

## Features

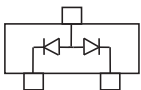
- Dual Zeners in Common Anode Configuration
- $\Delta V_z$  for Both Diodes in One Case is  $\leq 5\%$ .
- Ideally Suited for Automated Assembly Processes
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range:  $-15^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Storage Temperature Range:  $-15^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Thermal Resistance:  $625^{\circ}\text{C/W}$  Junction to Ambient

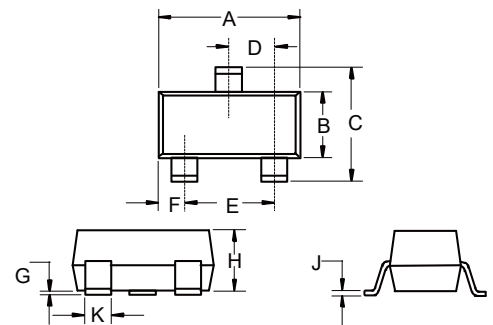
Parameter	Symbol	Rating	Unit
Power Dissipation	$P_D$	$\infty$	{ W

## Internal Structure



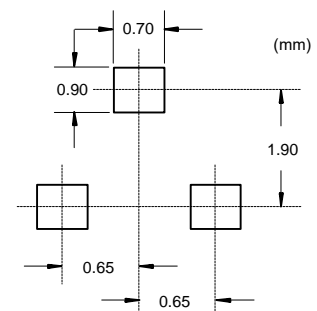
**200 mW  
Zener Diode  
2.7 to 39 Volts**

## SOT-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026		0.65		TYP.
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.044	0.90	1.10	
J	0.002	0.010	0.05	0.25	
K	0.006	0.016	0.15	0.40	

## Suggested Solder Pad Layout



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

MCC Part Number	Zener Voltage <sup>(1)</sup>	Maximum Zener Impedance <sup>(2)</sup>		Maximum Zener Impedance <sup>(2)</sup>		Minimum Reverse Voltage I <sub>R</sub> @ V <sub>R</sub> <sup>(1)</sup>		Typical Temperature coefficient	Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	I <sub>ZK</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>	T <sub>c</sub>	
	V	mA	Ω	mA	Ω	μA	V	%/°C	
AZ23C2V7W	2.5~2.9	5.0	83	1.00	500	0.1	-	-0.065	KD1
AZ23C3V0W	2.8~3.2	5.0	95	1.00	500	0.1	-	-0.060	KD2
AZ23C3V3W	3.1~3.5	5.0	95	1.00	500	0.1	-	-0.055	KD3
AZ23C3V6W	3.4~3.8	5.0	95	1.00	500	0.1	-	-0.055	KD4
AZ23C3V9W	3.7~4.1	5.0	95	1.00	500	0.1	-	-0.050	KD5
AZ23C4V3W	4.0~4.6	5.0	95	1.00	500	0.1	-	-0.035	KD6
AZ23C4V7W	4.4~5.0	5.0	78	1.00	500	0.1	-	-0.015	KD7
AZ23C5V1W	4.8~5.4	5.0	60	1.00	480	0.1	0.8	+0.005	KD8
AZ23C5V6W	5.2~6.0	5.0	40	1.00	400	0.1	1.0	+0.020	KD9
AZ23C6V2W	5.8~6.6	5.0	10	1.00	200	0.1	2.0	+0.030	KDA
AZ23C6V8W	6.4~7.2	5.0	8.0	1.00	150	0.1	3.0	+0.045	KDB
AZ23C7V5W	7.0~7.9	5.0	7.0	1.00	50	0.1	5.0	+0.050	KDC
AZ23C8V2W	7.7~8.7	5.0	7.0	1.00	50	0.1	6.0	+0.055	KDD
AZ23C9V1W	8.5~9.6	5.0	10	1.00	50	0.1	7.0	+0.065	KDE
AZ23C10W	9.4~10.6	5.0	15	1.00	70	0.1	7.5	+0.065	KDF
AZ23C11W	10.4~11.6	5.0	20	1.00	70	0.1	8.5	+0.070	KDG
AZ23C12W	11.4~12.7	5.0	20	1.00	90	0.1	9.0	+0.075	KDH
AZ23C13W	12.4~14.1	5.0	25	1.00	110	0.1	10.0	+0.080	KDI
AZ23C15W	13.8~15.6	5.0	30	1.00	110	0.1	11.0	+0.080	KDJ
AZ23C16W	15.3~17.1	5.0	40	1.00	170	0.1	12.0	+0.090	KDK
AZ23C18W	16.8~19.1	5.0	50	1.00	170	0.1	14.0	+0.090	KDL
AZ23C20W	18.8~21.2	5.0	50	1.00	220	0.1	15.0	+0.090	KDM
AZ23C22W	20.8~23.3	5.0	55	1.00	220	0.1	17.0	+0.090	KDN
AZ23C24W	22.8~25.6	5.0	80	1.00	220	0.1	18.0	+0.090	KDO
AZ23C27W	25.1~28.9	5.0	80	1.00	250	0.1	20.0	+0.090	KDP
AZ23C30W	28~32	5.0	80	1.00	250	0.1	22.5	+0.090	KDQ
AZ23C33W	31~35	5.0	80	1.00	250	0.1	25.0	+0.090	KDR
AZ23C36W	34~38	5.0	90	1.00	250	0.1	27.0	+0.090	KDS
AZ23C39W	37~41	5.0	90	1.00	300	0.1	29.0	+0.110	KDT

