

## Features

- Standard Vz Tolerance is  $\pm 2\%$
- Planar Die Construction
- 200mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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)

## Maximum Ratings

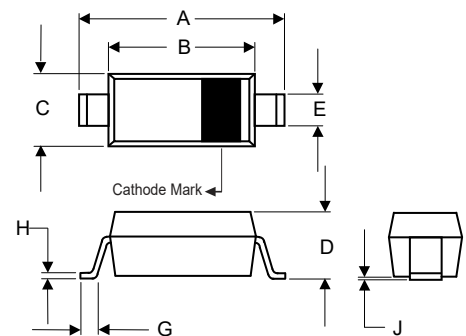
- Operating Junction Temperature Range:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Storage Temperature Range:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Thermal Resistance :  $625^{\circ}\text{C}/\text{W}$  Junction to Ambient

Parameter	Symbol	Rating	Conditions
Power Dissipation	$P_D$	200mW	Note 1
Maximum Forward Voltage	$V_F$	0.9V	$I_F=10\text{mA}$

Pad [ 1.8mm ] x [ 0.69mm ] 5.0mm<sup>2</sup>(0.013mm thick) land areas.

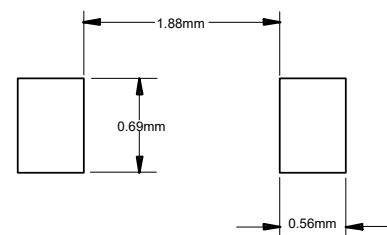
# 200 mW Zener Diode 3.0 to 75 Volts

## SOD-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

### Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Nominal Zener Voltage			Maximum Zener Impedance		Maximum Zener Impedance		Maximum Reverse Current $I_R(\text{Max}) @ V_R$		Marking Code
	$V_Z @ I_{ZT}$			$Z_{ZT} @ I_{ZT}$	$I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R$	$V_R$	
	Min.(V)	Nom(V)	Max.(V)	$\Omega$	mA	$\Omega$	mA	$\mu\text{A}$	V	
BZT52B3V0JS	2.94	3.0	3.06	89	5.0	564	1.00	9.0	1.0	2Z
BZT52B3V3JS	3.23	3.3	3.37	89	5.0	564	1.00	4.5	1.0	3Z
BZT52B3V6JS	3.53	3.6	3.67	84	5.0	564	1.00	4.5	1.0	4Z
BZT52B3V9JS	3.82	3.9	3.98	84	5.0	564	1.00	2.7	1.0	5Z
BZT52B4V3JS	4.21	4.3	4.39	84	5.0	564	1.00	2.7	1.0	6Z
BZT52B4V7JS	4.61	4.7	4.79	75	5.0	564	1.00	2.7	2.0	7Z
BZT52B5V1JS	5.00	5.1	5.20	60	5.0	480	1.00	2.0	2.0	2W8/8Z
BZT52B5V6JS	5.49	5.6	5.71	40	5.0	400	1.00	1.0	2.0	2W9/9Z
BZT52B6V2JS	6.08	6.2	6.32	10	5.0	150	1.00	3.0	4.0	2WA/AZ
BZT52B6V8JS	6.66	6.8	6.94	15	5.0	141	1.00	2.0	4.0	2WB/BZ
BZT52B7V5JS	7.35	7.5	7.65	15	5.0	80	1.00	1.0	5.0	2WC/CZ
BZT52B8V2JS	8.04	8.2	8.36	15	5.0	80	1.00	0.7	5.0	2WD/DZ
BZT52B9V1JS	8.92	9.1	9.28	15	5.0	100	1.00	0.5	6.0	2WE/EZ
BZT52B10JS	9.80	10	10.20	20	5.0	150	1.00	0.2	7.0	2WF/FZ
BZT52B11JS	10.78	11	11.22	20	5.0	150	1.00	0.1	8.0	2WG/GZ
BZT52B12JS	11.76	12	12.24	25	5.0	150	1.00	0.1	8.0	2WH/HZ
BZT52B13JS	12.74	13	13.26	30	5.0	170	1.00	0.1	8.0	2WI/IJZ
BZT52B15JS	14.70	15	15.30	30	5.0	200	1.00	0.1	10.5	2WJ/KZ
BZT52B16JS	15.68	16	16.32	40	5.0	200	1.00	0.1	11.2	2WK/LZ
BZT52B18JS	17.64	18	18.36	45	5.0	225	1.00	0.1	12.6	2WL/MZ
BZT52B20JS	19.60	20	20.40	55	5.0	225	1.00	0.1	14.0	2WM/NZ
BZT52B22JS	21.56	22	22.44	51	5.0	235	1.00	0.045	15.4	PZ
BZT52B24JS	23.52	24	24.48	65	5.0	235	1.00	0.045	16.8	RZ
BZT52B27JS	26.46	27	27.54	75	5.0	282	0.50	0.045	18.9	SZ
BZT52B30JS	29.40	30	30.60	75	5.0	282	0.50	0.045	21.0	TZ
BZT52B33JS	32.34	33	33.66	75	5.0	306	0.50	0.045	23.0	UZ
BZT52B36JS	35.28	36	36.72	84	5.0	329	0.50	0.045	25.2	VZ
BZT52B39JS	38.22	39	39.78	122	5.0	329	0.50	0.045	27.3	WZ
BZT52B43JS	42.14	43	43.86	141	5.0	353	0.50	0.045	30.1	XZ
BZT52B47JS	46.06	47	47.94	160	5.0	353	0.50	0.045	33.0	YZ
BZT52B51JS	49.98	51	52.02	169	5.0	376	0.50	0.045	35.7	ZZ
BZT52B56JS	54.88	56	57.12	135	2.5	1000	1.00	0.100	42.0	X2
BZT52B62JS	60.76	62	63.24	150	2.5	1000	1.00	0.100	46.0	X3
BZT52B68JS	66.64	68	69.36	200	2.5	1000	1.00	0.100	51.0	X4
BZT52B75JS	73.50	75	76.50	250	2.5	1000	1.00	0.100	56.0	X5

