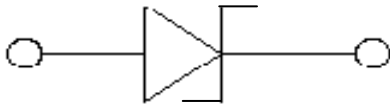


Zener Diodes



Features

- High reliability
- Very sharp reverse characteristic
- Low reverse current level
- Zener Voltage 2.4V~75V

Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Power Dissipation (*Note)	P _D	mW	300
Storage Temperature Range	T _{stg}	°C	-55~+150
Junction Temperature	T _J	°C	-55~+150
Maximum Regulator Current	I _{ZM}	mA	P _D /V _Z
Maximum Forward Voltage (I _F =10mAdc)	V _F	V	0.9
Thermal Resistance Junction to Ambient Air(*Note)	R _{θJA}	°C /W	417

Note:Device mounted on PCB

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52C2V4S THRU BZT52C75S	F2	Approximate 0.004	3000	30000	120000	7" reel



BZT52C2V4S THRU BZT52C75S

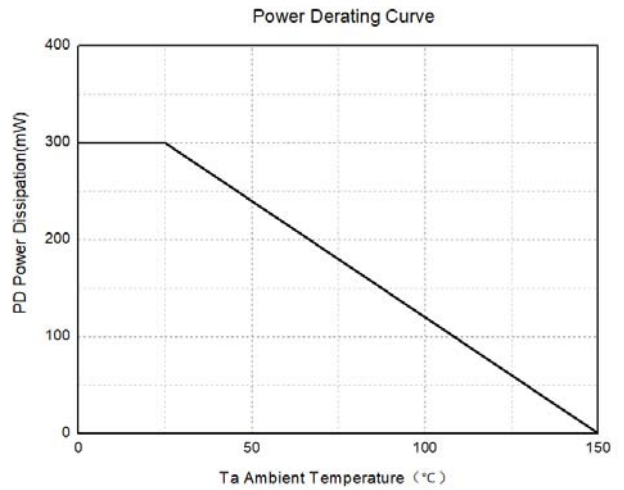
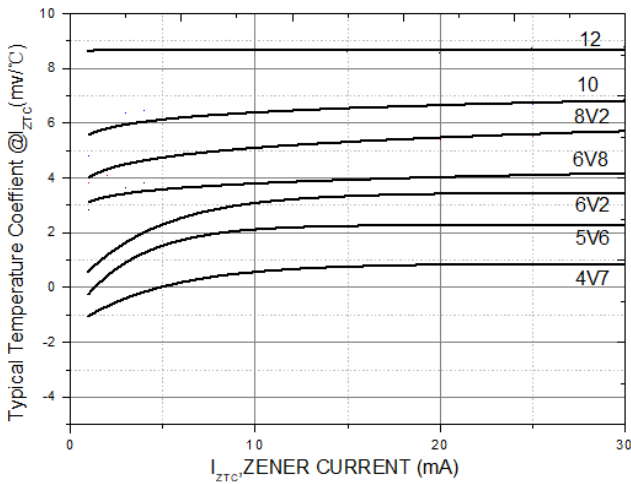
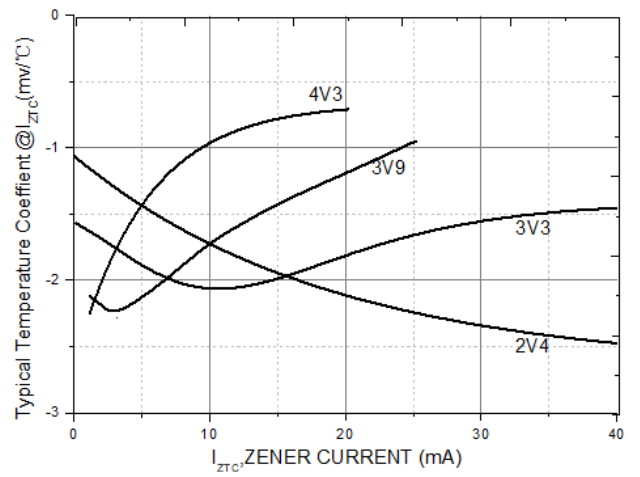
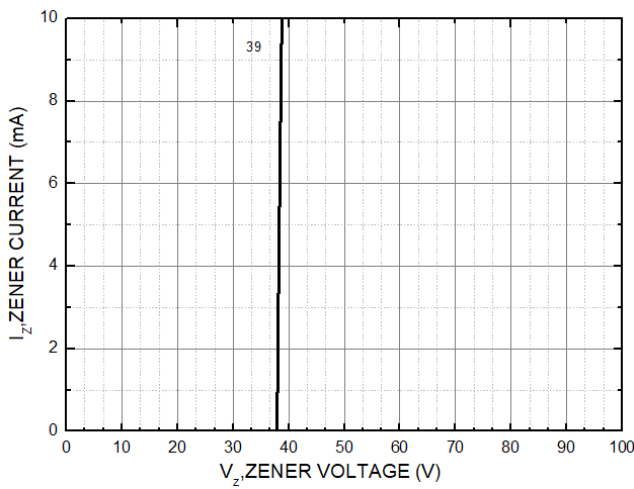
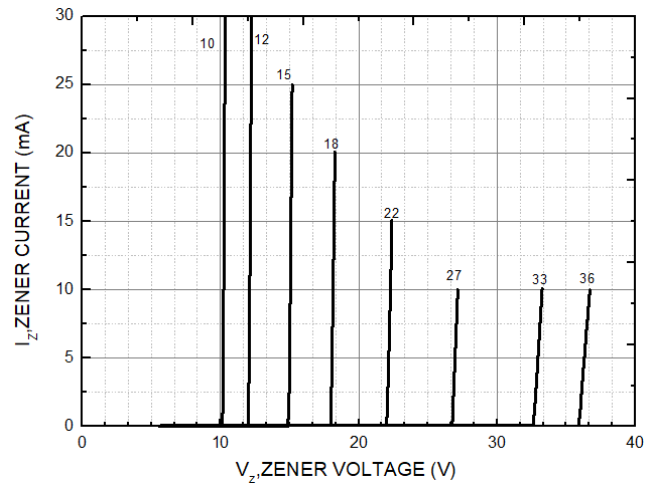
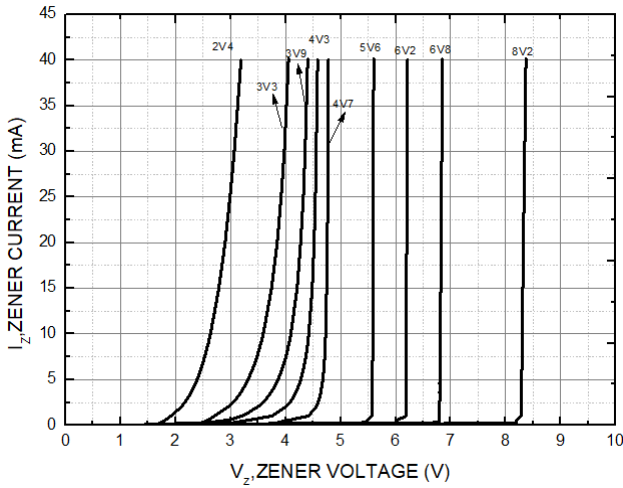
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Type Number	Device Marking	V _z at I _{zT} (V)			Z _{zt} (Ω)		Z _{zk} (Ω)		I _R (μA)@V _R		Typical Temperature Coefficient @I _{ZTC}	
		min.	typ.	max.	I _{zT} (mA)	max.	I _{zk} (mA)	max.	max	V _R (V)	mV/°C	
BZT52C2V4S	WX	2.28	2.4	2.56	5	100	1.0	600	50	1.0	-3.5	0
BZT52C2V7S	W1	2.5	2.7	2.9	5	100	1.0	600	20	1.0	-3.5	0
BZT52C3V0S	W2	2.8	3.0	3.2	5	95	1.0	600	10	1.0	-3.5	0
BZT52C3V3S	W3	3.1	3.3	3.5	5	95	1.0	600	5	1.0	-3.5	0
BZT52C3V6S	W4	3.4	3.6	3.8	5	90	1.0	600	5	1.0	-3.5	0
BZT52C3V9S	W5	3.7	3.9	4.1	5	90	1.0	600	3	1.0	-3.5	0
BZT52C4V3S	W6	4.0	4.3	4.6	5	90	1.0	600	3	1.0	-3.5	0
BZT52C4V7S	W7	4.4	4.7	5.0	5	80	1.0	500	3	2.0	-3.5	0.2
