Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Planar Die Construction
- Ideally Suited for Automated Assembly Processes
- 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)

350 mWatt Zener Diodes 2.4 to 36 Volts

Maximum Ratings

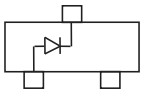
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance : 357°C/W Junction to Ambient

Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	350mW	Note 2
Peak Forward Surge Current	I_{FSM}	2.0A	Note 3
Maximum Forward Voltage	V_F	0.9V	I_F=10mA

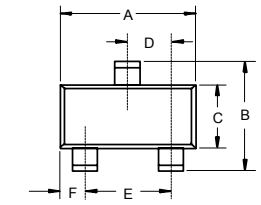
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. Mounted on 5.0mm^2 (.013mm thick) Land Areas.
3. Measured on 8.3ms, Single Half Sine-wave or Equivalent Square Wave

Internal Structure

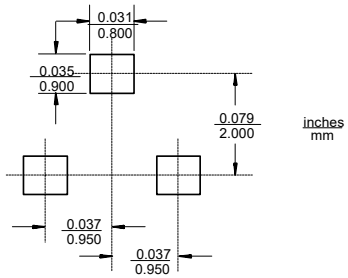


SOT-23



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(4,5)			Maximum Zener Impedance(6)				Maximum Reverse Current I_R(Max) @ V_R		Marking Code
	V_Z @ I_{ZT}			I_{ZT}	Z_{ZT} @ I_{ZT}	I_{ZK}	Z_{ZK} @ I_{ZK}	I_R	V_R	
	Min.(V)	Nom(V)	Max.(V)	mA	Ω	mA	Ω	μA	V	
BZX84B4V3HE3	4.21	4.30	4.39	5	90	1	600	3.0	1.0	Z17
BZX84B4V7HE3	4.61	4.70	4.79	5	80	1	500	3.0	2.0	Z1
BZX84B5V1HE3	5.00	5.10	5.20	5	60	1	480	2.0	2.0	2Z2
BZX84B5V6HE3	5.49	5.60	5.71	5	40	1	400	1.0	2.0	2Z3
BZX84B6V2HE3	6.08	6.20	6.32	5	10	1	150	3.0	4.0	2Z4
BZX84B6V8HE3	6.66	6.80	6.94	5	15	1	80	2.0	4.0	2Z5
BZX84B7V5HE3	7.35	7.50	7.65	5	15	1	80	1.0	5.0	2Z6
BZX84B8V2HE3	8.04	8.20	8.36	5	15	1	80	0.7	5.0	2Z7
BZX84B9V1HE3	8.92	9.10	9.28	5	15	1	100	0.5	6.0	2Z8
BZX84B10HE3	9.80	10.00	10.20	5	20	1	150	0.2	7.0	2Z9
BZX84B11HE3	10.78	11.00	11.22	5	20	1	150	0.1	8.0	WH
BZX84B12HE3	11.76	12.00	12.24	5	25	1	150	0.1	8.0	2Y2
BZX84B13HE3	12.74	13.00	13.26	5	30	1	170	0.1	8.0	2Y3
BZX84B15HE3	14.70	15.00	15.30	5	30	1	200	0.1	10.5	2Y4
BZX84B16HE3	15.68	16.00	16.32	5	40	1	200	0.1	11.2	2Y5
BZX84B18HE3	17.64	18.00	18.36	5	45	1	225	0.1	12.6	2Y6
BZX84B20HE3	19.60	20.00	20.40	5	55	1	225	0.1	14.0	WO
BZX84B22HE3	21.56	22.00	22.44	5	55	1	250	0.1	15.4	Y8
BZX84B24HE3	23.52	24.00	24.48	5	70	1	250	0.1	16.8	Y9
BZX84B27HE3	26.46	27.00	27.54	5	80	1	300	0.1	18.9	Y10
BZX84B30HE3	29.40	30.00	30.60	5	80	1	300	0.1	21.0	WT
BZX84B33HE3	32.34	33.00	33.66	5	80	1	325	0.1	23.1	Y12
BZX84B36HE3	35.28	36.00	36.72	5	90	1	350	0.1	25.2	Y13

Note :

4.Suffix 'B' is +/- 2% tolerance from BZX84B4V3HE3~BZX84B36HE3.

