

BZT52B2V4~BZT52B75

ZENER DIODES

VOLTAGE 2.4 to 75 Volt **POWER** 0.41 Watt

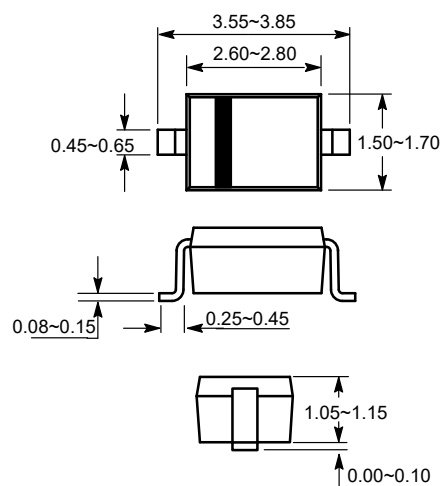
SOD-123 Unit:mm

FEATURES

- Planar Die Construction
- 410mW Power Dissipation
- General Purpose, Medium Current
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation	P_d	410	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

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ELECTRICAL CHARACTERISTICS @25°C

Type	ZENER VOLTAGE $V_Z^{(1)}$ VOLTS			Maximum Zener Impedance $(Z_{ZT})^{(2)}$ Z _{ZT} (OHMS)		Maximum Zener Impedance $(Z_{ZK})^{(2)}$ Z _{ZK} (OHMS)		REVERSE CURRENT $I_R(\text{Max})@V_R$		Marking
	Min.	Nom.	Max.	$I_{ZT}(\text{mA})$	Max.	$I_{ZK}(\text{mA})$	Max.	μA	V	
BZT52B2V4	2.35	2.4	2.45	5	85	1	600	100	1.0	W1
BZT52B2V7	2.64	2.7	2.75	5	83	1	600	75	1.0	W2
BZT52B3V0	2.94	3.0	3.06	5	95	1	600	50	1.0	W3
BZT52B3V3	3.23	3.3	3.37	5	95	1	600	25	1.0	W4
BZT52B3V6	3.52	3.6	3.67	5	95	1	600	15	1.0	W5
BZT52B3V9	3.82	3.9	3.98	5	95	1	600	10	1.0	W6
BZT52B4V3	4.21	4.3	4.39	5	95	1	600	5	1.0	W7
BZT52B4V7	4.61	4.7	4.79	5	78	1	500	5	2.0	W8
BZT52B5V1	5.0	5.1	5.20	5	60	1	480	0.1	0.8	W9
BZT52B5V6	5.49	5.6	5.71	5	40	1	400	0.1	1.0	WA
BZT52B6V2	6.08	6.2	6.32	5	10	1	150	0.1	2.0	WB
BZT52B6V8	6.66	6.8	6.94	5	8	1	80	0.1	3.0	WC
BZT52B7V5	7.35	7.5	7.65	5	7	1	80	0.1	5.0	WD
BZT52B8V2	8.04	8.2	8.36	5	7	1	80	0.1	6.0	WE
BZT52B9V1	8.92	9.1	9.28	5	10	1	100	0.1	7.0	WF
BZT52B10	9.80	10	10.20	5	15	1	150	0.1	7.5	WG
BZT52B11	10.78	11	11.22	5	20	1	150	0.1	8.5	WH
BZT52B12	11.76	12	12.24	5	20	1	150	0.1	9.0	WI
BZT52B13	12.74	13	13.30	5	25	1	170	0.1	10.0	WK
BZT52B15	14.7	15	15.30	5	30	1	200	0.1	11.0	WL
BZT52B16	15.68	16	16.30	5	40	1	200	0.1	12.0	WM
BZT52B18	17.6	18	18.40	5	50	1	225	0.1	14.0	WN
BZT52B20	19.6	20	20.40	5	50	1	225	0.1	15.0	WO
BZT52B22	21.56	22	22.44	5	55	1	250	0.1	17.0	WP
BZT52B24	23.52	24	24.50	5	70	1	250	0.1	18.0	WR
BZT52B27	26.46	27	27.54	2	80	1	300	0.1	20.0	WS
BZT52B30	29.4	30	30.60	2	80	1	300	0.1	22.5	WT
BZT52B33	32.34	33	33.70	2	80	1	325	0.1	25.0	WU
BZT52B36	35.28	36	36.72	2	90	1	350	0.1	27.0	WW
BZT52B39	38.22	39	39.80	2	90	1	350	0.1	29.0	WX
BZT52B43	42.14	43	43.86	2	100	1	375	0.1	32.0	WY
BZT52B47	46.06	47	47.94	2	100	1	375	0.1	35.0	WZ
BZT52B51	49.98	51	52.02	2	100	1	400	0.1	38.0	XA
BZT52B56	54.88	56	57.12	2	135	1	1000	0.1	42.0	X2
BZT52B62	60.76	62	63.24	2	150	1	1000	0.1	46.0	X3
BZT52B68	66.64	68	69.36	2	200	1	1000	0.1	51.0	X4
BZT52B75	73.50	75	76.50	2	250	1	1000	0.1	56.0	X5

(1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25 mm²

(2) f=1KHz

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RATING AND CHARACTERISTIC CURVES

