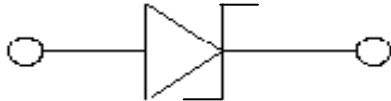


Zener Diodes



Features

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

Mechanical Data

- **Package:** SOD-123
- **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	P _D	mW	500
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
Forward Voltage(@I _F =10mA)	V _F	V	1.0
Thermal Resistance Junction to Ambient Air*	R _{θJA}	°C /W	250

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52B2V4 THRU BZT52B75	F2	Approximate 0.011	3000	30000	120000	7" reel



BZT52B2V4 THRU BZT52B75

■ Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

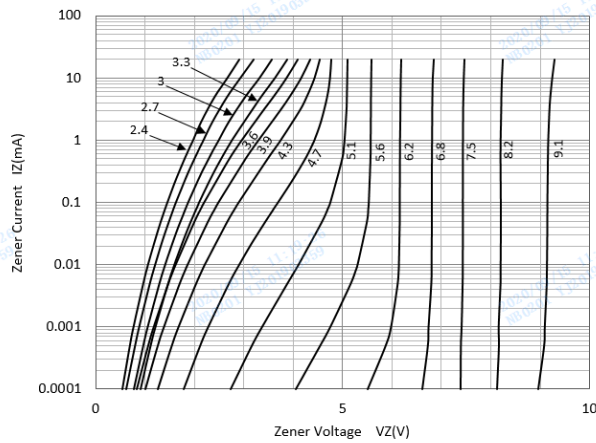
Type Number	Device Marking	V_z at I_{ZT} (V)			$Z_{zt}(\Omega)$		$Z_{zk}(\Omega)$		$I_R(\mu\text{A})@V_R$		Typical Temperature Coefficient@ I_{ZTC} mV/ $^{\circ}\text{C}$		Test Current I_{ZTC}
		min.	typ.	max.	$I_{ZT}(\text{mA})$	max.	$I_{zk}(\text{mA})$	max.	max	$V_R(\text{V})$	Min	Max	mA
BZT52B2V4	2WX	2.34	2.4	2.46	5	100	1.0	600	45	1.0	-3.5	0	5
BZT52B2V7	2W1	2.63	2.7	2.77	5	100	1.0	600	20	1.0	-3.5	0	5
BZT52B3V0	2W2	2.92	3.0	3.08	5	100	1.0	600	10	1.0	-3.5	0	5
BZT52B3V3	2W3	3.21	3.3	3.39	5	95	1.0	600	15	1.0	-3.5	0	5
BZT52B3V6	2W4	3.52	3.6	3.67	5	95	1.0	600	15	1.0	-3.5	0	5
BZT52B3V9	2W5	3.82	3.9	3.98	5	95	1.0	600	10	1.0	-3.5	0	5
BZT52B4V3	2W6	4.21	4.3	4.39	5	95	1.0	600	5	1.0	-3.5	0	5
BZT52B4V7	2W7	4.61	4.7	4.79	5	78	1.0	500	5	2.0	-3.5	0	5
BZT52B5V1	2W8	5.0	5.1	5.2	5	60	1.0	480	0.1	0.8	-2.7	1.2	5
BZT52B5V6	2W9	5.49	5.6	5.71	5	40	1.0	400	0.1	1.0	-2	2.5	5
BZT52B6V2	2WA	6.08	6.2	6.32	5	10	1.0	150	0.1	2.0	0.4	3.7	5
BZT52B6V8	2WB	6.66	6.8	6.94	5	8	1.0	80	0.1	3.0	1.2	4.5	5
BZT52B7V5	2WC	7.35	7.5	7.65	5	7	1.0	80	0.1	5.0	2.5	5.3	5
BZT52B8V2	2WD	8.04	8.2	8.36	5	7	1.0	80	0.1	6.0	3.2	6.2	5
BZT52B9V1	2WE	8.92	9.1	9.28	5	10	1.0	100	0.1	7.0	3.8	7.0	5
BZT52B10	2WF	9.8	10	10.2	5	15	1.0	150	0.1	7.5	4.5	8.0	5
BZT52B11	2WG	10.78	11	11.22	5	20	1.0	150	0.1	8.5	5.4	9.0	5
BZT52B12	2WH	11.76	12	12.24	5	20	1.0	150	0.1	9.0	6.0	10.0	5
BZT52B13	2WI	12.74	13	13.3	5	25	1.0	170	0.1	10.0	7.0	11.0	5
BZT52B14	WJ	13.7	14	14.3	5	30	1.0	170	0.1	10.5	8.1	12.0	5
BZT52B15	2WJ	14.7	15	15.3	5	30	1.0	200	0.1	11.0	9.2	13.0	5
BZT52B16	2WK	15.68	16	16.3	5	40	1.0	200	0.1	12	10.4	14.0	5
BZT52B18	2WL	17.6	18	18.4	5	50	1.0	225	0.1	14.0	12.4	16.0	5
BZT52B20	2WM	19.6	20	20.4	5	55	1.0	225	0.1	15.0	14.4	18.0	5
BZT52B22	2WN	21.56	22	22.44	5	55	1.0	250	0.1	17.0	16.4	20.0	5
BZT52B24	2WO	23.52	24	24.5	5	70	1.0	250	0.1	18.0	18.4	22.0	5
BZT52B27	2WP	26.46	27	27.54	5	80	1.0	300	0.1	20.0	21.4	25.3	2
BZT52B30	2WQ	29.4	30	30.6	5	80	1.0	300	0.1	22.5	24.4	29.4	2
BZT52B33	2WR	32.34	33	33.7	5	80	1.0	325	0.1	25.0	27.4	33.4	2
BZT52B36	2WS	35.28	36	36.72	5	90	1.0	350	0.1	27.0	30.4	37.4	2
BZT52B39	2WT	38.22	39	39.8	5	90	1.0	350	0.1	29.0	33.4	41.2	2
BZT52B43	2WU	42.14	43	43.86	5	100	1	375	0.1	32.0	37.6	46.6	2
BZT52B47	2WV	46.06	47	47.94	5	110	1	375	0.1	35.0	42.0	51.8	2
BZT52B51	2X1	50.0	51	52.0	2	180	0.5	400	0.05	35.7	46.6	57.2	2
BZT52B56	2X2	54.9	56	57.1	2	200	0.5	425	0.05	39.2	52.2	63.8	2
BZT52B62	X3	60.8	62	63.2	2	215	0.5	450	0.05	43.4	58.8	71.6	2
BZT52B68	X4	66.6	68	69.4	2	240	0.5	475	0.05	47.6	65.6	79.8	2
BZT52B75	X5	73.5	75	76.5	2	255	0.5	500	0.05	52.5	73.4	88.6	2