BZT52C5V1S	W8	4.8	5.1	5.4	5	60	1.0	480	2	2.0	-2.7	1.2
BZT52C5V6S	W9	5.2	5.6	6.0	5	40	1.0	400	1	2.0	-2.0	2.5
BZT52C6V2S	WA	5.8	6.2	6.6	5	10	1.0	150	3	4.0	0.4	3.7
BZT52C6V8S	WB	6.4	6.8	7.2	5	15	1.0	80	2	4.0	1.2	4.5
BZT52C7V5S	WC	7.0	7.5	7.9	5	15	1.0	80	1	5.0	2.5	5.3
BZT52C8V2S	WD	7.7	8.2	8.7	5	15	1.0	80	0.7	5.0	3.2	6.2
BZT52C9V1S	WE	8.5	9.1	9.6	5	15	1.0	100	0.5	6.0	3.8	7.0
BZT52C10S	WF	9.4	10	10.6	5	20	1.0	150	0.2	7.0	4.5	8.0
BZT52C11S	WG	10.4	11	11.6	5	20	1.0	150	0.1	8.0	5.4	9.0
BZT52C12S	WH	11.4	12	12.7	5	25	1.0	150	0.1	8.0	6.0	10.0
BZT52C13S	WI	12.4	13	14.1	5	30	1.0	170	0.1	8.0	7.0	11.0
BZT52C15S	WJ	14.25	15	15.75	5	30	1.0	200	0.1	10.5	9.2	13.0
BZT52C16S	WK	15.3	16	17.1	5	40	1.0	200	0.1	11.2	10.4	14.0
BZT52C18S	WL	16.8	18	19.1	5	45	1.0	225	0.1	12.6	12.4	16.0
BZT52C20S	WM	18.8	20	21.2	5	55	1.0	225	0.1	14.0	14.4	18.0
BZT52C22S	WN	20.8	22	23.3	5	55	1.0	250	0.1	15.4	16.4	20.0
BZT52C24S	WO	22.8	24	25.6	5	70	1.0	250	0.1	16.8	18.4	22.0
BZT52C27S	WP	25.1	27	28.9	2	80	0.5	300	0.1	18.9	21.4	25.3
BZT52C30S	WQ	28	30	32	2	80	0.5	300	0.1	21.0	24.4	29.4
BZT52C33S	WR	31	33	35	2	80	0.5	325	0.1	23.1	27.4	33.4
BZT52C36S	WS	34	36	38	2	90	0.5	350	0.1	25.2	30.4	37.4
BZT52C39S	WT	37	39	41	2	130	0.5	350	0.1	27.3	33.4	41.2
BZT52C43S	WU	40	43	46	5	100	1.0	750	0.1	32	37.6	46.6
BZT52C47S	WV	44	47	50	5	100	1.0	750	0.1	35	42.0	51.8
BZT52C51S	X1	48	51	54	2	180	0.5	400	0.05	35.7	46.6	57.2
BZT52C56S	X2	53	56	59	2	200	1	1000	0.1	42	52.2	63.8
BZT52C62S	X3	58	62	66	2	215	0.5	450	0.05	43.4	58.8	71.6
BZT52C68S	X4	64	68	72	2	240	0.5	475	0.05	47.6	65.6	79.8
BZT52C75S	X5	70	75	79	2	255	0.5	500	0.05	52.5	73.4	88.6



