

SMD-codes

DATABOOK

SMD-codes.

5-pin cases active SMD
semiconductor components
marking codes.

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



2024-2025 EDITION



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ELECTRONICS COMPONENTS

Eugeniu Turuta Martin Turuta

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5-pin cases
active SMD semiconductor components
marking codes.**

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Chisinau, Toronto, 2024-2025
<http://www.turuta.md>



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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** (Ricoch). 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'** (**IT9, 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.

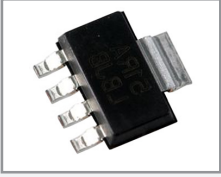
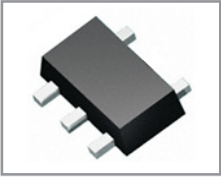
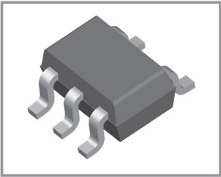
Column 3 ("Function")

Short definition of the semiconductor component.

Used abbreviations:

BM-IC	Battery Management integrated circuit	LDR-IC	LED driver integrated circuit
BR	Bridge Rectifier	Lin-IC	Linear integrated circuit
C-diode	Capacitance diode (varactor, varicap)	LVR-IC	Linear voltage regulator integrated circuit
CMOS-Log	CMOS logic integrated circuit	LVR/Vdet-IC	Linear voltage regulator/Voltage detector combined integrated circuit
Comp-IC	Voltage comparator integrated circuit	MMIC	Monolithic Microwave Integrated Circuit
DC/DC-IC	DC/DC voltage converter integrated circuit	-MOSFET	Metal-Oxide-Semiconductor FET
ESDP-diode	ElectroStatic Discharge Protection diode	-MESFET	MEtal-Semiconductor FET
ESD-Prot	ElectroStatic Discharge Protection thyristor	n-	n-channel junction transistor
-FET	Field Effect Transistor	n/p-	n-channel and p-channel transistors area
HEMT	High electron mobility transistors	Op-IC	Operational amplifier integrated circuit
H-IC	Hall-effect sensor integrated circuit	p-	p-channel junction transistor
HSPS-IC	High-side power switch integrated circuit	PDS-IC	Power distribution switch integrated circuit
IGBT	Insulated Gate Bipolar Transistor	PHEMT	Pseudomorphic high electron mobility transistors
IGBT+Di	Insulated Gate Bipolar Transistor with antiparallel diode	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
5-pin case SMD semiconductor components



