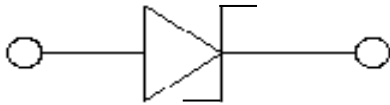


Zener Diodes



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

PARAMETER	SYMBOL	UNIT	VALUE
Power Dissipation(*Note)	P_D	mW	300
Storage Temperature Range	T_{stg}	$^\circ\text{C}$	-55~+150
Junction Temperature	T_J	$^\circ\text{C}$	-55~+150
Maximum Forward Voltage @ $I_F=10\text{mA}$	V_F	V	0.9
Maximum Regulator Current	I_{ZM}	mA	P_D / V_z
Thermal Resistance Junction to Ambient Air(*Note)	$R_{\theta JA}$	$^\circ\text{C} / \text{W}$	417

Note:Device mounted on PCB

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BZT52B2V4S THRU BZT52B75S	F2	Approximate 0.004	3000	30000	120000	7" reel



BZT52B2V4S THRU BZT52B75S

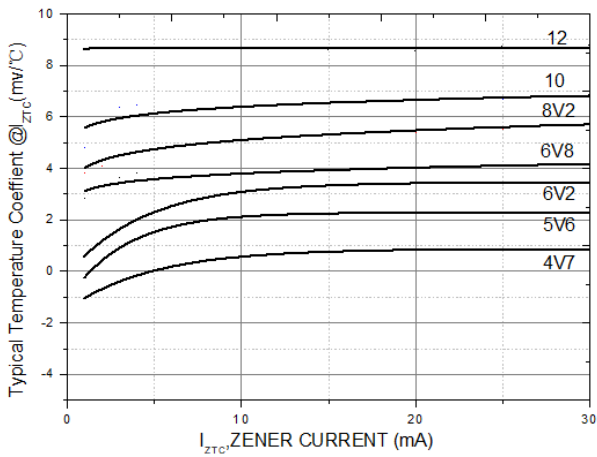
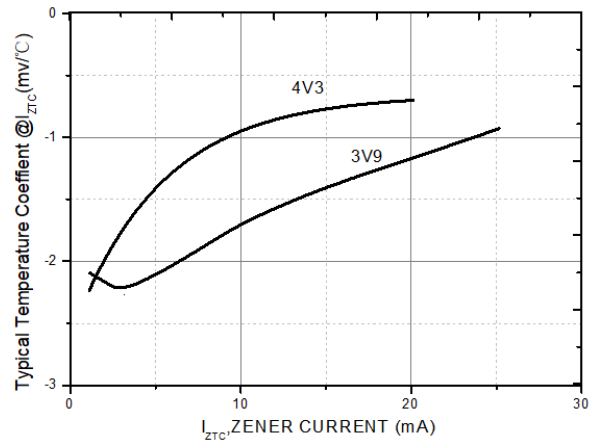
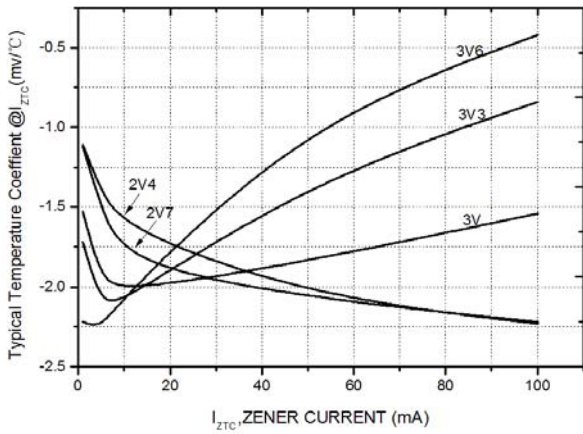
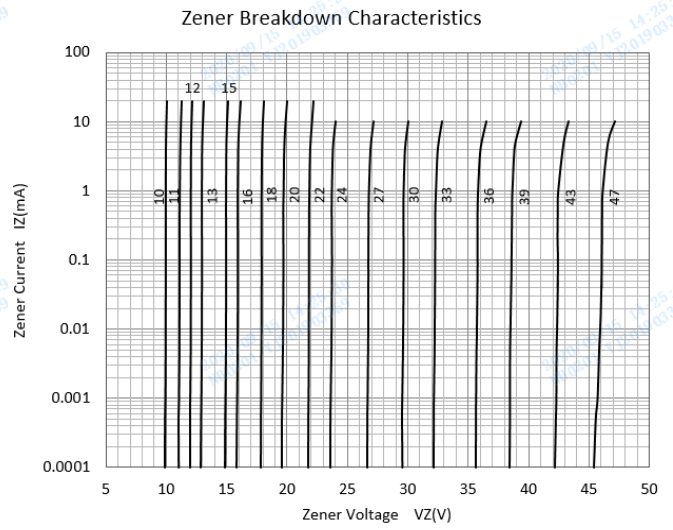
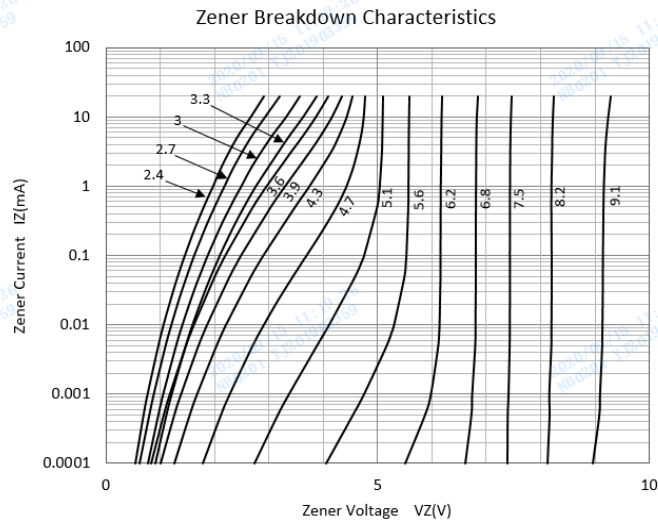
■Electrical Characteristics (T_a=25°C Unless otherwise specified)

