



**THE DATASHEET OF  
BZT52B5V6JS-TP**



## Features

- Standard Vz Tolerance is  $\pm 2\%$
- Planar Die Construction
- 200mW Power Dissipation
- 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)

## 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 :  $625^{\circ}\text{C/W}$  Junction to Ambient

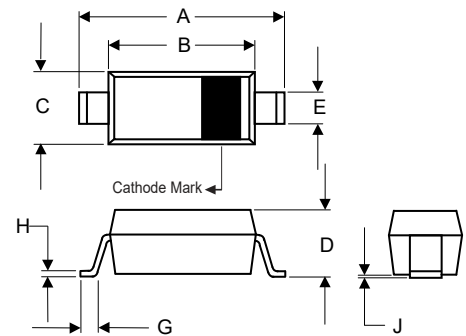
Parameter	Symbol	Rating	Conditions
Power Dissipation	$P_D$	200mW	Note 2
Maximum Forward Voltage	$V_F$	0.9V	$I_F=10\text{mA}$

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

Plating (if any) on leads is 5.0mm<sup>2</sup> (0.013mm thick) land areas.

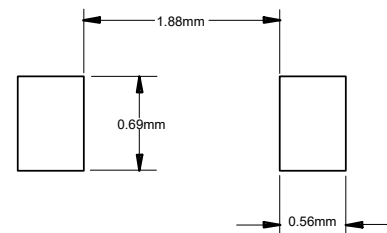
# 200 mW Zener Diode 3.0 to 75 Volts

## SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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
BZT52B5V6JS	5.49	5.6	5.71	40	5.0	400	1.00	1.0	2.0	2W9
BZT52B6V2JS	6.08	6.2	6.32	10	5.0	150	1.00	3.0	4.0	2WA
BZT52B6V8JS	6.66	6.8	6.94	15	5.0	141	1.00	2.0	4.0	2WB
BZT52B7V5JS	7.35	7.5	7.65	15	5.0	80	1.00	0.1	5.0	2WC
BZT52B8V2JS	8.04	8.2	8.36	15	5.0	80	1.00	0.7	5.0	2WD
BZT52B9V1JS	8.92	9.1	9.28	15	5.0	100	1.00	0.5	6.0	2WE
BZT52B10JS	9.80	10	10.20	20	5.0	150	1.00	0.2	7.0	2WF
BZT52B11JS	10.78	11	11.22	20	5.0	150	1.00	0.1	8.0	2WG
BZT52B12JS	11.76	12	12.24	25	5.0	150	1.00	0.1	8.0	2WH
BZT52B13JS	12.74	13	13.26	30	5.0	170	1.00	0.1	8.0	2WI
BZT52B15JS	14.70	15	15.30	30	5.0	200	1.00	0.1	10.5	2WJ
BZT52B16JS	15.68	16	16.32	40	5.0	200	1.00	0.1	11.2	2WK
BZT52B18JS	17.64	18	18.36	45	5.0	225	1.00	0.1	12.6	2WL
BZT52B20JS	19.60	20	20.40	55	5.0	225	1.00	0.1	14.0	2WM
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

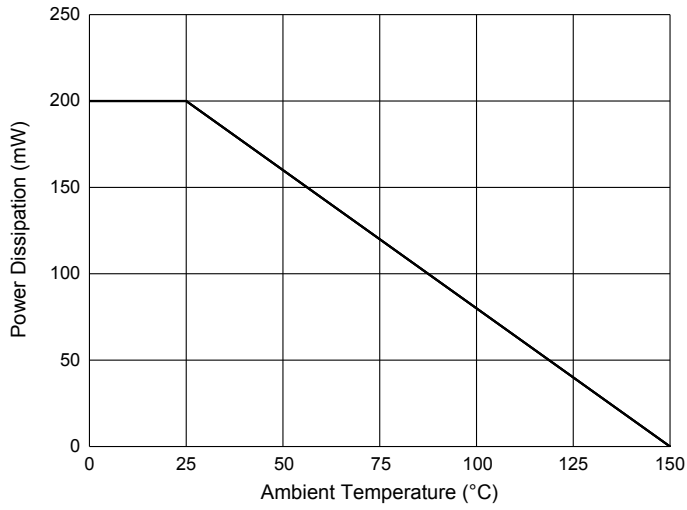
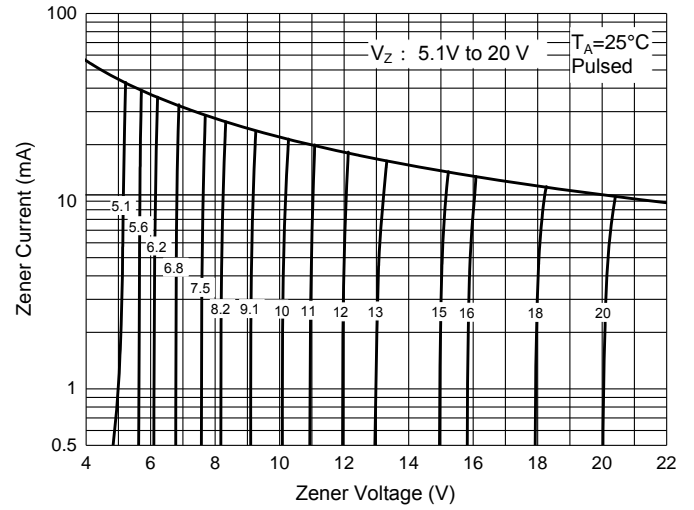


Fig. 2 - Typical Zener Breakdown Characteristics



## Ordering Information

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

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