

## Features

- Dual Zeners in Common Anode Configuration
- $\Delta V_z$  for Both Diodes in One Case is  $\leq 2\%$ .
- Ideally Suited for Automated Assembly Processes
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

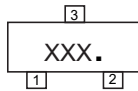
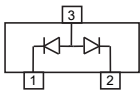
## Maximum Ratings

- 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 :  $417^{\circ}\text{C/W}$  Junction to Ambient

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_D$	300	mW

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

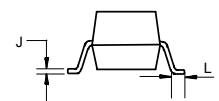
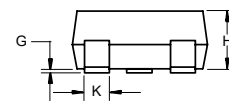
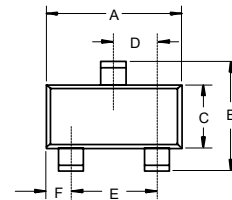
## Internal Structure and Marking Code



XX: Marking Code  
! : Product Line

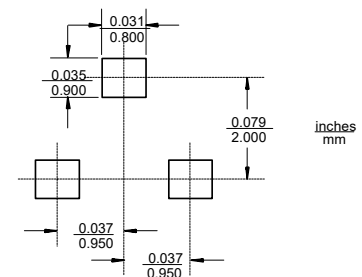
**300 mW  
Zener Diode  
2.4 to 47 Volts**

## SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

## Suggested Solder Pad Layout



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

MCC Part Number	Zener Voltage			Maximum Zener Impedance <sup>(4)</sup>				Reverse Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> (Max)	V <sub>R</sub>	
	Min.(V)	Nom(V)	Max.(V)	Ω	mA	Ω	mA	μA	V	
AZ23B2V4	2.34	2.4	2.46	100	5	600	1	45	1.0	2WX
AZ23B2V7	2.63	2.7	2.77	100	5	600	1	20	1.0	2W1
AZ23B3V0	2.92	3.0	3.08	100	5	600	1	9	1.0	2W2
AZ23B3V3	3.21	3.3	3.39	95	5	600	1	4.5	1.0	2W3
AZ23B3V6	3.52	3.6	3.67	95	5	600	1	15	1.0	2W4
AZ23B3V9	3.82	3.9	3.98	95	5	600	1	10	1.0	2W5
AZ23B4V3	4.21	4.3	4.39	95	5	600	1	5	1.0	2W6
AZ23B4V7	4.61	4.7	4.79	78	5	500	1	5	2.0	2W7
AZ23B5V1	5.0	5.1	5.2	60	5	480	1	0.1	0.8	2W8
AZ23B5V6	5.49	5.6	5.71	40	5	400	1	0.1	1.0	2W9
AZ23B6V2	6.08	6.2	6.32	10	5	150	1	0.1	2.0	2WA
AZ23B6V8	6.66	6.8	6.94	8	5	80	1	0.1	3.0	2WB
AZ23B7V5	7.35	7.5	7.65	7	5	80	1	0.1	5.0	2WC
AZ23B8V2	8.04	8.2	8.36	7	5	80	1	0.1	6.0	2WD
AZ23B9V1	8.92	9.1	9.28	10	5	100	1	0.1	7.0	2WE
AZ23B10	9.80	10	10.2	15	5	150	1	0.1	7.5	2WF
AZ23B11	10.78	11	11.22	20	5	150	1	0.1	8.5	2WG
AZ23B12	11.76	12	12.24	20	5	150	1	0.1	9.0	2WH
AZ23B13	12.74	13	13.3	25	5	170	1	0.1	10.0	2WI
AZ23B15	14.7	15	15.3	30	5	200	1	0.1	11.0	2WJ
AZ23B16	15.68	16	16.3	40	5	200	1	0.1	12.0	2WK
AZ23B18	17.6	18	18.4	50	5	225	1	0.1	14.0	2WL
AZ23B20	19.6	20	20.4	55	5	225	1	0.1	15.0	2WM
AZ23B22	21.56	22	22.44	55	5	250	1	0.1	17.0	2WN
AZ23B24	23.52	24	24.5	70	5	250	1	0.1	18.0	2WO
AZ23B27	26.46	27	27.54	80	2	300	1	0.1	20.0	2WP
AZ23B30	29.4	30	30.6	80	2	300	1	0.1	22.5	2WQ
AZ23B33	32.34	33	33.7	80	2	325	1	0.1	25.0	2WR
AZ23B36	35.28	36	36.72	90	2	350	1	0.1	27.0	2WS
AZ23B39	38.22	39	39.8	90	2	350	1	0.1	29.0	2WT
AZ23B43	42.14	43	43.86	100	2	375	1	0.1	32.0	2WU
AZ23B47	46.06	47	47.94	110	2	375	1	0.1	35.0	2WV

Note : 2. Short duration test pulse used to minimize self-heating effect.  
3. f=1KHz.