## Curve Characteristics

Fig. 1 - Power Derating Curve

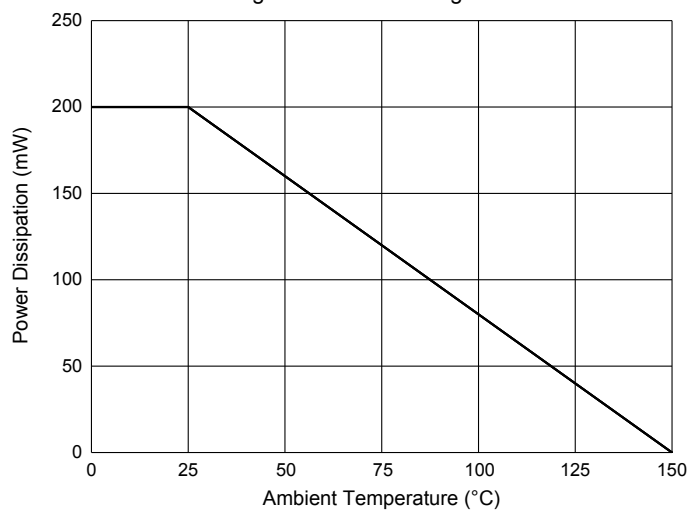
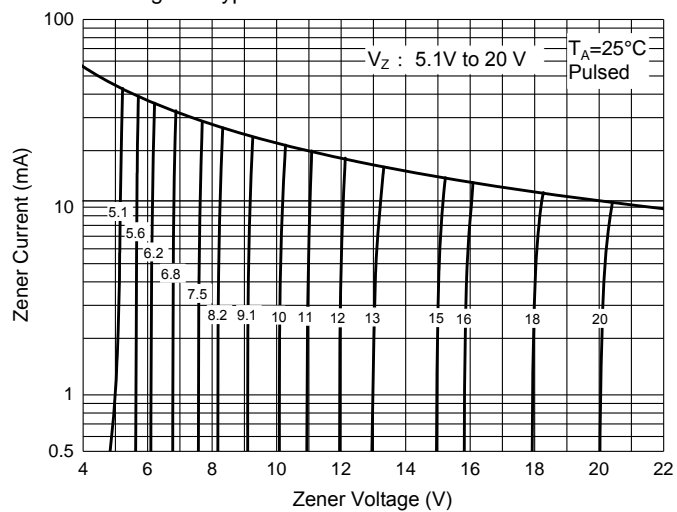


Fig. 2 - Typical Zener Breakdown Characteristics



## Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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