

## 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

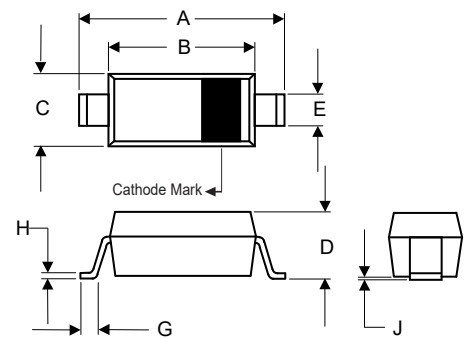
Parameter	Symbol	Rating	Conditions
Power Dissipation	$P_D$	200mW	Note 2
Maximum Forward Voltage	$V_F$	0.9V	$I_F=10\text{mA}$

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

2. All dimensions are based on a 0.5mm (0.013mm thick) land areas.

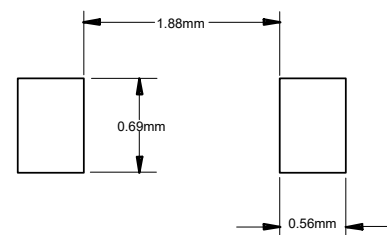
# 200 mW Zener Diode 3.0 to 75 Volts

## 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

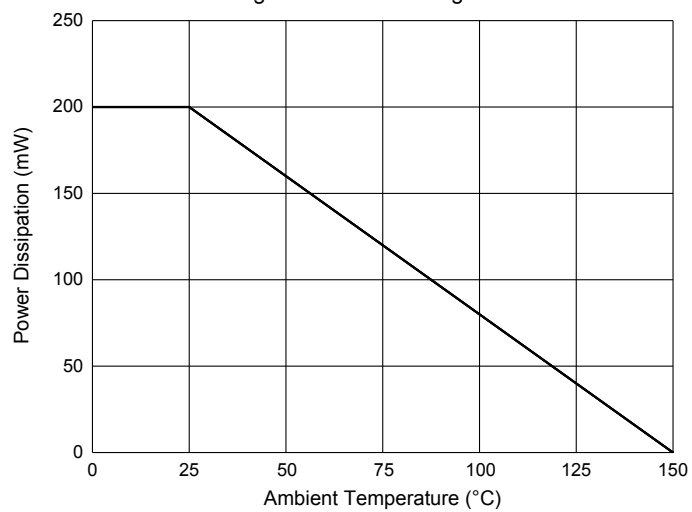
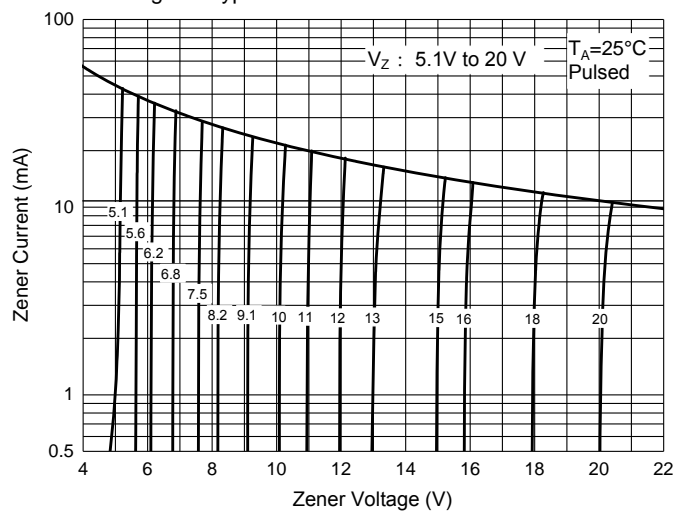


Fig. 2 - Typical Zener Breakdown Characteristics



## Ordering Information

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

**\*\*\*IMPORTANT NOTICE\*\*\***

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.