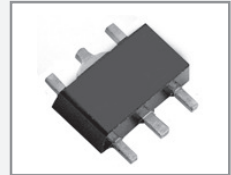
SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
-	ELM7548CCC	Vdet-IC	SC-70-5	6gb	4.8V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
-	ELM7548NCC	Vdet-IC	SC-70-5	6g	4.8V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
#	ELM7541CCC	Vdet-IC	SC-70-5	6gb	4.1V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
#	ELM7541NCC	Vdet-IC	SC-70-5	6g	4.1V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
%	ELM7543CCC	Vdet-IC	SC-70-5	6gb	4.3V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
%	ELM7543NCC	Vdet-IC	SC-70-5	6g	4.3V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
*	ELM7513CCC	Vdet-IC	SC-70-5	6gb	1.3V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
*	ELM7513NCC	Vdet-IC	SC-70-5	6g	1.3V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
/	ELM7554CCC	Vdet-IC	SC-70-5	6gb	5.4V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
/	ELM7554NCC	Vdet-IC	SC-70-5	6g	5.4V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
?	ELM7551CCC	Vdet-IC	SC-70-5	6gb	5.1V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
?	ELM7551NCC	Vdet-IC	SC-70-5	6g	5.1V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
+	ELM7547CCC	Vdet-IC	SC-70-5	6gb	4.7V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
+	ELM7547NCC	Vdet-IC	SC-70-5	6g	4.7V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
+ACAB	MAX999EUK-T	Comp-IC	SOT-23-5	6k	U-High Speed, Vcc=2.7..5.5V, Icco=5mA, <5ns	-	-	28opa	OP1	Max
+AFEI	MAX999AAUK+T	Comp-IC	SOT-23-5	6k	U-High Speed, Vcc=2.7..5.5V, Icco=5mA, <5ns	-	-	28opa	OP1	Max
<	ELM7553CCC	Vdet-IC	SC-70-5	6gb	5.3V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
<	ELM7553NCC	Vdet-IC	SC-70-5	6g	5.3V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
=	ELM7544CCC	Vdet-IC	SC-70-5	6gb	4.4V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
=	ELM7544NCC	Vdet-IC	SC-70-5	6g	4.4V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
>	ELM7549CCC	Vdet-IC	SC-70-5	6gb	4.9V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
>	ELM7549NCC	Vdet-IC	SC-70-5	6g	4.9V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
+	ELM7517CCC	Vdet-IC	SC-70-5	6gb	1.7V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
+	ELM7517NCC	Vdet-IC	SC-70-5	6g	1.7V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
▪	ELM7546CCC	Vdet-IC	SC-70-5	6gb	4.6V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
▪	ELM7546NCC	Vdet-IC	SC-70-5	6g	4.6V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
¥	ELM7552CCC	Vdet-IC	SC-70-5	6gb	5.2V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
¥	ELM7552NCC	Vdet-IC	SC-70-5	6g	5.2V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
0	ELM7509CCC	Vdet-IC	SC-70-5	6gb	0.9V±2%, +Reset PPO	F22	23	28h3	VD7	Elm
0	ELM7509NCC	Vdet-IC	SC-70-5	6g	0.9V±2%, +Reset ODO	F22	06	28h3	VD6	Elm
00	R1223N252A	DC/DC-IC	SOT-23-5	6g	PWM/VFM st-dwn, +CE, 2.5V±2%, 300kHz, Latch-prot.	-	-	28ud	DC7	Ric
00	RN5RF50BA	LVR-IC	SOT-23-5	6g	LRip, +CE, 5V±2%, 1A (ext. transistor)	-	-	28vw	VR6	Ric
00	RN5RZ50BA	LVR-IC	SOT-23-5	6g	LDO, LN, 5.0V±2%, 100mA, +CE	-	-	28vrt	VR4	Ric
000	XC6101A131MR	Vdet-IC	SOT-25	6gb	3.1V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
001	XC6101A132MR	Vdet-IC	SOT-25	6gb	3.2V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
002	XC6101A133MR	Vdet-IC	SOT-25	6gb	3.3V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
003	XC6101A134MR	Vdet-IC	SOT-25	6gb	3.4V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
004	XC6101A135MR	Vdet-IC	SOT-25	6gb	3.5V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
005	XC6101A136MR	Vdet-IC	SOT-25	6gb	3.6V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
006	XC6101A137MR	Vdet-IC	SOT-25	6gb	3.7V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
007	XC6101A138MR	Vdet-IC	SOT-25	6gb	3.8V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
008	R1160N081A	LVR-IC	SOT-23-5	6g	LDO, 0.8V±2%, 200mA, -CE, AE(Mode)	-	-	28x9	VR10	Ric
008	XC6101A139MR	Vdet-IC	SOT-25	6gb	3.9V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
009	R1160N091A	LVR-IC	SOT-23-5	6g	LDO, 0.9V±2%, 200mA, -CE, AE(Mode)	-	-	28x9	VR10	Ric
009	XC6101A140MR	Vdet-IC	SOT-25	6gb	4.0V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00A	XC6101A141MR	Vdet-IC	SOT-25	6gb	4.1V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00B	XC6101A142MR	Vdet-IC	SOT-25	6gb	4.2V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00C	XC6101A143MR	Vdet-IC	SOT-25	6gb	4.3V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00D	XC6101A144MR	Vdet-IC	SOT-25	6gb	4.4V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00E	XC6101A145MR	Vdet-IC	SOT-25	6gb	4.5V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00E	XC6505A151MR	LVR-IC	SOT-25	6g	LDO, 1.5V±20mV, 200mA, +CE	-	05	28cx	VR4	Tor
00F	XC6101A116MR	Vdet-IC	SOT-25	6gb	1.6V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00F	XC6101A146MR	Vdet-IC	SOT-25	6gb	4.6V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00F	XC6505A161MR	LVR-IC	SOT-25	6g	LDO, 1.6V±20mV, 200mA, +CE	-	05	28cx	VR4	Tor
00H	XC6101A117MR	Vdet-IC	SOT-25	6gb	1.7V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00H	XC6101A147MR	Vdet-IC	SOT-25	6gb	4.7V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00H	XC6505A171MR	LVR-IC	SOT-25	6g	LDO, 1.7V±20mV, 200mA, +CE	-	05	28cx	VR4	Tor
00K	XC6101A118MR	Vdet-IC	SOT-25	6gb	1.8V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00K	XC6101A148MR	Vdet-IC	SOT-25	6gb	4.8V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00K	XC6505A181MR	LVR-IC	SOT-25	6g	LDO, 1.8V±20mV, 200mA, +CE	-	05	28cx	VR4	Tor
00L	XC6101A119MR	Vdet-IC	SOT-25	6gb	1.9V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00L	XC6101A149MR	Vdet-IC	SOT-25	6gb	4.9V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00L	XC6505A191MR	LVR-IC	SOT-25	6g	LDO, 1.9V±20mV, 200mA, +CE	-	05	28cx	VR4	Tor
00M	XC6101A120MR	Vdet-IC	SOT-25	6gb	2.0V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00M	XC6101A150MR	Vdet-IC	SOT-25	6gb	5.0V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F04	15	28cp	VD17	Tor
00M	XC6505A201MR	LVR-IC	SOT-25	6g	LDO, 2.0V±1%, 200mA, +CE	-	05	28cx	VR4	Tor
00N	XC6101A121MR	Vdet-IC	SOT-25	6gb	2.1V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00N	XC6505A211MR	LVR-IC	SOT-25	6g	LDO, 2.1V±1%, 200mA, +CE	-	05	28cx	VR4	Tor
00P	XC6101A122MR	Vdet-IC	SOT-25	6gb	2.2V±2%, Hst, -MR, -Reset PPO, Wt=6.25ms, Rdt=3.13ms	F03	15	28cp	VD17	Tor
00P	XC6505A221MR	LVR-IC	SOT-25	6g	LDO, 2.2V±1%, 200mA, +CE	-	05	28cx	VR4	Tor



SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
ZMH	XC9142E54DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.4V±2%, +CE	F01	05	28g7	DC19a	Tor
ZMK	XC9142E55DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.5V±2%, +CE	F01	05	28g7	DC19a	Tor
ZN	BU4245FWE	Vdet-IC	VSOF-5	6e	4.5V±1%, -Reset ODO	-	-	30vka	VD1	Rhm
ZN	BU4245G	Vdet-IC	SSOP-5	6c	4.5V±1%, -Reset ODO	-	-	28vdo	VD1	Rhm
ZN-	RT9711APB	HSPS-IC	SOT-23-5	6g	Vin=2.5..5.5V, 1.5A, +CE, -Flag	-	-	28ps3	PS1	Rct
ZN=	RT9711AGB	HSPS-IC	SOT-23-5	6g	Vin=2.5..5.5V, 1.5A, +CE, -Flag	-	-	28ps3	PS1	Rct
ZN0	XC9142F18DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 1.8V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN1	XC9142F19DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 1.9V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN2	XC9142F20DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.0V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN3	XC9142F21DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.1V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN4	XC9142F22DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.2V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN5	XC9142F23DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.3V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN6	XC9142F24DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.4V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN7	XC9142F25DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.5V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN8	XC9142F26DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.6V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZN9	XC9142F27DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.7V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNA	XC9142F28DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.8V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNB	XC9142F29DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 2.9V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNC	XC9142F30DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.0V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZND	XC9142F31DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.1V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNE	XC9142F32DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.2V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNF	XC9142F33DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.3V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNH	XC9142F34DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.4V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNK	XC9142F35DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.5V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNL	XC9142F36DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.6V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZNM	XC9142F37DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.7V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP	BU4246FWE	Vdet-IC	VSOF-5	6e	4.6V±1%, -Reset ODO	-	-	30vka	VD1	Rhm
ZP	BU4246G	Vdet-IC	SSOP-5	6c	4.6V±1%, -Reset ODO	-	-	28vdo	VD1	Rhm
ZP-	RT9711CPB	HSPS-IC	SOT-23-5	6g	Vin=2.5..5.5V, 0.6A, +CE, -Flag	-	-	28ps3	PS1	Rct
ZP=	RT9711CGB	HSPS-IC	SOT-23-5	6g	Vin=2.5..5.5V, 0.6A, +CE, -Flag	-	-	28ps3	PS1	Rct
ZP0	XC9142F38DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.8V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP1	XC9142F39DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 3.9V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP2	XC9142F40DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.0V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP3	XC9142F41DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.1V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP4	XC9142F42DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.2V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP5	XC9142F43DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.3V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP6	XC9142F44DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.4V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP7	XC9142F45DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.5V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP8	XC9142F46DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.6V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZP9	XC9142F47DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.7V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPA	XC9142F48DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.8V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPB	XC9142F49DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 4.9V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPC	XC9142F50DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.0V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPD	XC9142F51DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.1V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPE	XC9142F52DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.2V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPF	XC9142F53DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.3V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPH	XC9142F54DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.4V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPK	XC9142F55DMR-G	DC/DC-IC	SOT-25	6g	PWM st-up, 3.0MHz, 5.5V±2%, +CE (compl. out discon.)	F01	05	28g7	DC19a	Tor
ZPQ	74AHCT1G07QSE	CMOS-Logic	SOT-353	6ba	Noninverting buffer/driver (ODO)	-	61	28	Log8	Di
ZPQ	74AHCT1G07QW5	CMOS-Logic	SOT-25	6ba	Noninverting buffer/driver (ODO)	-	61	28	Log8	Di
ZQ	BU4247FWE	Vdet-IC	VSOF-5	6e	4.7V±1%, -Reset ODO	-	-	30vka	VD1	Rhm
ZQ	BU4247G	Vdet-IC	SSOP-5	6c	4.7V±1%, -Reset ODO	-	-	28vdo	VD1	Rhm
ZR	74AHCT1G00SE	CMOS-Logic	SOT-353	6kh	2-input NAND gate	-	61	28	Log1	Di
ZR	74AHCT1G00W5	CMOS-Logic	SOT-25	6kh	2-input NAND gate	-	61	28	Log1	Di
ZR	BU4248FWE	Vdet-IC	VSOF-5	6e	4.8V±1%, -Reset ODO	-	-	30vka	VD1	Rhm
ZR	BU4248G	Vdet-IC	SSOP-5	6c	4.8V±1%, -Reset ODO	-	-	28vdo	VD1	Rhm
ZRQ	74AHCT1G00QSE	CMOS-Logic	SOT-353	6ba	2-input NAND gate	-	61	28	Log1	Di
ZRQ	74AHCT1G00QW5	CMOS-Logic	SOT-25	6ba	2-input NAND gate	-	61	28	Log1	Di
ZS	74AHCT1G02SE	CMOS-Logic	SOT-353	6kh	2-input NOR gate	-	61	28	Log2	Di
ZS	74AHCT1G02W5	CMOS-Logic	SOT-25	6kh	2-input NOR gate	-	61	28	Log2	Di
ZS	BU4309FWE	Vdet-IC	VSOF-5	6e	0.9V±1%, -Reset PPO	-	-	30vka	VD3	Rhm
ZS	BU4309G	Vdet-IC	SSOP-5	6c	0.9V±1%, -Reset PPO	-	-	28vdo	VD3	Rhm
ZS-	RT9818A-24PB	Vdet-IC	SOT-23-5	6a	2.4V±1.5%, -Reset ODO	F16	-	28vdm	VD6	Rct
ZSQ	74AHCT1G02QW5	CMOS-Logic	SOT-25	6ba	2-input NOR gate	-	61	28	Log2	Di
ZSQ	74AHCT1G0Q2SE	CMOS-Logic	SOT-353	6ba	2-input NOR gate	-	61	28	Log2	Di
ZT	74AHCT1G04SE	CMOS-Logic	SOT-353	6kh	Single inverter	-	61	28	Log6	Di
ZT	74AHCT1G04W5	CMOS-Logic	SOT-25	6kh	Single inverter	-	61	28	Log6	Di
ZT	BU4310FWE	Vdet-IC	VSOF-5	6e	1.0V±1%, -Reset PPO	-	-	30vka	VD3	Rhm
ZT	BU4310G	Vdet-IC	SSOP-5	6c	1.0V±1%, -Reset PPO	-	-	28vdo	VD3	Rhm
ZT	EUP7915-12VIR1	LVR-IC	SOT-23-5	6g	LDO, 1.2V±2%, 150mA, +CE	-	-	28vrx	VR7	Eut