5.Zener Voltage (V_Z) Measurement. Guarantess the Zener Voltage When Measured at 90 Seconds While Maintaining the Lead Temperature (T_L) at 25°C from the Diode Body.

6.Zener Impedance (Z_Z) Derivation. The zener Impedance is Derived from the 60 Cycle AC Voltage, Which Results When an AC Current Having an rms Value Equal to 10% of the DC Zener Current (I_{ZT} or I_{ZK}) is Superimposed on I_{ZT} or I_{ZK}.

Curve Characteristics

Fig. 1 - Power Derating Curve

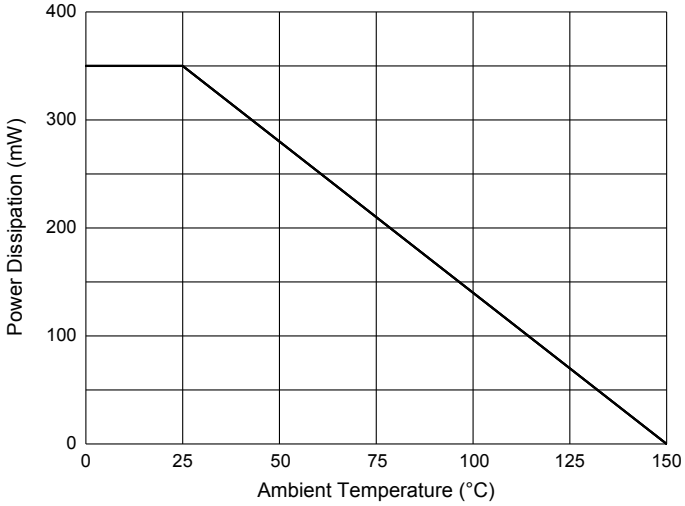


Fig. 2 - Typical Zener Breakdown Characteristics

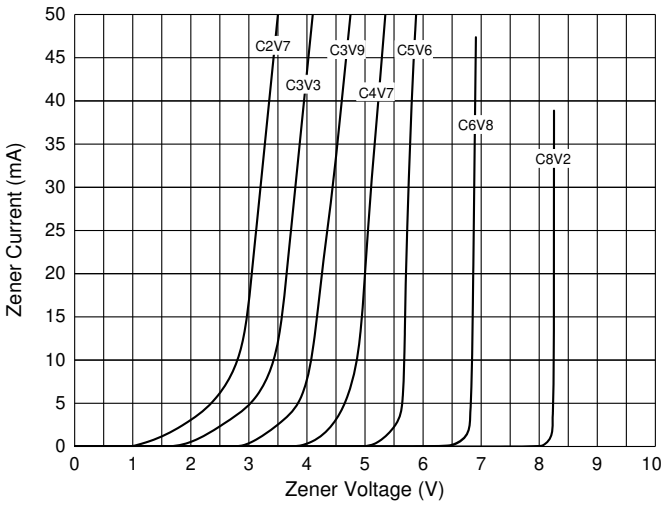
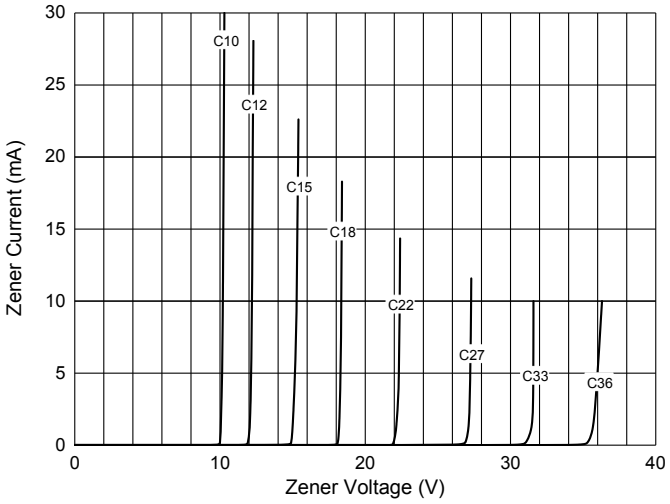


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

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