**Curve Characteristics**

Fig. 1 - Power Derating Curve

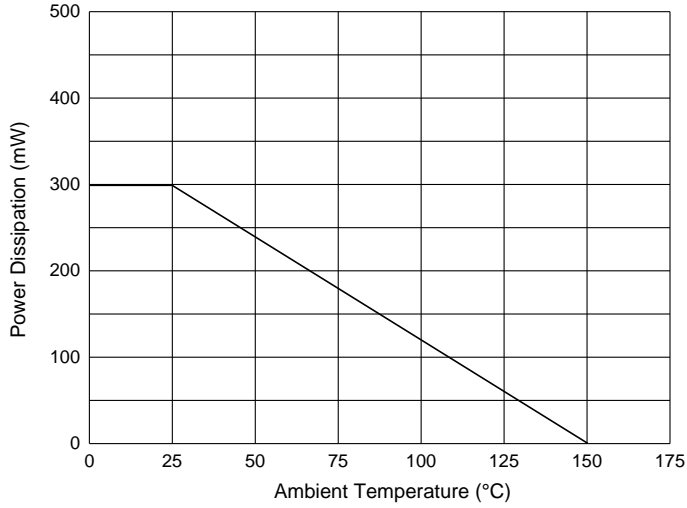


Fig. 2 - Typical Zener Breakdown Characteristics

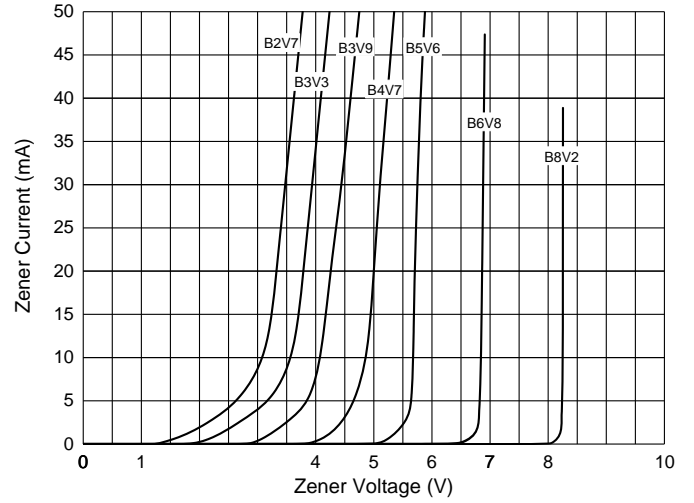


Fig. 3 - Typical Zener Breakdown Characteristics

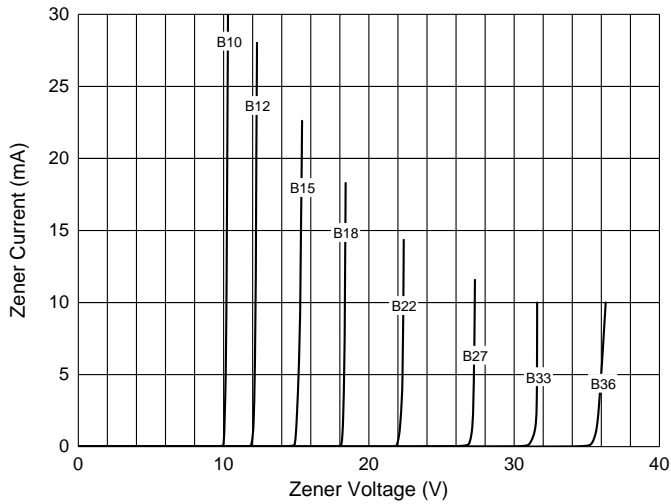


Fig. 4 - Typical Zener Breakdown Characteristics

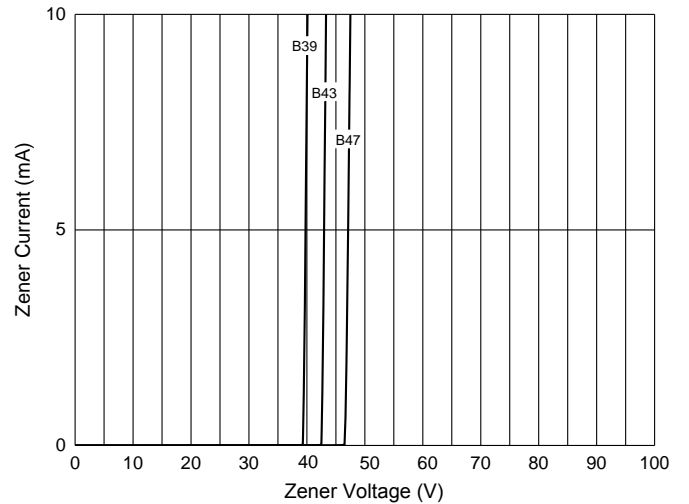
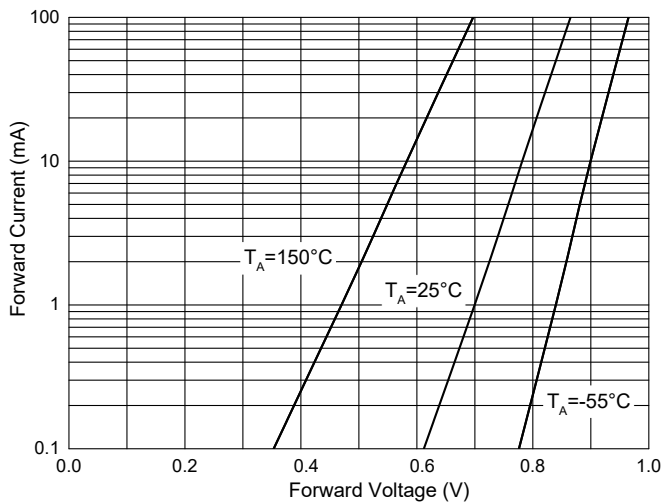


Fig. 5 - Typical Forward Characteristics



## Ordering Information

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

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