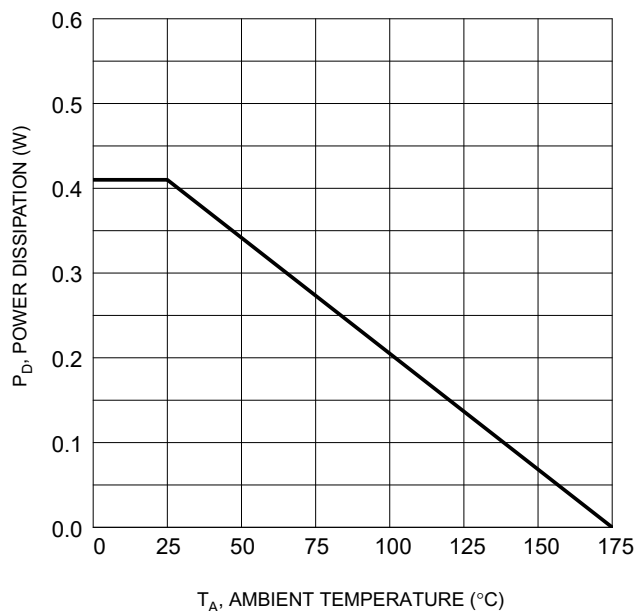


Fig. 1 Power Dissipation vs Ambient Temperature

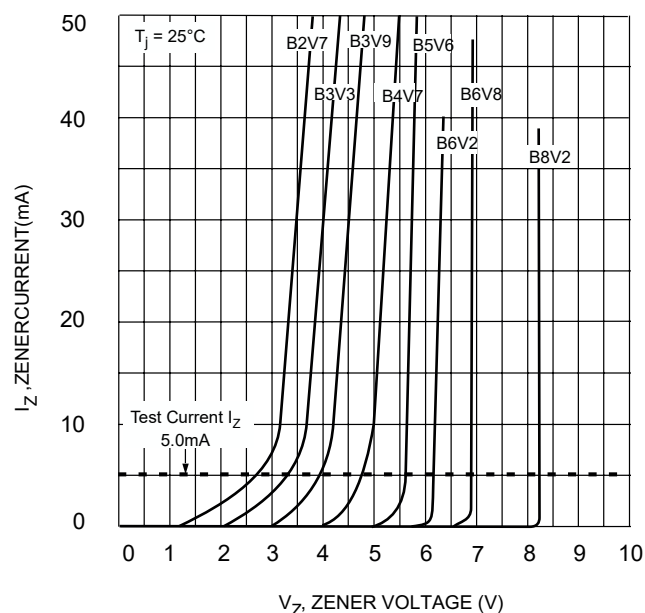


Fig.2 Zener Breakdown Characteristics

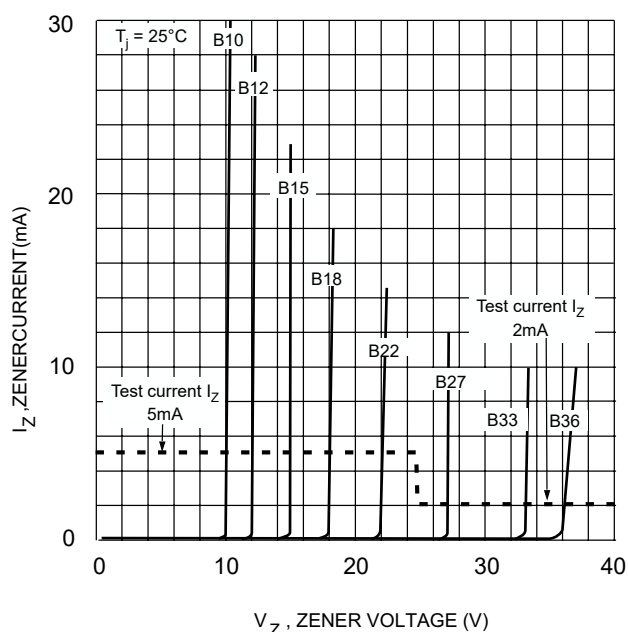


Fig. 3 Zener Breakdown Characteristics

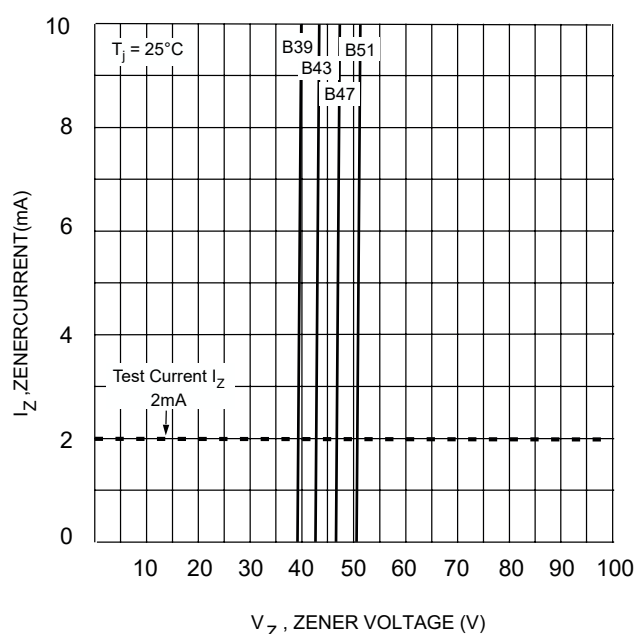


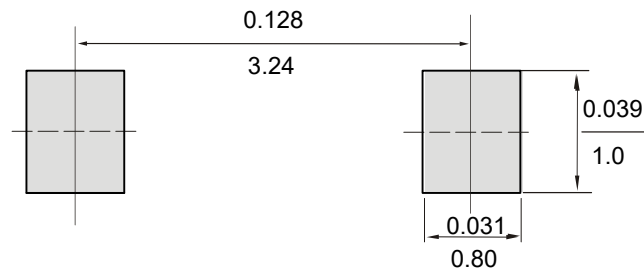
Fig. 4 Zener Breakdown Characteristics

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MOUNTING PAD LAYOUT

SOD-123

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BZT52B2V4~BZT52B75	SOD-123	7 Inch	3000