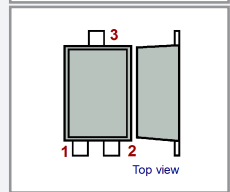
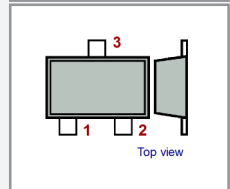
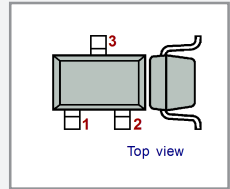
SECTION 2
SOT-89-5 case SMD semiconductor components

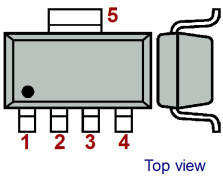


SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
00E	XC6505A151PR	LVR-IC	SOT-89-5	6n	LDO, 1.5V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00F	XC6505A161PR	LVR-IC	SOT-89-5	6n	LDO, 1.6V±20mV, 200mA, +CE	-	05	32um	VR4	Tor
00H	XC6505A171PR	LVR-IC	SOT-89-5	6n	LDO, 1.7V±20mV, 200mA, +CE	-	05	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	6h	LDO, 1.2V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02B	ELM85123A	LVR-IC	SOT-89-5	6ha	LDO, 1.2V±2%, 600mA, +CE	-	20	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	6h	LDO, 1.5V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02E	ELM85153A	LVR-IC	SOT-89-5	6ha	LDO, 1.5V±2%, 600mA, +CE	-	20	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	6h	LDO, 1.6V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02F	ELM85163A	LVR-IC	SOT-89-5	6ha	LDO, 1.6V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02G	ELM85173A	LVR-IC	SOT-89-5	6h	LDO, 1.7V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02G	ELM85173A	LVR-IC	SOT-89-5	6ha	LDO, 1.7V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02H	ELM85183A	LVR-IC	SOT-89-5	6h	LDO, 1.8V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02H	ELM85183A	LVR-IC	SOT-89-5	6ha	LDO, 1.8V±2%, 600mA, +CE	-	20	32vrt	VR4	Elm
02J	ELM85193A	LVR-IC	SOT-89-5	6h	LDO, 1.9V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm
02J	ELM85193A	LVR-IC	SOT-89-5	6ha	LDO, 1.9V±2%, 600mA, +CE	-	20	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	6h	LDO, 2.1V±2%, 800mA, +CE	-	-	32vrt	VR4	Elm

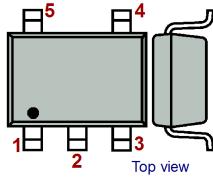


SECTION 3
Conventional case drawings. Pin assignment

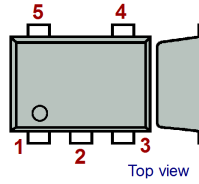




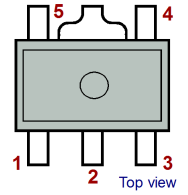
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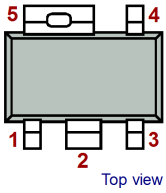
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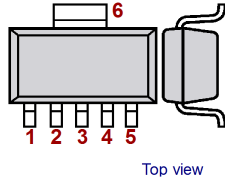
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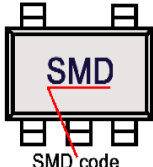
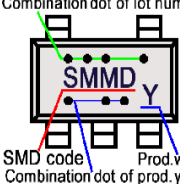
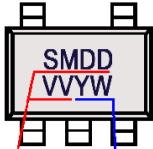
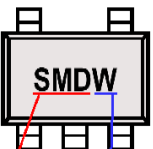
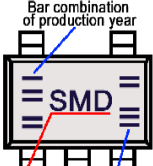

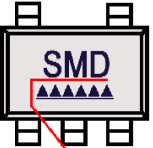
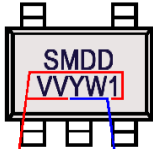
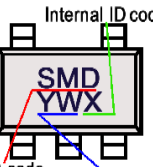
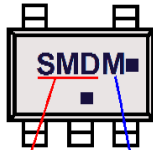
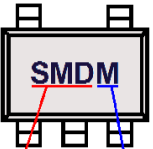
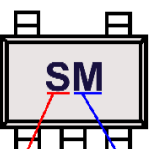
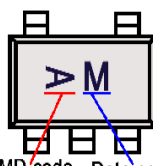
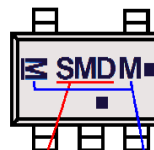
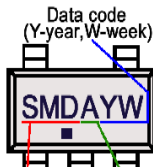
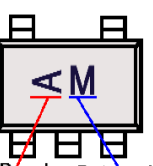
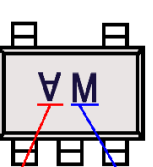
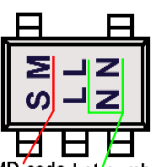
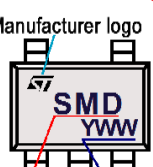
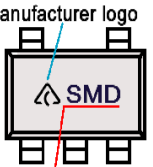
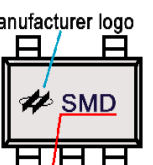
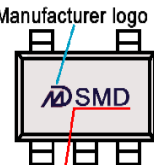
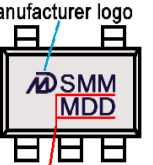
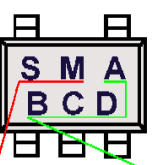
SECTION 4
Pinout (table)



