Features

- Standard Vz Tolerance is ±2%
- Planar Die Construction
- Ideally Suited for Automated Assembly Processes
- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

500 mW Zener Diode 2.4 to 75 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance : 304°C/W Junction to Ambient (Note2)
- Thermal Resistance : 250°C/W Junction to Ambient (Note3)

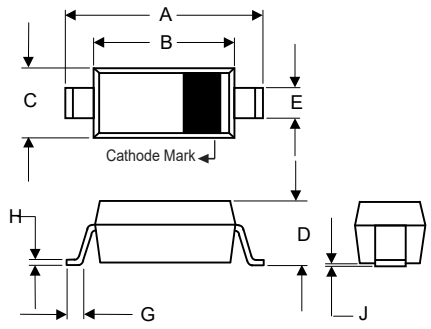
Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	410mW	Diode on Ceramic Substrate 0.7 mm, 2.5 mm^2 Pad Areas
Power Dissipation	P_D	500mW	Diode on Ceramic Substrate 0.7 mm, 5 mm^2 Pad Areas
Maximum Forward Voltage	V_F	0.9V	I_F=10mA

Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Note: 2. Diode on Ceramic Substrate 0.7 mm, 2.5 mm^2 Pad Areas.

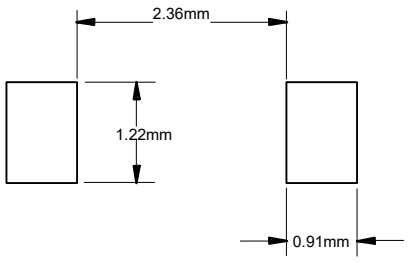
Note: 3. Diode on Ceramic Substrate 0.7 mm, 5 mm^2 Pad Areas.

SOD-123



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	----	0.053	----	1.35	
E	0.018	0.026	0.45	0.65	
G	0.006	----	0.15	----	
H	----	0.010	----	0.25	
J	----	0.006	----	0.15	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Zener Voltage			Maximum Zener Impedance (4)				Reverse Current		Marking Code
	V_Z @ I_{ZT}			Z_{ZT}	I_{ZT}	Z_{ZK}	I_{ZK}	I_R(Max)	V_R	
	Min.(V)	Nom(V)	Max.(V)	Ω	mA	Ω	mA	μA	V	
BZT52B2V4	2.35	2.4	2.45	85	5	600	1	100	1.0	2WX
BZT52B2V7	2.64	2.7	2.75	83	5	600	1	75	1.0	2W1
BZT52B3V0	2.94	3.0	3.06	95	5	600	1	50	1.0	2W2
BZT52B3V3	3.23	3.3	3.37	95	5	600	1	25	1.0	2W3
BZT52B3V6	3.52	3.6	3.67	95	5	600	1	15	1.0	2W4
BZT52B3V9	3.82	3.9	3.98	95	5	600	1	10	1.0	2W5
BZT52B4V3	4.21	4.3	4.39	95	5	600	1	5	1.0	2W6
BZT52B4V7	4.61	4.7	4.79	78	5	500	1	5	2.0	2W7
BZT52B5V1	5.0	5.1	5.2	60	5	480	1	0.1	0.8	2W8
BZT52B5V6	5.49	5.6	5.71	40	5	400	1	0.1	1.0	2W9
BZT52B6V2	6.08	6.2	6.32	10	5	150	1	0.1	2.0	2WA
BZT52B6V8	6.66	6.8	6.94	8	5	80	1	0.1	3.0	2WB
BZT52B7V5	7.35	7.5	7.65	7	5	80	1	0.1	5.0	2WC
BZT52B8V2	8.04	8.2	8.36	7	5	80	1	0.1	6.0	2WD
BZT52B9V1	8.92	9.1	9.28	10	5	100	1	0.1	7.0	2WE
BZT52B10	9.80	10	10.2	15	5	150	1	0.1	7.5	2WF
BZT52B11	10.78	11	11.22	20	5	150	1	0.1	8.5	2WG
BZT52B12	11.76	12	12.24	20	5	150	1	0.1	9.0	2WH
BZT52B13	12.74	13	13.3	25	5	170	1	0.1	10.0	2WI
BZT52B15	14.7	15	15.3	30	5	200	1	0.1	11.0	2WJ
BZT52B16	15.68	16	16.3	40	5	200	1	0.1	12.0	2WK
BZT52B18	17.6	18	18.4	50	5	225	1	0.1	14.0	2WL
BZT52B20	19.6	20	20.4	50	5	225	1	0.1	15.0	2WM
BZT52B22	21.56	22	22.44	55	5	250	1	0.1	17.0	2WN
BZT52B24	23.52	24	24.5	70	5	250	1	0.1	18.0	WR
BZT52B27	26.46	27	27.54	80	2	300	1	0.1	20.0	2WP
BZT52B30	29.4	30	30.6	80	2	300	1	0.1	22.5	WT
BZT52B33	32.34	33	33.7	80	2	325	1	0.1	25.0	2WR
BZT52B36	35.28	36	36.72	90	2	350	1	0.1	27.0	2WS
BZT52B39	38.22	39	39.8	90	2	350	1	0.1	29.0	2WT
BZT52B43	42.14	43	43.86	100	2	375	1	0.1	32.0	2WU
BZT52B47	46.06	47	47.94	100	2	375	1	0.1	35.0	2WV
BZT52B51	49.98	51	52.02	100	2	400	1	0.1	38.0	2X1
BZT52B56	54.88	56	57.12	135	2	1000	1	0.1	42.0	2X2
BZT52B62	60.76	62	63.24	150	2	1000	1	0.1	46.0	X3
BZT52B68	66.64	68	69.36	200	2	1000	1	0.1	51.0	X4
BZT52B75	73.50	75	76.50	250	2	1000	1	0.1	56.0	2X5