Note :

- (1) Short Duration Test Pulse Used to Minimize Self-Heating Effect.  
 (2) f=1KHz.

**Curve Characteristics**

Fig. 1 - Power Derating Curve

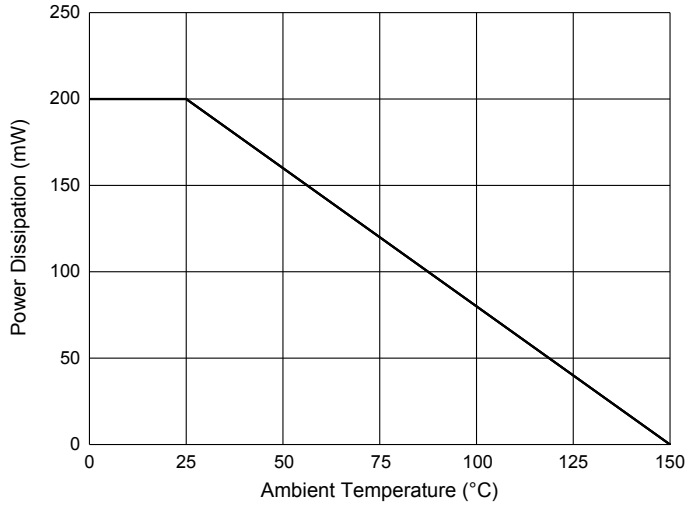
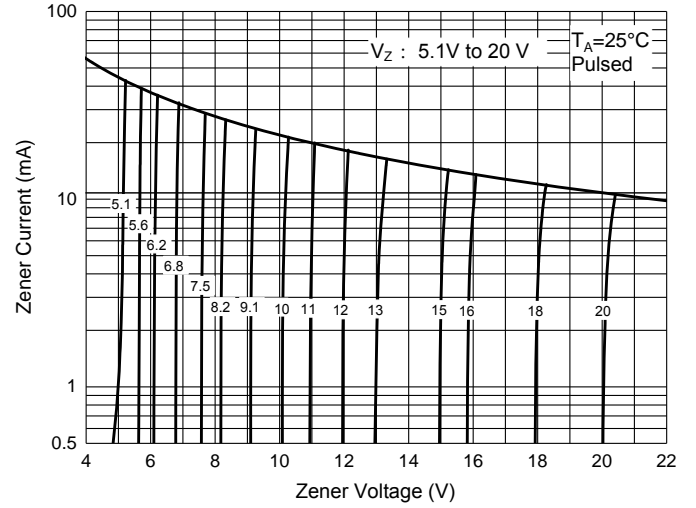


Fig. 2 - Typical Zener Breakdown Characteristics



## 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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