	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	Lx	-	-	-	-	-
br	GND	Voutput	Ext	-	-	-	-	-

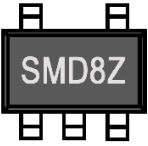
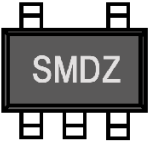
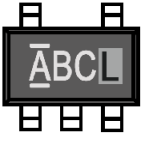
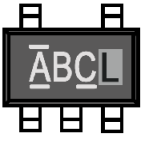
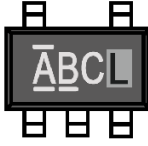
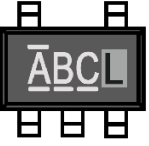
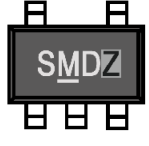
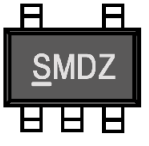
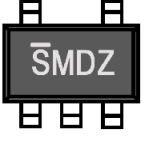
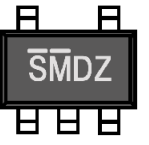
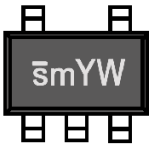
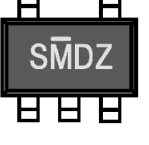
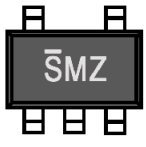
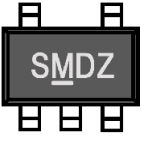
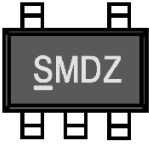
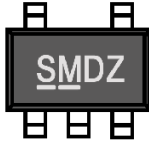
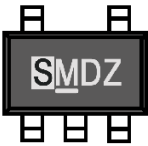
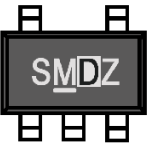
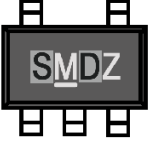
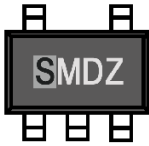
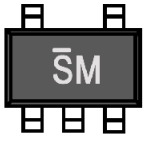
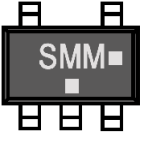
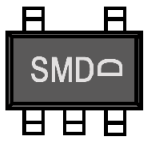

SECTION 5
5-pin cases SMD-code marking style

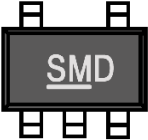
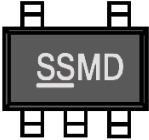
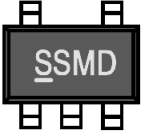
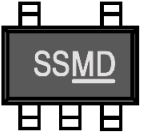
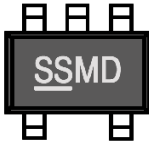
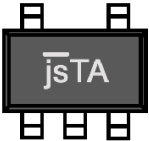
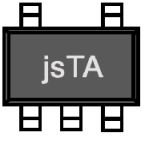
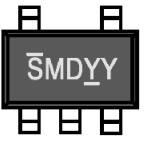
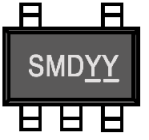
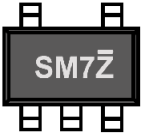
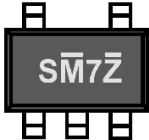
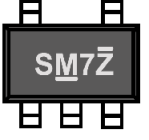
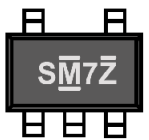
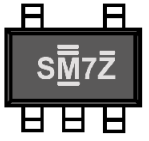
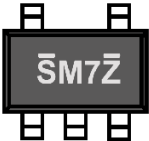
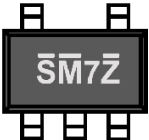
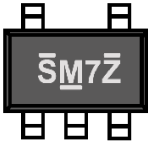
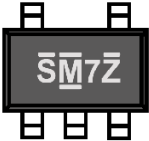
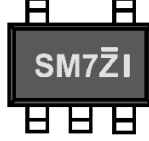
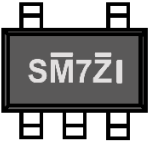
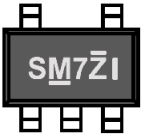
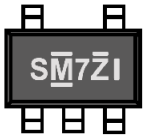
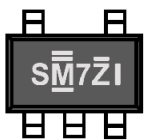
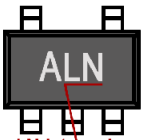


