

## Features

- AEC-Q101 Qualified
- Dual Zeners in Common Anode Configuration
- 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)
- ESD(HBM): 30KV

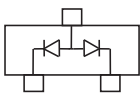
## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance : 417°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_D$	300	mW

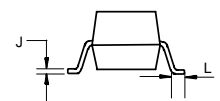
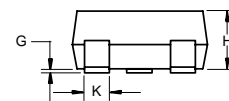
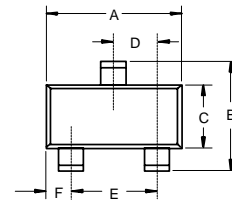
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

## Internal Structure



**300 mW  
Zener Diode  
2.4 to 39 Volts**

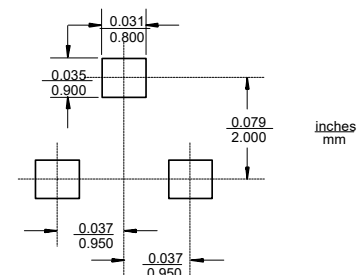
## SOT-23



### DIMENSIONS

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			Test Current	Maximum Zener Impedance	Maximum Zener Impedance		Maximum Reverse Current		Typical Temperature Coefficient		Test Current	Device Marking
	V <sub>Z</sub> @ I <sub>ZT</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> @ V <sub>R</sub>		T <sub>C</sub> @ I <sub>ZTC</sub>		
	min.	typ.	max.	μA	V				min.	max.			
	V	V	V			mA	Ω	mA			mV/°C	mV/°C	
AZ23C2V4HE3	2.28	2.4	2.56	5	100	600	1	50	1	-3.5	0	5	KD0
AZ23C2V7HE3	2.5	2.7	2.9	5	100	600	1	20	1	-3.5	0	5	KD1
AZ23C3V0HE3	2.8	3	3.2	5	95	600	1	10	1	-3.5	0	5	KD2
AZ23C3V3HE3	3.1	3.3	3.5	5	95	600	1	5	1	-3.5	0	5	KD3
AZ23C3V6HE3	3.4	3.6	3.8	5	90	600	1	5	1	-3.5	0	5	KD4
AZ23C3V9HE3	3.7	3.9	4.1	5	90	600	1	3	1	-3.5	0	5	KD5
AZ23C4V3HE3	4	4.3	4.6	5	90	600	1	3	1	-3.5	0	5	KD6
AZ23C4V7HE3	4.4	4.7	5	5	80	500	1	3	2	-3.5	0.2	5	KD7
AZ23C5V1HE3	4.8	5.1	5.4	5	60	480	1	2	2	-2.7	1.2	5	KD8
AZ23C5V6HE3	5.2	5.6	6	5	40	400	1	1	2	-2	2.5	5	KD9
AZ23C6V2HE3	5.8	6.2	6.6	5	10	150	1	3	4	0.4	3.7	5	KDA
AZ23C6V8HE3	6.4	6.8	7.2	5	15	80	1	2	4	1.2	4.5	5	KDB
AZ23C7V5HE3	7	7.5	7.9	5	15	80	1	1	5	2.5	5.3	5	KDC
AZ23C8V2HE3	7.7	8.2	8.7	5	15	80	1	0.7	5	3.2	6.2	5	KDD
AZ23C9V1HE3	8.5	9.1	9.6	5	15	100	1	0.5	6	3.8	7	5	KDE
AZ23C10HE3	9.4	10	10.6	5	20	150	1	0.2	7	4.5	8	5	KDF
AZ23C11HE3	10.4	11	11.6	5	20	150	1	0.1	8	5.4	9	5	KDG
AZ23C12HE3	11.4	12	12.7	5	25	150	1	0.1	8	6	10	5	KDH
AZ23C13HE3	12.4	13	14.1	5	30	170	1	0.1	8	7	11	5	KDI
AZ23C15HE3	13.8	15	15.6	5	30	200	1	0.1	10.5	9.2	13	5	KDJ
AZ23C16HE3	15.3	16	17.1	5	40	200	1	0.1	11.2	10.4	14	5	KDK
AZ23C18HE3	16.8	18	19.1	5	45	225	1	0.1	12.6	12.4	16	5	KDL
AZ23C20HE3	18.8	20	21.2	5	55	225	1	0.1	14	14.4	18	5	KDM
AZ23C22HE3	20.8	22	23.3	5	55	250	1	0.1	15.4	16.4	20	5	KDN
AZ23C24HE3	22.8	24	25.6	5	70	250	1	0.1	16.8	18.4	22	5	KDO
AZ23C27HE3	25.1	27	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2	KDP
AZ23C30HE3	28	30	32	2	80	300	0.5	0.1	21	24.4	29.4	2	KDQ
AZ23C33HE3	31	33	35	2	80	325	0.5	0.1	23.1	27.4	33.4	2	KDR
AZ23C36HE3	34	36	38	2	90	350	0.5	0.1	25.2	30.4	37.4	2	KDS
AZ23C39HE3	37	39	41	2	130	350	0.5	0.1	27.3	33.4	41.2	2	KDT

