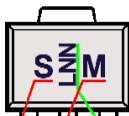
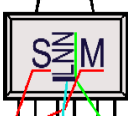
SECTION 7
Pinout (table)



	PIN 1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8
a0	GND	Output	Vcc	+Input	-Input	-	-	-
a1	GND	GND	Input	GND	GND	Vcc/Output	-	-
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 datash.	See sch	-	-	-	-	-
a7	CE	GND	SSC	Vinput	Voutput	-	-	-
a8	Test	GND	Tdet	N/C	Vcc	-	-	-
a9	Tdet	GND	Test	Vcc	-	-	-	-
aa	Input	GND	Vcc/Output	GND	-	-	-	-
aa*	A1=CE/MODE	A3=Voutput	B2=Lx	C1=Vinput	C3=GND	-	-	-
ab	Input	GND	GND	Output	GND	Vcc	-	-
ab*	A1=CE/MODE	A3=Feedb.	B2=Lx	C1=Vinput	C3=GND	-	-	-
ac	Vcc	GND	Input	GND	GND	Output	GND	GND
ac*	A1-CE	A2=Vinput	B1=GND	B2=Voutput	-	-	-	-
ad	Input	GND	Vcc	Output	GND	-	-	-
ae	Input	Vcc	GND	Output	GND	GND	-	-
af	N/C	Vinput	N/C	GND	N/C	Voutput	N/C	N/C
ag	Contact	Contact	N/C	-	-	-	-	-
ah	Emitter	Emitter	Base	Emitter	Emitter	Collector	-	-
ai	GND	Vcc	Input	Output	-	-	-	-
aj	GND	Vcc/Vout	GND	Input	-	-	-	-
ak	N/C	Cathode	Anode	-	-	-	-	-
am	Vcc/Output	GND	Input	GND	-	-	-	-
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=Voutput1	B1=GND	B2=Vinput	C1=CE2	C2=Voutput2	-	-
ay*	A1=Voutput2	A2=Vcc	A3=Voutput1	B1=CE2	B2=GND	B3=CE1	-	-
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	-	-	-	-	-
ba	Anode/Cath.	Anode/Cath.	-	-	-	-	-	-
ba*	A1=GND	A2=Voutput	B1=CE	B2=Vinput	-	-	-	-
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	-	-	-
bf*	A1=Output L	A2=GND	A3=Output R	B1=Input L	B3=Input R	C1=Shutdown	C2=Vcc	C3=Cext
bg	Cathode1	Cathode2	Anode2	N/C	Anode1	-	-	-
bg*	A1=Voutput	A2=Vinput	B1=Adj	B2=CE	C1=GND	C2=Vbias	-	-
bh	Anode1	Com. 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	-	-	-	-
bm1	N/C	Cout	Dout	GND	V+	V-	-	-
bm2	V-	V+	GND	Dout	Cout	-	-	-
bn	OVP	Vinput	CE	A GND	N/C	Feedback	Switching	P GND
bp	Cathode	Cathode	Anode	Anode	Cathode	Cathode	-	-
bq	GND	Voutput	L x	-	-	-	-	-
br	GND	Voutput	Ext	-	-	-	-	-


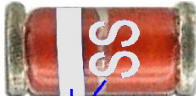







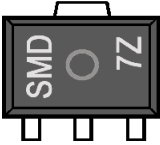
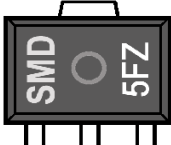
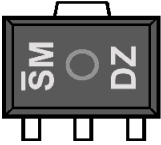
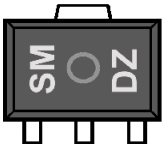
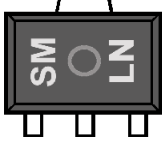
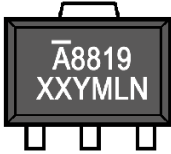
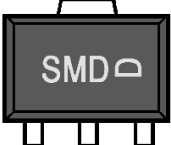
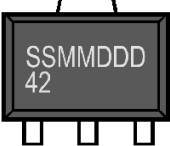
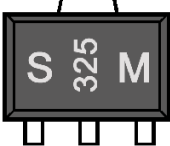
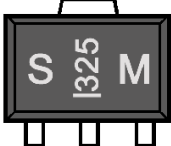
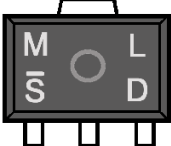
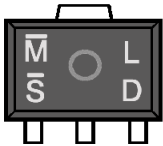
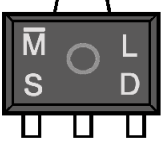
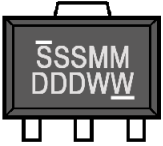
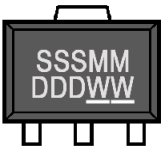
SECTION 8
SMD-codes marking style



