Features

- Wide Voltage Range Available
- Small Outline Package For Space Savings
- Surface Mount Package
- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant t ("P" Suffix Designates RoHS Compliant. See Ordering Information)

200 mWatt Zener Diodes 2.4V to 39 Volts

Maximum Ratings

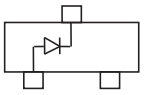
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance : 625°C/W Junction to Ambient

Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	200mW	Note 2
Maximum Forward Voltage	V_F	0.9V	I_F=10mA

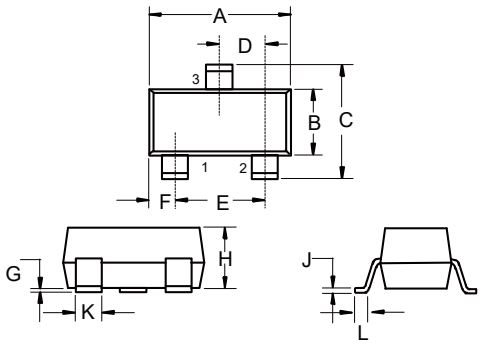
Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. Mounted on FR4 PC Board With Our Suggested Solder Pad Layout .

Internal Structure

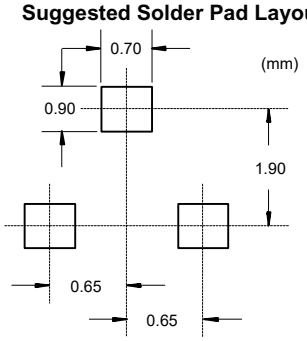


SOT-323



DIMENSIONS					
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	
L	0.010	0.018	0.26	0.46	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Nominal Zener Voltage(3,4)	Test Current	Maximum Zener Impedance(5)			Maximum Reverse Leakage Current		Marking Code
	V_Z	I_{ZT}	Z_{ZT} @ I_{ZT}	I_{ZK}	Z_{Zk}	I_R	V_R	
	V	mA	Ω	mA	Ω	μA	V	
MMBZ5221BW	2.4	20	30	0.25	1200	100	1.0	KC1
MMBZ5222BW	2.5	20	30	0.25	1250	100	1.0	KC2
MMBZ5223BW	2.7	20	30	0.25	1300	75	1.0	KC3
MMBZ5225BW	3.0	20	29	0.25	1600	50	1.0	KC5
MMBZ5226BW	3.3	20	28	0.25	1600	25	1.0	KG1
MMBZ5227BW	3.6	20	24	0.25	1700	15	1.0	KG2
MMBZ5228BW	3.9	20	23	0.25	1900	10	1.0	KG3
MMBZ5229BW	4.3	20	22	0.25	2000	5.0	1.0	KG4
MMBZ5230BW	4.7	20	19	0.25	1900	5.0	2.0	KG5
MMBZ5231BW	5.1	20	17	0.25	1600	5.0	2.0	KE1
MMBZ5232BW	5.6	20	11	0.25	1600	5.0	3.0	KE2
MMBZ5234BW	6.2	20	7.0	0.25	1000	5.0	4.0	KE4
MMBZ5235BW	6.8	20	5.0	0.25	750	3.0	5.0	KE5
MMBZ5236BW	7.5	20	6.0	0.25	500	3.0	6.0	KF1
MMBZ5237BW	8.2	20	8.0	0.25	500	3.0	6.5	KF2
MMBZ5239BW	9.1	20	10	0.25	600	3.0	7.0	KF4
MMBZ5240BW	10	20	17	0.25	600	3.0	8.0	KF5
MMBZ5241BW	11	20	22	0.25	600	2.0	8.4	KH1
MMBZ5242BW	12	20	30	0.25	600	1.0	9.1	KH2
MMBZ5243BW	13	9.5	13	0.25	600	0.5	9.9	KH3
MMBZ5244BW	14	9.0	15	0.25	600	0.1	10	KH4
MMBZ5245BW	15	8.5	16	0.25	600	0.1	11	KH5
MMBZ5246BW	16	7.8	17	0.25	600	0.1	12	KJ1
MMBZ5248BW	18	7.0	21	0.25	600	0.1	14	KJ3
MMBZ5250BW	20	6.2	25	0.25	600	0.1	15	KJ5
MMBZ5251BW	22	5.6	29	0.25	600	0.1	17	KK1
MMBZ5252BW	24	5.2	33	0.25	600	0.1	18	KK2
MMBZ5254BW	27	5.0	41	0.25	600	0.1	21	KK4
MMBZ5255BW	28	4.5	44	0.25	600	0.1	21	KK5
MMBZ5256BW	30	4.2	49	0.25	600	0.1	23	KM1
MMBZ5257BW	33	3.8	58	0.25	700	0.1	25	KM2
MMBZ5258BW	36	3.4	70	0.25	700	0.1	27	KM3
MMBZ5259BW	39	3.2	80	0.25	800	0.1	30	KM4