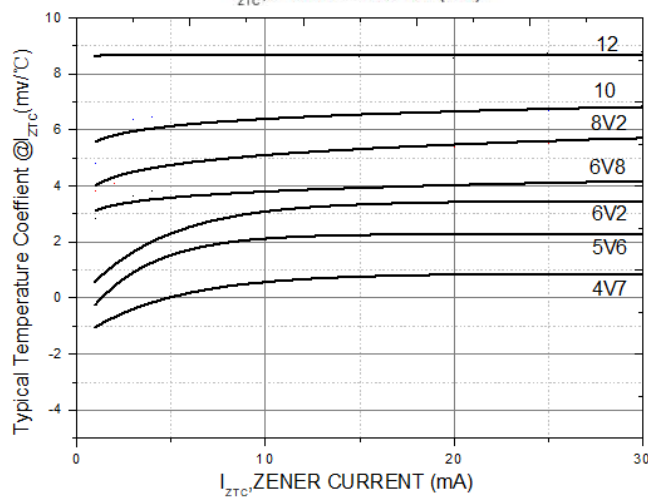
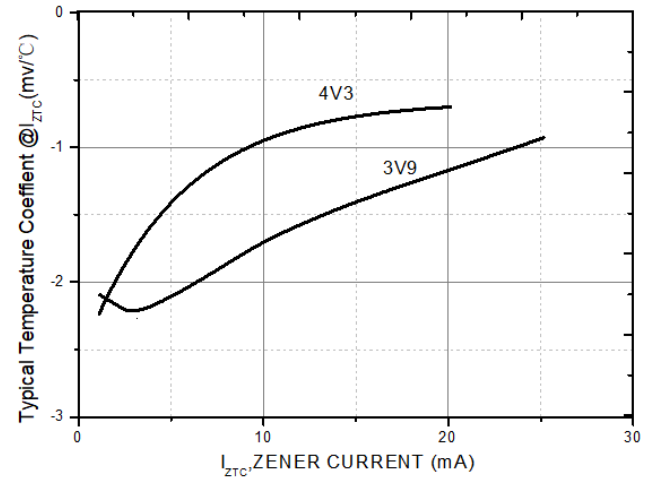
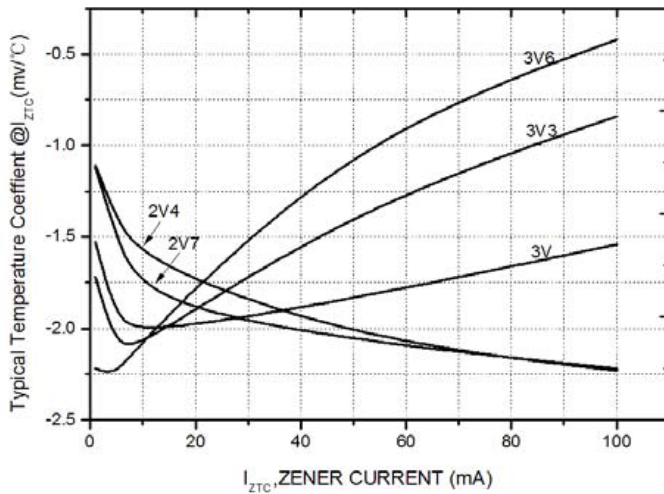
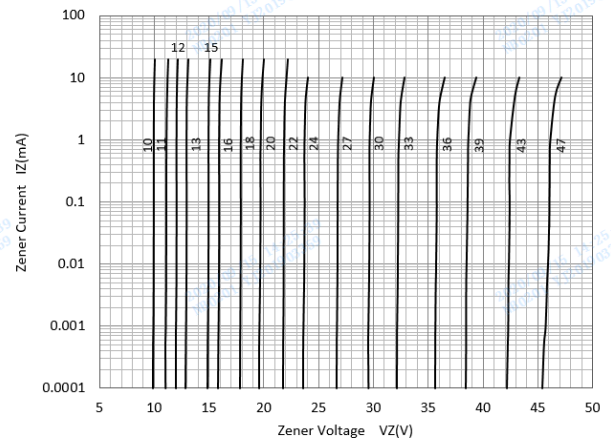
BZT52B2V4 THRU BZT52B75