<p style="text-align: center;">2c</p>  <p>Cathode band SMD code band</p>	<p style="text-align: center;">2ca</p>  <p>SMD code-cathode identifier</p>	<p style="text-align: center;">2g</p>  <p>Cathode band (color) SMD code (same color as cathode band)</p>	<p style="text-align: center;">2h</p>  <p>Cathode band SMD code band</p>
<p style="text-align: center;">4a</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4aa</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4ab</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4b</p>  <p>SMD code Data code (Y-year, M-month)</p>
<p style="text-align: center;">4ba</p>  <p>Internal code SMD-code</p> <p>SMD-code Data code (Y-year, W-week)</p>	<p style="text-align: center;">4bb</p>  <p>SMD-code Lot number Data code Fab code (Y-year, W-week)</p>	<p style="text-align: center;">4bc</p>  <p>SMD-code Data code (Y-year, W-week)</p>	<p style="text-align: center;">4bd</p>  <p>SMD-code Data code (Y-year, W-week)</p>
<p style="text-align: center;">4be</p>  <p>Manufacturer logo SMD-code Data code Fab code (Y-year, W-week)</p>	<p style="text-align: center;">4bf</p>  <p>Manufacturer logo SMD-code Data code Lot number Assmby loc. Y-year, WW-week</p>	<p style="text-align: center;">4bg</p>  <p>SMD-code Data code Y-year, W-week Lot number</p>	<p style="text-align: center;">4c</p>  <p>SMD code Lot number</p>
<p style="text-align: center;">4ca</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4cb</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4d</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4e</p>  <p>SMD code Data code (Y-year, M-month)</p>
<p style="text-align: center;">4ea</p>  <p>SMD code Data code (Y-year, M-month)</p>	<p style="text-align: center;">4f</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4fa</p>  <p>SMD code Lot number</p>	<p style="text-align: center;">4fb</p>  <p>SMD code Lot number Pb-free</p>

SECTION 9
SMD-code attribute



<p style="text-align: center;">A53</p>  <p style="text-align: center;">SMD-code and cathode band pink</p>	<p style="text-align: center;">A54</p>  <p style="text-align: center;">SMD-code and cathode band white</p>	<p style="text-align: center;">A55</p>  <p style="text-align: center;">SMD-code and cathode band blue</p>	<p style="text-align: center;">A76</p> 
<p style="text-align: center;">A77</p> 	<p style="text-align: center;">A78</p> 	<p style="text-align: center;">A78A</p> 	<p style="text-align: center;">A83</p> 
<p style="text-align: center;">A83A</p> 	<p style="text-align: center;">C01</p> 	<p style="text-align: center;">C02</p> 	<p style="text-align: center;">C03</p> 
<p style="text-align: center;">C04</p> 	<p style="text-align: center;">C07</p> 	<p style="text-align: center;">C08</p> 	<p style="text-align: center;">C09</p> 
<p style="text-align: center;">C10</p> 	<p style="text-align: center;">C11</p> 	<p style="text-align: center;">C12</p> 	<p style="text-align: center;">C13</p> 
<p style="text-align: center;">C13A</p> 	<p style="text-align: center;">C13B</p> 	<p style="text-align: center;">C14</p> 	<p style="text-align: center;">C14A</p> 

SECTION 10
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 additional info is an arbitrary position and arbitrary 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

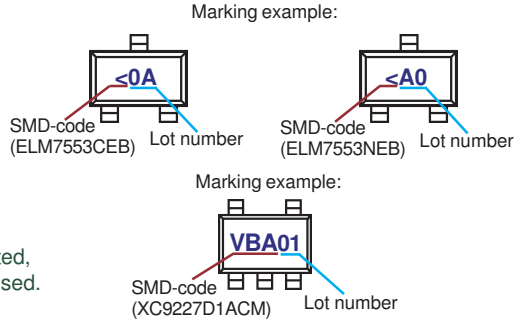
Rules 2 (for PPO voltage detectors)

Symbol 1 - 0 to 9

Symbol 2 - A to Z(I, O, X excepted)

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.