## Curve Characteristics

Fig. 1 - Power Derating Curve

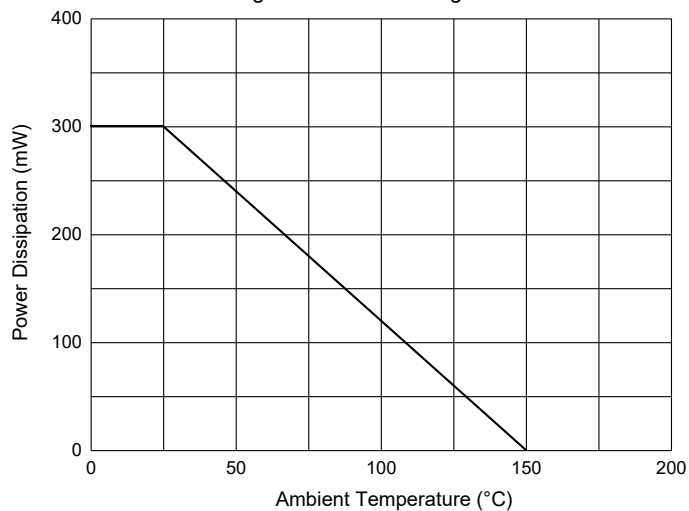


Fig. 2 - Typical Zener Breakdown Characteristics

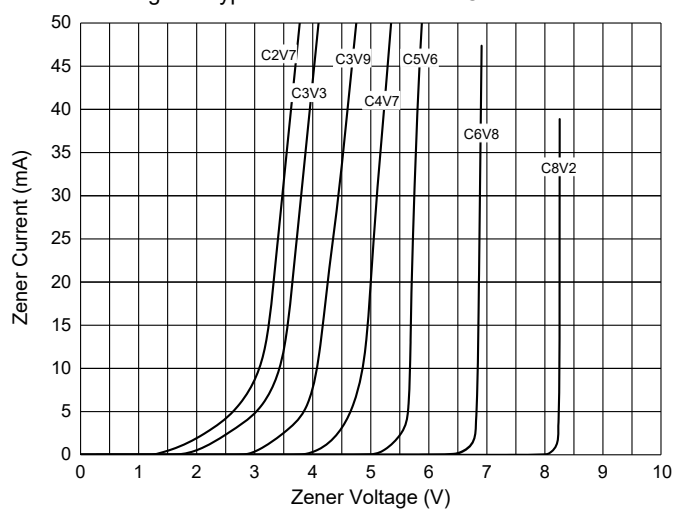
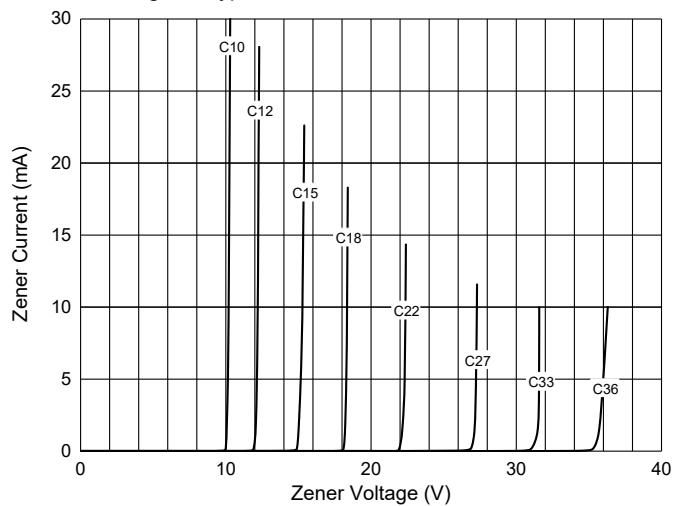


Fig. 3 - Typical Zener Breakdown Characteristics



## Ordering Information

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

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