Note:

3.Tolerance and Type Number Designation. The Type Numbers Listed Have a Standard Tolerance on The Nominal Zener Voltage of ±5%.

4. Zener Voltage (V_Z) Measurement. Guarantees The Zener Voltage When Measured at 90 Seconds While Maintaining The Lead Temperature (T_L) at 25°C, from The Diode Body.

5. 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

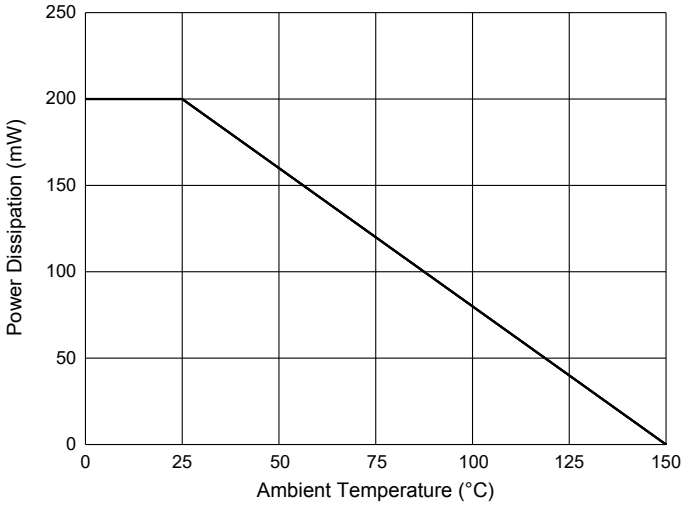
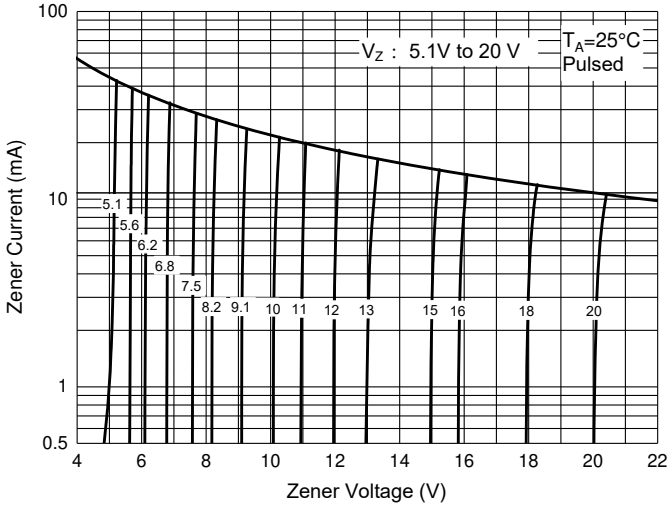


Fig. 2 - Typical Zener Breakdown Characteristics



Ordering Information

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

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