Production data

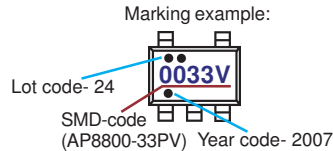
Manufacturer: **Anw (Anwell Semiconductor Corp.)**

Dot above product code: Lot Code:

1			•	17	•		•
2			•	18	•		•
3			•	19	•		•
4			•	20	•		•
5			•	21	•		•
6			•	22	•		•
7			•	23	•		•
8			•	24	•		•
9			•	25	•		•
10			•	26	•		•
11			•	27	•		•
12			•	28	•		•
13			•	29	•		•
14			•	30	•		•
15			•	31	•		•
16			•				

Dot under product code: Year Code:

2003			
2004			
2005			•
2006			•
2007			•
2008			•
2009			•
2010			•



Manufacturer: **Ape (Advanced Power Electronics Corp.)**

Code Year

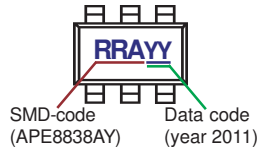
YY 2004, 2008, 2012

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

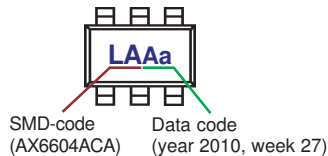
9 2009

A 2010

B 2011

C 2012

Marking example:














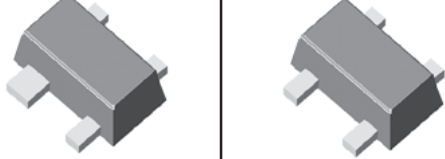







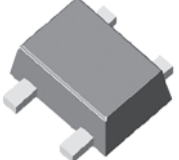
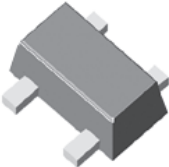


