

## Features

- Standard Vz Tolerance is  $\pm 2\%$
- AEC-Q101 Qualified
- 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

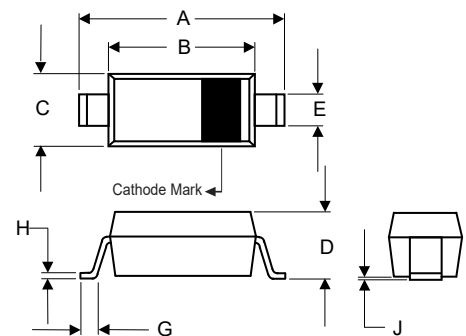
Parameter	Symbol	Rating	Conditions
Power Dissipation	$P_D$	200mW	Note 2
Maximum Forward Voltage	$V_F$	0.9V	$I_F=10\text{mA}$

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 lead areas are  $0.013\text{mm}^2$  (0.013mm thick) land areas.

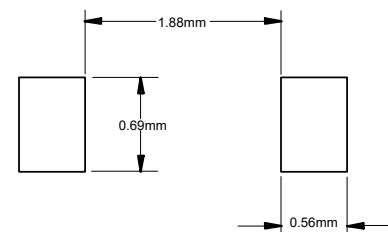
# 200 mW Zener Diode 3.6 to 47 Volts

## 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

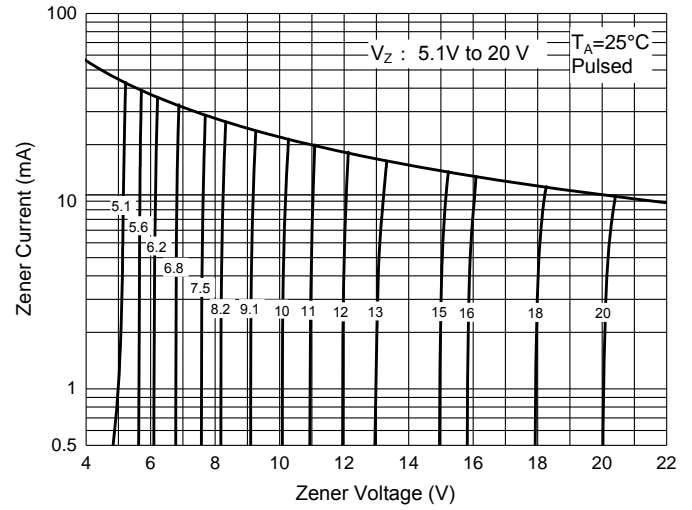
MCC Part Number	Nominal Zener Voltage			Maximum Zener Impedance		Maximum Zener Impedance		Maximum Reverse Current $I_R(\text{Max}) @ V_R$		Marking Code
		$V_Z @ I_{ZT}$		$Z_{ZT} @ I_{ZT}$	$I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R$	$V_R$	
	Min.(V)	Nom(V)	Max.(V)	$\Omega$	mA	$\Omega$	mA	$\mu\text{A}$	V	
BZT52B3V6JSHE3	3.53	3.6	3.67	84	5.0	564	1.00	4.5	1.0	4Z
BZT52B3V9JSHE3	3.82	3.9	3.98	84	5.0	564	1.00	2.7	1.0	5Z
BZT52B4V3JSHE3	4.21	4.3	4.39	84	5.0	564	1.00	2.7	1.0	6Z
BZT52B4V7JSHE3	4.61	4.7	4.79	75	5.0	564	1.00	2.7	2.0	7Z
BZT52B5V1JSHE3	5.00	5.1	5.20	60	5.0	480	1.00	2.0	2.0	2W8
BZT52B5V6JSHE3	5.49	5.6	5.71	40	5.0	400	1.00	1.0	2.0	2W9
BZT52B6V2JSHE3	6.08	6.2	6.32	10	5.0	150	1.00	3.0	4.0	2WA
BZT52B6V8JSHE3	6.66	6.8	6.94	15	5.0	141	1.00	2.0	4.0	2WB
BZT52B7V5JSHE3	7.35	7.5	7.65	15	5.0	80	1.00	1.0	5.0	2WC
BZT52B8V2JSHE3	8.04	8.2	8.36	15	5.0	80	1.00	0.7	5.0	2WD
BZT52B9V1JSHE3	8.92	9.1	9.28	15	5.0	100	1.00	0.5	6.0	2WE
BZT52B10JSHE3	9.80	10	10.20	20	5.0	150	1.00	0.2	7.0	2WF
BZT52B11JSHE3	10.78	11	11.22	20	5.0	150	1.00	0.1	8.0	2WG
BZT52B12JSHE3	11.76	12	12.24	25	5.0	150	1.00	0.1	8.0	2WH
BZT52B13JSHE3	12.74	13	13.26	30	5.0	170	1.00	0.1	8.0	2WI
BZT52B15JSHE3	14.70	15	15.30	30	5.0	200	1.00	0.1	10.5	2WJ
BZT52B16JSHE3	15.68	16	16.32	40	5.0	200	1.00	0.1	11.2	2WK
BZT52B18JSHE3	17.64	18	18.36	45	5.0	225	1.00	0.1	12.6	2WL
BZT52B20JSHE3	19.60	20	20.40	55	5.0	225	1.00	0.1	14.0	2WM
BZT52B22JSHE3	21.56	22	22.44	51	5.0	235	1.00	0.045	15.4	PZ
BZT52B24JSHE3	23.52	24	24.48	65	5.0	235	1.00	0.045	16.8	RZ
BZT52B27JSHE3	26.46	27	27.54	75	5.0	282	0.50	0.045	18.9	SZ
BZT52B30JSHE3	29.40	30	30.60	75	5.0	282	0.50	0.045	21.0	TZ
BZT52B33JSHE3	32.34	33	33.66	75	5.0	306	0.50	0.045	23.0	UZ
BZT52B36JSHE3	35.28	36	36.72	84	5.0	329	0.50	0.045	25.2	VZ
BZT52B39JSHE3	38.22	39	39.78	122	5.0	329	0.50	0.045	27.3	WZ
BZT52B43JSHE3	42.14	43	43.86	141	5.0	353	0.50	0.045	30.1	XZ
BZT52B47JSHE3	46.06	47	47.94	160	5.0	353	0.50	0.045	33.0	YZ

**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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