Type Number	Device Marking	V _z at I _{ZT} (V)			Z _{z1} (Ω)		Z _{zk} (Ω)		I _R (μA)@V _R		Typical Temperature Coefficient@ IZTC mV/°C	
		min.	typ.	max.	I _{ZT} (mA)	max.	I _{zk} (mA)	max.	max	V _R (V)	Min	Max
BZT52B2V4S	2WX	2.34	2.4	2.46	5	100	1.0	600	45	1.0	-3.5	0
BZT52B2V7S	2W1	2.633	2.7	2.768	5	100	1.0	600	20	1.0	-3.5	0
BZT52B3V0S	2W2	2.925	3.0	3.075	5	100	1.0	600	9	1.0	-3.5	0
BZT52B3V3S	2W3	3.218	3.3	3.383	5	95	1.0	600	4.5	1.0	-3.5	0
BZT52B3V6S	2W4	3.53	3.6	3.67	5	95	1.0	600	15	1.0	-3.5	0
BZT52B3V9S	2W5	3.82	3.9	3.98	5	95	1.0	600	10	1.0	-3.5	0
BZT52B4V3S	2W6	4.21	4.3	4.39	5	95	1.0	600	5	1.0	-3.5	0
BZT52B4V7S	2W7	4.61	4.7	4.79	5	78	1.0	500	5	2.0	-3.5	0
BZT52B5V1S	2W8	5.0	5.1	5.2	5	60	1.0	480	0.1	0.8	-2.7	1.2
BZT52B5V6S	2W9	5.49	5.6	5.71	5	40	1.0	400	0.1	1.0	-2	2.5
BZT52B6V2S	2WA	6.08	6.2	6.32	5	10	1.0	150	0.1	2.0	0.4	3.7
BZT52B6V8S	2WB	6.66	6.8	6.94	5	8	1.0	80	0.1	3.0	1.2	4.5
BZT52B7V5S	2WC	7.35	7.5	7.65	5	7	1.0	80	0.1	5.0	2.5	5.3
BZT52B8V2S	2WD	8.04	8.2	8.36	5	7	1.0	80	0.1	6.0	3.2	6.2
BZT52B9V1S	2WE	8.92	9.1	9.28	5	10	1.0	100	0.1	7.0	3.8	7.0
BZT52B10S	WG	9.8	10	10.2	5	15	1.0	150	0.1	7.5	4.5	8.0
BZT52B11S	2WG	10.78	11	11.22	5	20	1.0	150	0.1	8.5	5.4	9.0
BZT52B12S	WI	11.76	12	12.24	5	20	1.0	150	0.1	9.0	6.0	10.0
BZT52B13S	2WI	12.74	13	13.26	5	25	1.0	170	0.1	10.0	7.0	11.0
BZT52B14S	WJ	13.7	14	14.3	5	30	1.0	170	0.1	10.2	8.1	12.0
BZT52B15S	WL	14.7	15	15.3	5	30	1.0	200	0.1	11.0	9.2	13.0
BZT52B16S	WM	15.68	16	16.3	5	40	1.0	200	0.1	12	10.4	14.0
BZT52B18S	WN	17.64	18	18.36	5	50	1.0	225	0.1	14.0	12.4	16.0
BZT52B20S	2WM	19.6	20	20.4	5	55	1.0	225	0.1	15.0	14.4	18.0
BZT52B22S	2WN	21.56	22	22.44	5	55	1.0	250	0.1	17.0	16.4	20.0
BZT52B24S	WR	23.52	24	24.48	5	70	1.0	250	0.1	18.0	18.4	22.0
BZT52B27S	2WP	26.46	27	27.54	5	80	1.0	300	0.1	20.0	21.4	25.3
BZT52B30S	2WQ	29.4	30	30.6	5	80	1.0	300	0.1	22.5	24.4	29.4
BZT52B33S	2WR	32.34	33	33.66	5	80	1.0	325	0.1	25.0	27.4	33.4
BZT52B36S	2WS	35.28	36	36.72	5	90	1.0	350	0.1	27.0	30.4	37.4
BZT52B39S	2WT	38.22	39	39.78	5	90	1.0	350	0.1	29.0	33.4	41.2
BZT52B43S	2WU	42.14	43	43.86	5	100	1	375	0.1	32.0	37.6	46.6
BZT52B47S	2WV	46.06	47	47.94	5	110	1	375	0.1	35.0	42.0	51.8
BZT52B51S	2X1	50.0	51	52.0	2	180	0.5	400	0.05	35.7	46.6	57.2
BZT52B56S	2X2	54.9	56	57.1	2	200	0.5	425	0.05	39.2	52.2	63.8
BZT52B62S	2X3	60.8	62	63.2	2	215	0.5	450	0.05	43.4	58.8	71.6
BZT52B68S	2X4	66.64	68	69.36	2	240	0.5	475	0.05	47.6	65.6	79.8
BZT52B75S	2X5	73.5	75	76.5	2	255	0.5	500	0.05	52.5	73.4	88.6