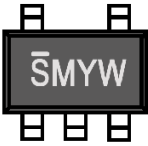
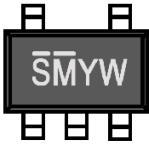
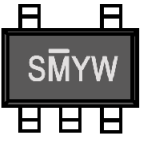
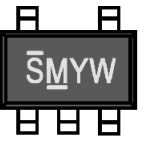
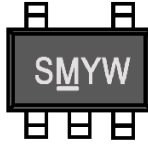
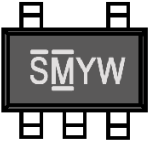
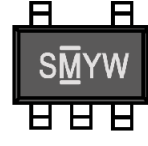
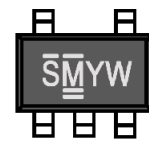
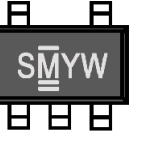
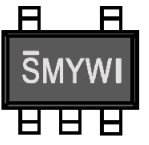
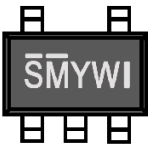
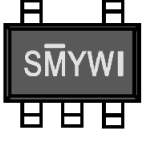
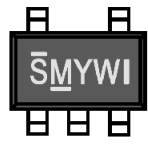
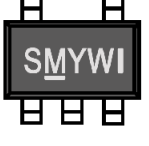
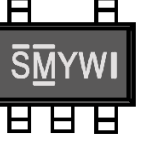
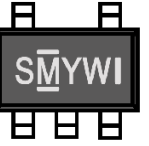
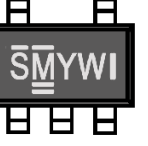
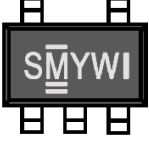
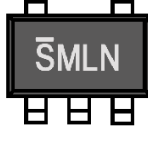
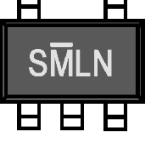
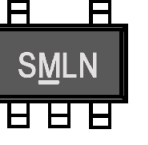
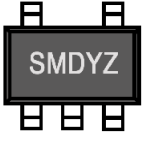
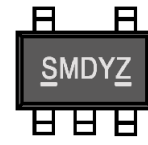
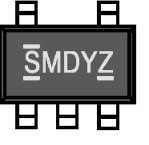
<p>6a</p>  <p>SMD code</p>	<p>6aa</p>  <p>Combination dot of lot number SMD code Prod. week Combination dot of prod. year</p>	<p>6ab</p>  <p>SMD-code Data code (Y-year, W-week)</p>	<p>6ac</p>  <p>SMD-code Data code (week)</p>
<p>6ad</p>  <p>Bar combination of production year SMD code Bar combination of production week</p>	<p>6ae</p>  <p>Bar combination of production year SMD code Bar combination of production week</p>	<p>6af</p>  <p>SMD code</p>	<p>6ag</p>  <p>SMD-code Data code (Y-year, W-week)</p>
<p>6ba</p>  <p>Internal ID code SMD code Data code (Y-year, W-week)</p>	<p>6bb</p>  <p>SMD code Data code</p>	<p>6bc</p>  <p>SMD code Data code</p>	<p>6bd</p>  <p>SMD code Data code</p>
<p>6be</p>  <p>SMD code Data code (rotate 90°)</p>	<p>6bf</p>  <p>SMD code Data code</p>	<p>6bg</p>  <p>Data code (Y-year, W-week) SMD code Assembly location</p>	<p>6bh</p>  <p>SMD code Data code (rotate 90°)</p>
<p>6bk</p>  <p>SMD code Data code (rotate 90°)</p>	<p>6c</p>  <p>SMD code Lot number</p>	<p>6cd</p>  <p>Manufacturer logo SMD code Data code (year, week)</p>	<p>6da</p>  <p>Manufacturer logo SMD code</p>
<p>6db</p>  <p>Manufacturer logo SMD code</p>	<p>6dc</p>  <p>Manufacturer logo SMD code</p>	<p>6dd</p>  <p>Manufacturer logo SMD code</p>	<p>6de</p>  <p>SMD-code Lot number</p>

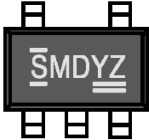
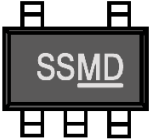
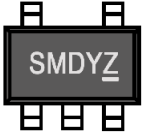
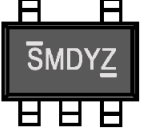
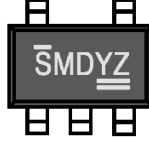
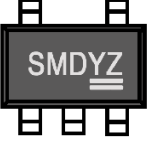
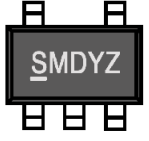
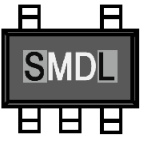
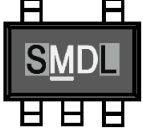
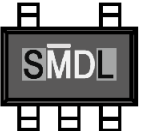
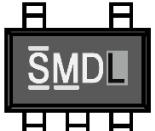
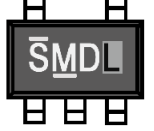
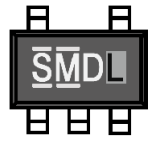
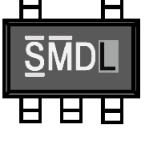
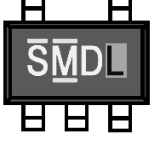
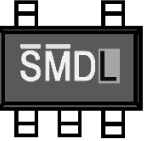
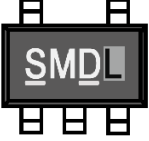
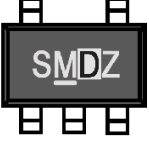
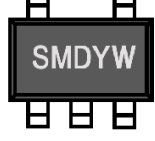
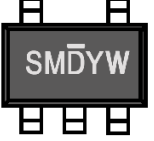
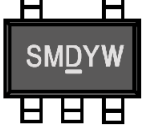
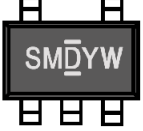
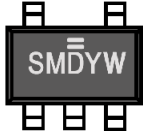
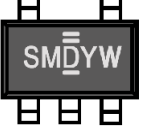
SECTION 6
5-pin cases SMD-code attribute