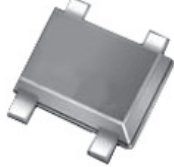
Manufacturer: **Di (Diodes Inc.)**

Y : Year : 0~9XXX

W : Week : A~Z : 1~26 week; a~z : 27~52 week; z represents 52 and 53 week

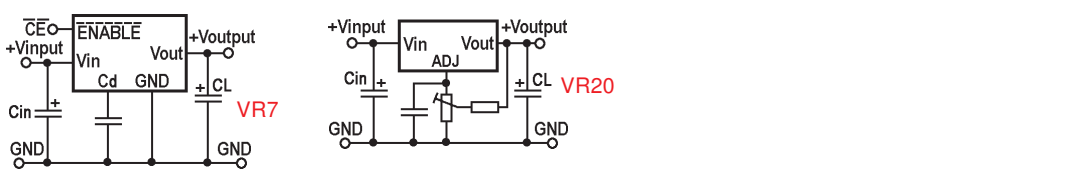
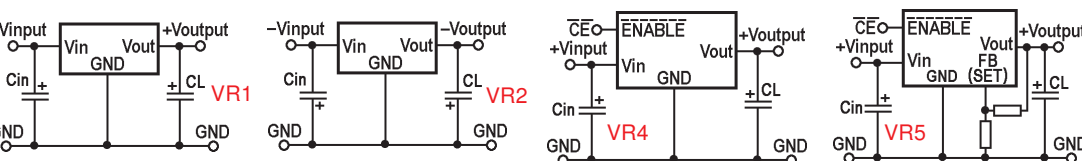
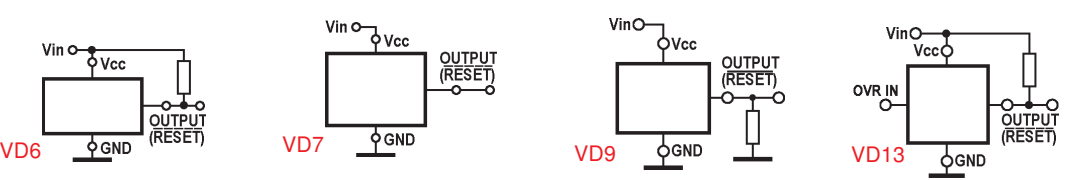
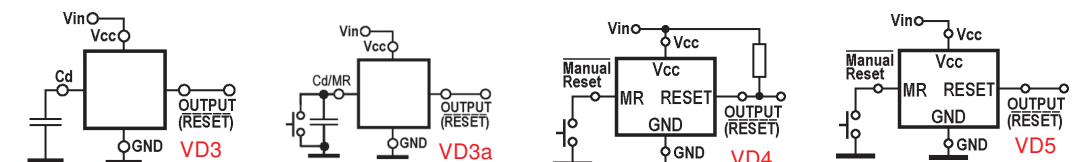
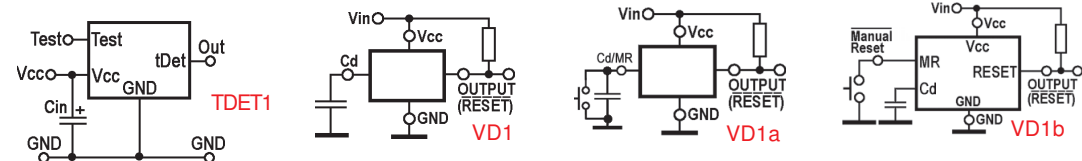
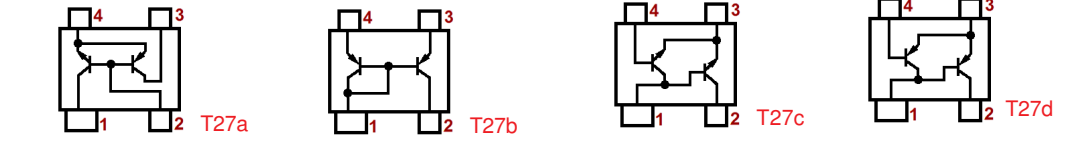
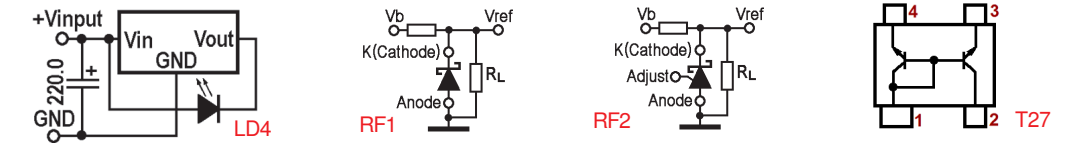
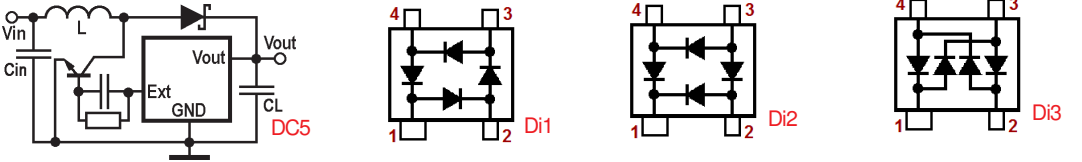
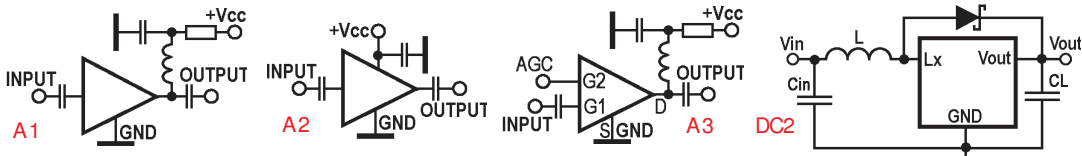
SECTION 11
Case drawings



 1-2U1A	 2-2K1A 2-2K1B	 2-3JIA 2-3JIB	 2-3J1C
 CMPAK-4 MPAK-4	 SC-61 SC-70-4 SC-70-4L	 CP4 SMQ USQ	 D-2PAK TO-252 D-PAK TO-263
 HD DIP SC-82SA SOP-4	 LL-34	 LLD SOD-80 SOD-80C	 M04 M05
 MPT3 PCP SC-62 SOT-89	 MPAK-4R SOT-143 SC-82AB	 SOT-89-3L SOT-89H UPAK	 MW4 POWERMITE SC-63
 SC-64	 SC-82-4L SC-82S	 SC-82 SC-82-4 SOT-143R SOT-343R	 SNT-4 SNT-4A
 SON-4	 SOT-223	 SOT-343	 SOT-543

SECTION 12
Sample schematic diagram







SECTION 9
Manufacturers name, logo and web page URL





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



Abi- 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



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/>



Anw- Anwell Semiconductor Corp.
<http://www.ansc.com.tw/>



Aom- Alpha & Omega Semiconductor
<http://www.aosmd.com/>



Yea- Yeashin.Technology Co., Ltd
<http://www.yeashin.com/>



Yen- Yenyo Technology Co., Ltd.
<http://www.yenyo.com.tw/>



Ynt- Yint Electronics Co., Ltd.
<http://www.yint.com.cn>



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



Zbs- Zhide Electronics Co., Ltd
<http://www.senocn.com/>



Zhd- Zibo Seno Electronic Engineering 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>



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