■ Characteristics (Typical)

Zener Breakdown Characteristics



Zener Breakdown Characteristics

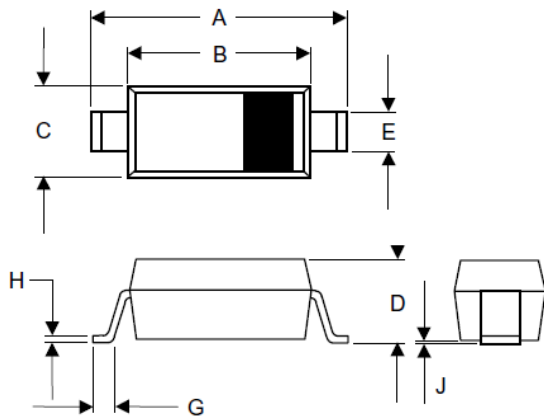




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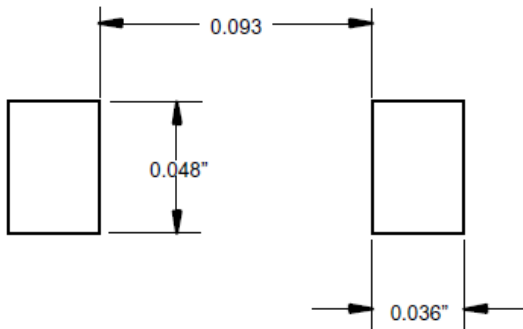
■ SOD-123 Package Outline Dimensions

SOD123



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

■ SOD-123 Soldering Footprint



Unit: inches



BZT52B2V4 THRU BZT52B75

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