Note : 4. f=1KHz

Curve Characteristics

Fig. 1 - Power Derating Curve

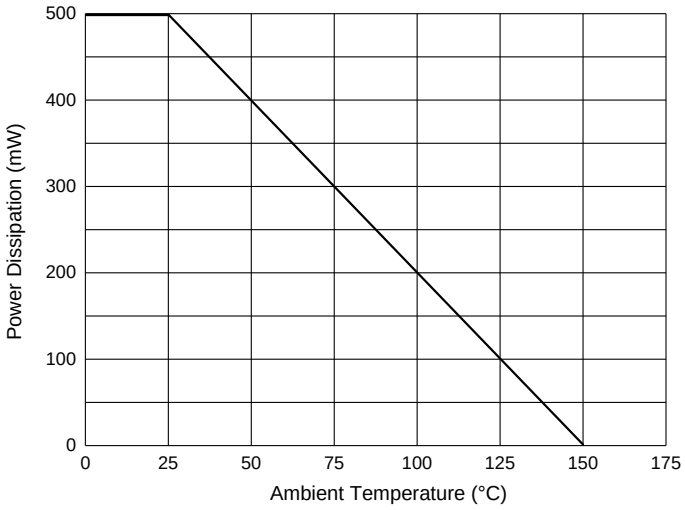


Fig. 2 - Typical Zener Breakdown Characteristics

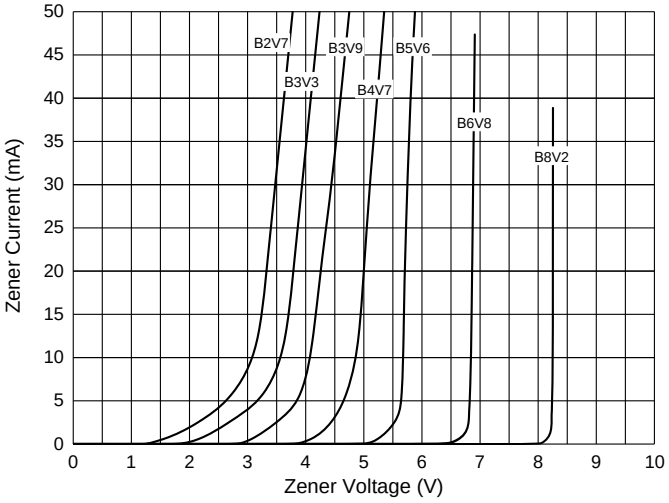


Fig. 3 - Typical Zener Breakdown Characteristics

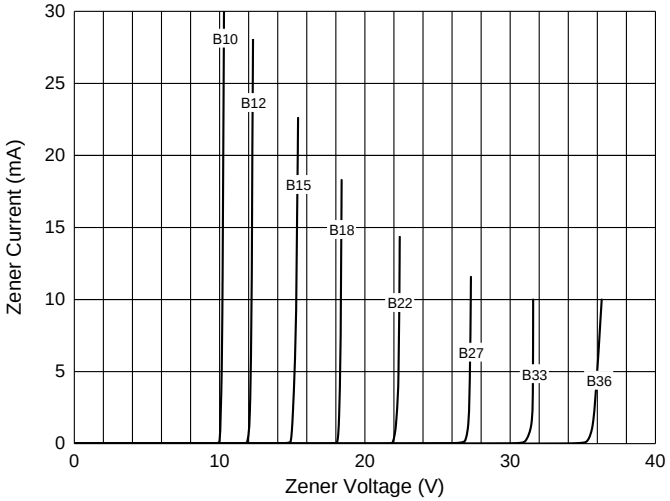
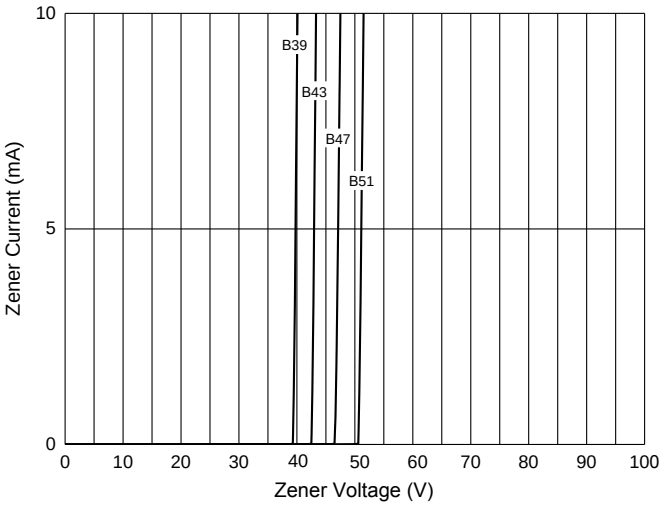


Fig. 4 - Typical Zener Breakdown Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

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