BZT52B2V4S THRU BZT52B75S

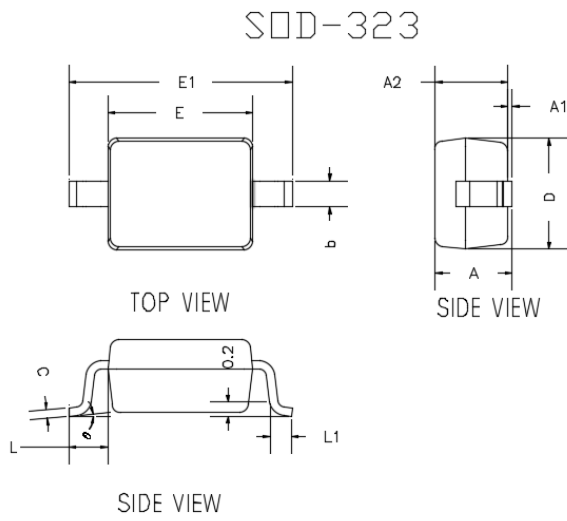
■ Characteristics (Typical)





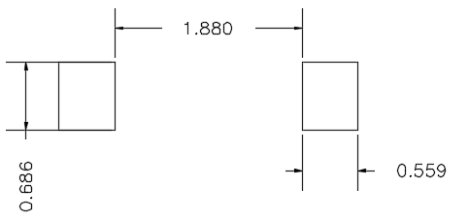
BZT52B2V4S THRU BZT52B75S

■ SOD-323 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

■ SOD-323 Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



BZT52B2V4S THRU BZT52B75S

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