<p style="text-align: center; color: red;">F01</p> 	<p style="text-align: center; color: red;">F02</p> 	<p style="text-align: center; color: red;">F03</p> 	<p style="text-align: center; color: red;">F04</p> 
<p style="text-align: center; color: red;">F05</p> 	<p style="text-align: center; color: red;">F06</p> 	<p style="text-align: center; color: red;">F07</p> 	<p style="text-align: center; color: red;">F08</p> 
<p style="text-align: center; color: red;">F09</p> 	<p style="text-align: center; color: red;">F09a</p> 	<p style="text-align: center; color: red;">F09b</p> 	<p style="text-align: center; color: red;">F09c</p> 
<p style="text-align: center; color: red;">F09d</p> 	<p style="text-align: center; color: red;">F10</p> 	<p style="text-align: center; color: red;">F10a</p> 	<p style="text-align: center; color: red;">F10b</p> 
<p style="text-align: center; color: red;">F10c</p> 	<p style="text-align: center; color: red;">F10d</p> 	<p style="text-align: center; color: red;">F10e</p> 	<p style="text-align: center; color: red;">F10f</p> 
<p style="text-align: center; color: red;">F12a</p> 	<p style="text-align: center; color: red;">F13</p> 	<p style="text-align: center; color: red;">F15</p> 	<p style="text-align: center; color: red;">F16</p> 

<p>F16a</p> 	<p>F16b</p> 	<p>F16c</p> 	<p>F16d</p> 
<p>F16e</p> 	<p>F17</p> 	<p>F18</p> 	<p>F19</p> 
<p>F19a</p> 	<p>F20</p> 	<p>F20a</p> 	<p>F20b</p> 
<p>F20c</p> 	<p>F20d</p> 	<p>F20e</p> 	<p>F20f</p> 
<p>F20g</p> 	<p>F20h</p> 	<p>F21</p> 	<p>F21a</p> 
<p>F21b</p> 	<p>F21c</p> 	<p>F21d</p> 	<p>F22</p>  <p>LN-lot number (see note)</p>

<p>F23</p> 	<p>F23a</p> 	<p>F23b</p> 	<p>F23c</p> 
<p>F23d</p> 	<p>F23e</p> 	<p>F23f</p> 	<p>F23g</p> 
<p>Fh3h</p> 	<p>F24</p> 	<p>F24a</p> 	<p>F24b</p> 
<p>F24c</p> 	<p>F24d</p> 	<p>F24e</p> 	<p>F24f</p> 
<p>F24g</p> 	<p>F24h</p> 	<p>F25</p> 	<p>F25a</p> 
<p>F25b</p> 	<p>F26</p> 	<p>F26a</p> 	<p>F26b</p> 

<p>F26c</p> 	<p>F26d</p> 	<p>F26e</p> 	<p>F26f</p> 
<p>F26g</p> 	<p>F26h</p> 	<p>F26i</p> 	<p>F27</p> 
<p>F28</p> 	<p>F29</p> 	<p>F30</p> 	<p>F30a</p> 
<p>F30b</p> 	<p>F30c</p> 	<p>F30d</p> 	<p>F30e</p> 
<p>F30f</p> 	<p>F30g</p> 	<p>F31</p> 	<p>F31a</p> 
<p>F31b</p> 	<p>F31c</p> 	<p>F31d</p> 	<p>F31e</p> 

SECTION 7
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 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)

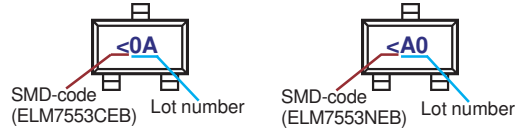
Symbol 1 - 0 to 9

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

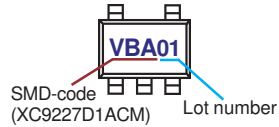
Manufacturer: **Tor (Torex Semiconductor LTD):**

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:



Marking example:



Production data

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

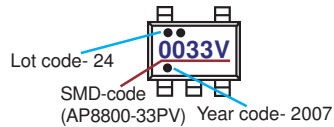
Dot above product code: Lot Code:

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	•	•	

Marking example:



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

Code Year

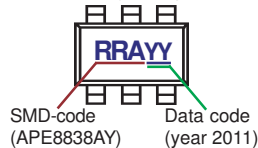
YY 2004, 2008, 2012

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

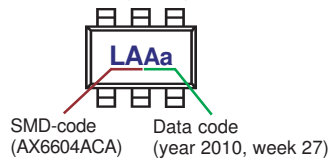
9 2009

A 2010

B 2011

C 2012

Marking example:

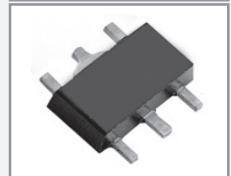
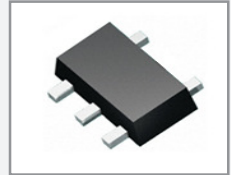
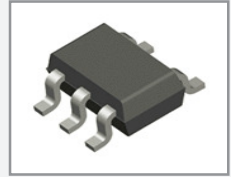


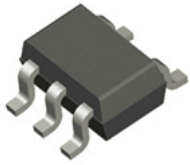
Manufacturer: **Di (Diodes Inc.)**

Y : Year : 0~9XXX

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

SECTION 8
Case drawings





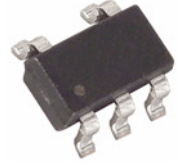
**CMPAK-5
CP5**



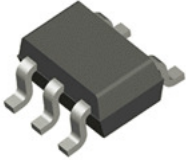
**EMT5
ESV SMini5
SON-5 SOT-553**



**HVSO5
SOT-665**



**MCPH5
MPAK-5**



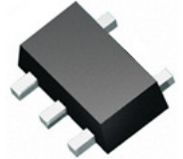
**SC-70-5 SC-88A
SC-70-5L SMV**



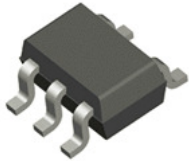
**SC-74A
SOT753**



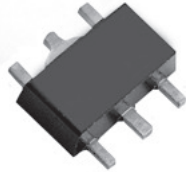
SCT-595



**SMini5-F3-B
SSMini5
SSMini5-F4-B**



**SO5-1 SOT-23-5T
SOT-23-5 SOT-25
SOT-23-5L SOT-25J**



**SOT-89-5
SOT-89-5L**



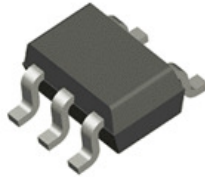
SOT-223-5



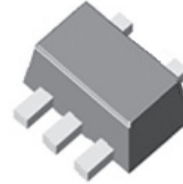
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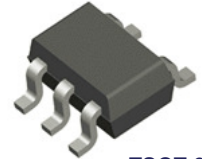
SOT-323-5L



