

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

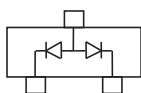
Maximum Ratings

- 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

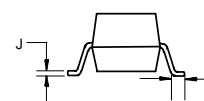
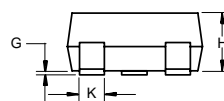
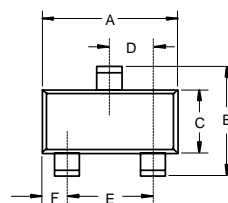
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



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

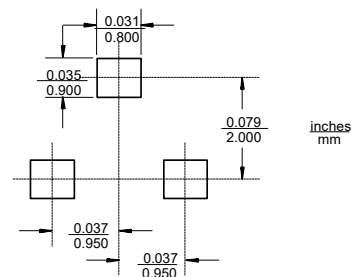
SOT-23



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 _Z @ I _{ZT}					I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _R @ V _R		T _C @ I _{ZTC}		
	min.	typ.	max.	μA	V				min.	max.			
	V	V	V			mA	Ω	mA			mV/°C	mV/°C	
AZ23B3V6HE3	3.53	3.6	3.67	5	90	600	1	5	1	-3.5	0	5	2D4
AZ23B3V9HE3	3.82	3.9	3.98	5	90	600	1	3	1	-3.5	0	5	2D5
AZ23B4V3HE3	4.21	4.3	4.39	5	90	600	1	3	1	-3.5	0	5	2D6
AZ23B4V7HE3	4.61	4.7	4.79	5	80	500	1	3	2	-3.5	0.2	5	2D7
AZ23B5V1HE3	5.0	5.1	5.2	5	60	480	1	2	2	-2.7	1.2	5	2D8
AZ23B5V6HE3	5.49	5.6	5.71	5	40	400	1	1	2	-2	2.5	5	2D9
AZ23B6V2HE3	6.08	6.2	6.32	5	10	150	1	3	4	0.4	3.7	5	2DA
AZ23B6V8HE3	6.66	6.8	6.94	5	15	80	1	2	4	1.2	4.5	5	2DB
AZ23B7V5HE3	7.35	7.5	7.65	5	15	80	1	1	5	2.5	5.3	5	2DC
AZ23B8V2HE3	8.04	8.2	8.36	5	15	80	1	0.7	5	3.2	6.2	5	2DD
AZ23B9V1HE3	8.92	9.1	9.28	5	15	100	1	0.5	6	3.8	7	5	2DE
AZ23B10HE3	9.8	10	10.2	5	20	150	1	0.2	7	4.5	8	5	2DF
AZ23B11HE3	10.78	11	11.22	5	20	150	1	0.1	8	5.4	9	5	2DG
AZ23B12HE3	11.76	12	12.24	5	25	150	1	0.1	8	6	10	5	2DH
AZ23B13HE3	12.74	13	13.3	5	30	170	1	0.1	8	7	11	5	2DI
AZ23B15HE3	14.7	15	15.3	5	30	200	1	0.1	10.5	9.2	13	5	2DJ
AZ23B16HE3	15.68	16	16.3	5	40	200	1	0.1	11.2	10.4	14	5	2DK
AZ23B18HE3	17.6	18	18.4	5	45	225	1	0.1	12.6	12.4	16	5	2DL
AZ23B20HE3	19.6	20	20.4	5	55	225	1	0.1	14	14.4	18	5	2DM
AZ23B22HE3	21.56	22	22.44	5	55	250	1	0.1	15.4	16.4	20	5	2DN
AZ23B24HE3	23.52	24	24.5	5	70	250	1	0.1	16.8	18.4	22	5	2DO
AZ23B27HE3	26.46	27	27.54	2	80	300	0.5	0.1	18.9	21.4	25.3	2	2DP
AZ23B30HE3	29.4	30	30.6	2	80	300	0.5	0.1	21	24.4	29.4	2	2DQ
AZ23B33HE3	32.34	33	33.7	2	80	325	0.5	0.1	23.1	27.4	33.4	2	2DR
AZ23B36HE3	35.28	36	36.72	2	90	350	0.5	0.1	25.2	30.4	37.4	2	2DS
AZ23B39HE3	38.22	39	39.8	2	130	350	0.5	0.1	27.3	33.4	41.2	2	2DT