BZT52C2V4S THRU BZT52C75S

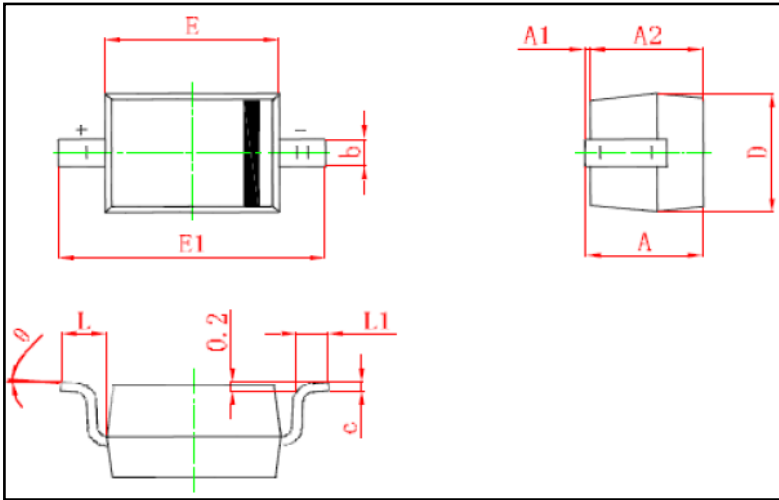
■ Characteristics (Typical)





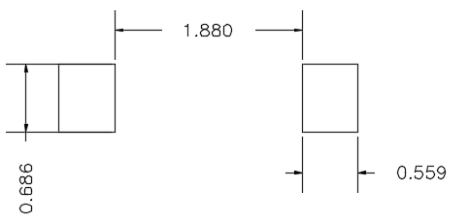
BZT52C2V4S THRU BZT52C75S

■ SOD-323 Package Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

■ SOD-323 Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



BZT52C2V4S THRU BZT52C75S

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