**SOT-353 SSOP-5
SOT-353-1 SSOP-5-P**



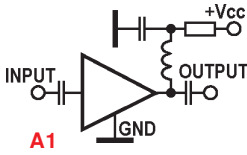
SOT953



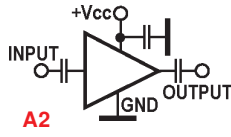
**TSOT-25
TSOP-5 TSV
TSOT-23-5 UJ-5
TSOT-23-5L USV**

SECTION 9
Sample schematic diagram

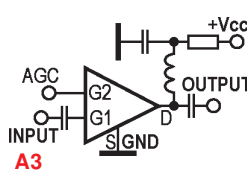




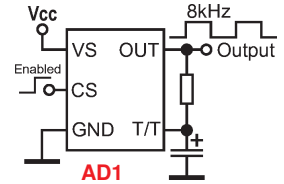
A1



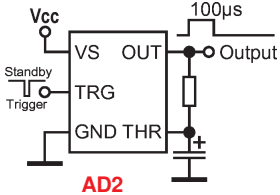
A2



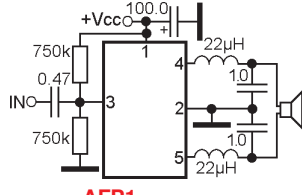
A3



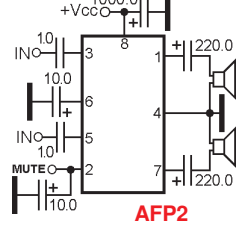
AD1



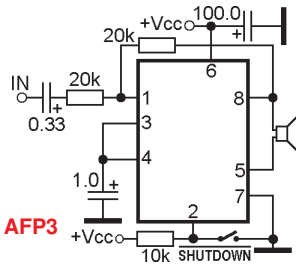
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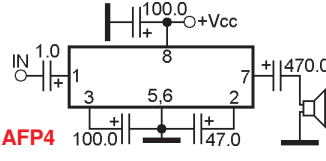
AFP1



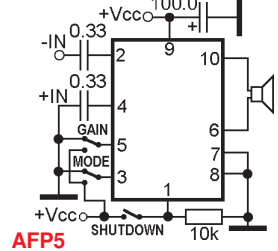
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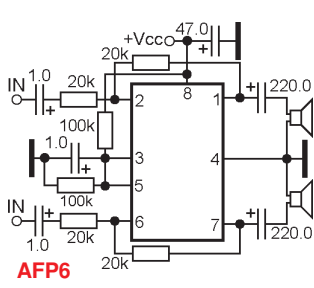
AFP3



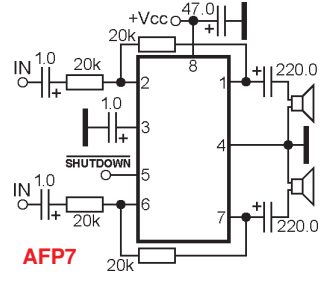
AFP4



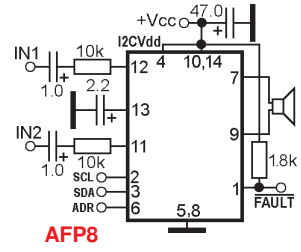
AFP5



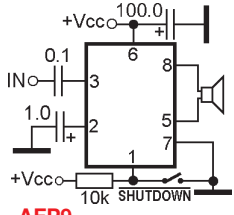
AFP6



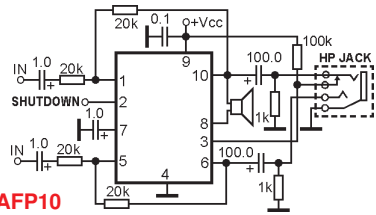
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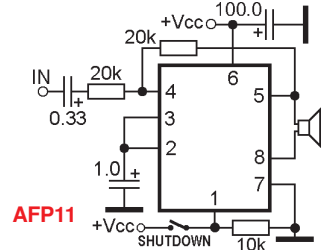
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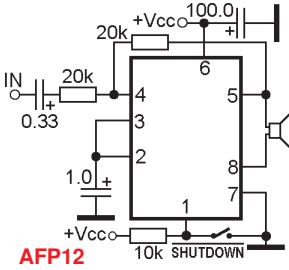
AFP9



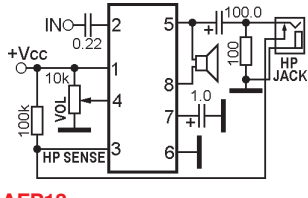
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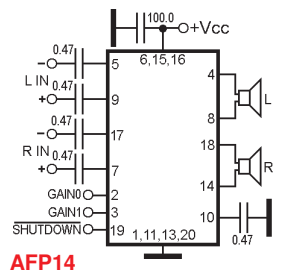
AFP11



AFP12



AFP13



AFP14



SECTION 10
Manufacturers name, logo and web page URL





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



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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