Curve Characteristics

Fig. 1 - Power Derating Curve

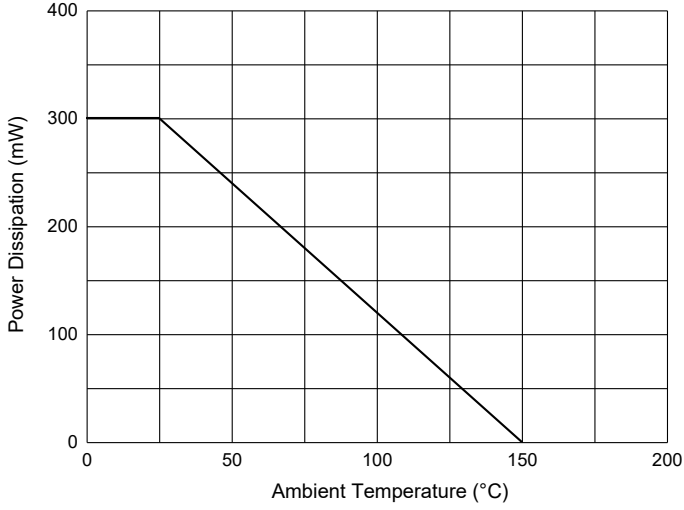


Fig. 2 - Typical Zener Breakdown Characteristics

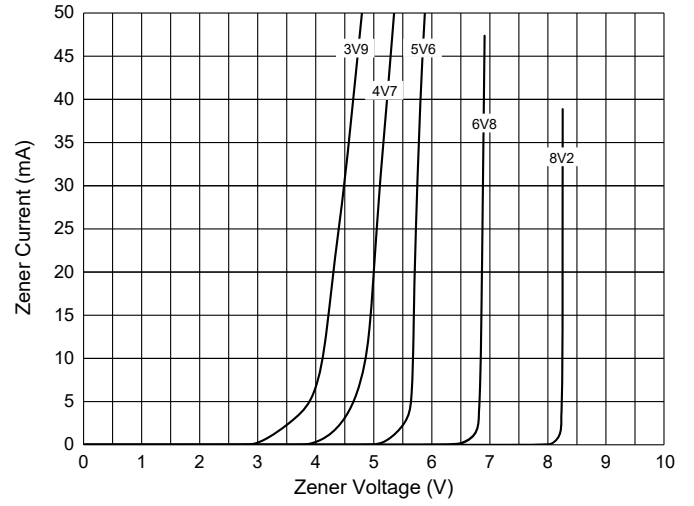
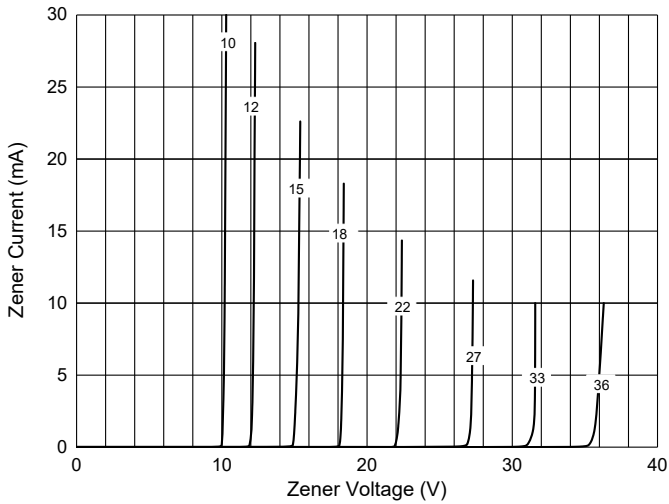


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

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

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