THE DATASHEET OF

MMXZ5231B-TP

Features

- Zener Voltages from 2.7V-39V
- Planar Die Construction
- Ideally Suited for Automated Assembly Processes
- 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 mW
Zener Diodes
2.7 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

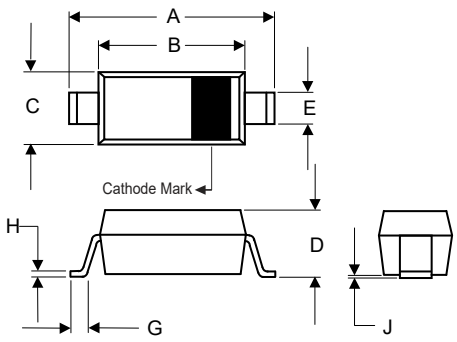
Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	200mW	Note 2
Maximum Forward Voltage	V_F	0.9V	I_F=10mA Note 3

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

Note: 2. Device Mounted on Ceramic PCB: 7.6mm x 9.4mm x 0.87mm With Pad Areas 25 mm^2

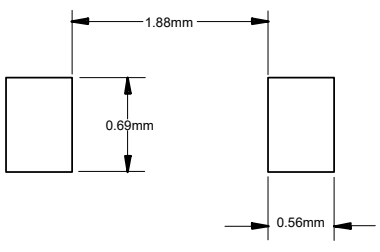
Note:3.Tested With Pulses, Tp<1.0ms

SOD-323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Nominal Zener Voltage(4,5)		Maximum Zener Impedance(6)			Leakage Current		Maximum Zener Voltage Temp Coefficient 'B' Suffix Only	Marking Code
	V_Z@I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{Zk} @ I_{ZK}	I_{ZK}	I_R	V_R		
	V	mA	Ω	Ω	mA	μA(Max.)	V	%/°C	
MMXZ5223B	2.7	20	30	1300	0.25	75	1.0	-0.080	C3
MMXZ5225B	3.0	20	29	1600	0.25	50	1.0	-0.075	C5
MMXZ5226B	3.3	20	28	1600	0.25	25	1.0	-0.070	G1
MMXZ5227B	3.6	20	24	1700	0.25	15	1.0	-0.065	G2
MMXZ5228B	3.9	20	23	1900	0.25	10	1.0	-0.060	G3
MMXZ5229B	4.3	20	22	2000	0.25	5.0	1.0	±0.055	G4
MMXZ5230B	4.7	20	19	1900	0.25	5.0	2.0	±0.030	G5
MMXZ5231B	5.1	20	17	1600	0.25	5.0	2.0	±0.030	E1
MMXZ5232B	5.6	20	11	1600	0.25	5.0	3.0	+0.038	E2
MMXZ5234B	6.2	20	7.0	1000	0.25	5.0	4.0	+0.045	E4
MMXZ5235B	6.8	20	5.0	750	0.25	3.0	5.0	+0.050	E5
MMXZ5236B	7.5	20	6.0	500	0.25	3.0	6.0	+0.058	F1
MMXZ5237B	8.2	20	8.0	500	0.25	3.0	6.5	+0.062	F2
MMXZ5239B	9.1	20	10	600	0.25	3.0	7.0	+0.068	F4
MMXZ5240B	10	20	17	600	0.25	3.0	8.0	+0.075	F5
MMXZ5241B	11	20	22	600	0.25	2.0	8.4	+0.076	H1
MMXZ5242B	12	20	30	600	0.25	1.0	9.1	+0.077	H2
MMXZ5243B	13	9.5	13	600	0.25	0.5	9.9	+0.079	H3
MMXZ5245B	15	8.5	16	600	0.25	0.1	11	+0.082	H5
MMXZ5246B	16	7.8	17	600	0.25	0.1	12	+0.083	J1
MMXZ5248B	18	7.0	21	600	0.25	0.1	14	+0.085	J3
MMXZ5250B	20	6.2	25	600	0.25	0.1	15	+0.086	J5
MMXZ5251B	22	5.6	29	600	0.25	0.1	17	+0.087	K1
MMXZ5252B	24	5.2	33	600	0.25	0.1	18	+0.088	K2
MMXZ5254B	27	4.6	41	600	0.25	0.1	21	+0.090	K4
MMXZ5255B	28	4.5	44	600	0.25	0.1	21	+0.091	K5
MMXZ5256B	30	4.2	49	600	0.25	0.1	23	+0.091	M1
MMXZ5257B	33	3.8	58	700	0.25	0.1	25	+0.092	M2
MMXZ5258B	36	3.4	70	700	0.25	0.1	27	+0.093	M3
MMXZ5259B	39	3.2	80	800	0.25	0.1	30	+0.094	M4

NOTE:

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

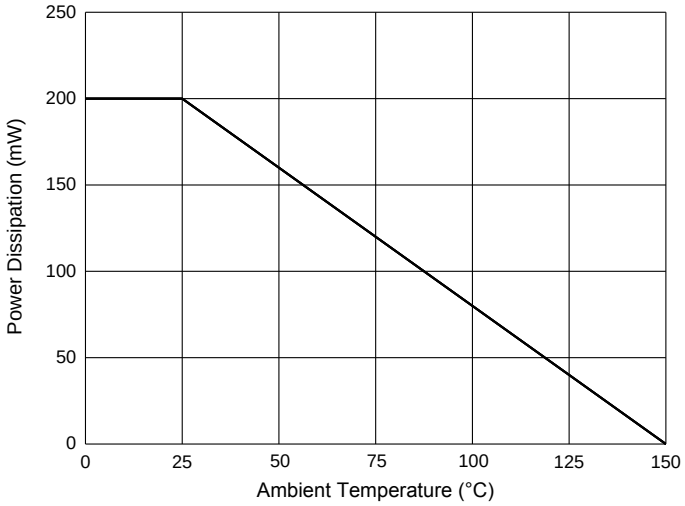


Fig. 2 - Typical Zener Breakdown Characteristics

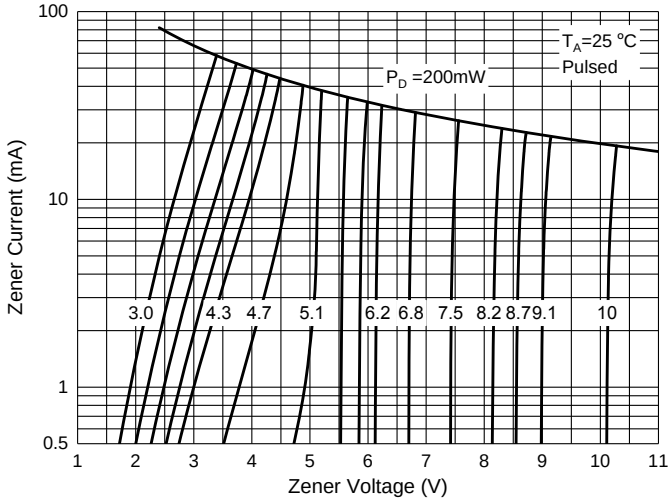
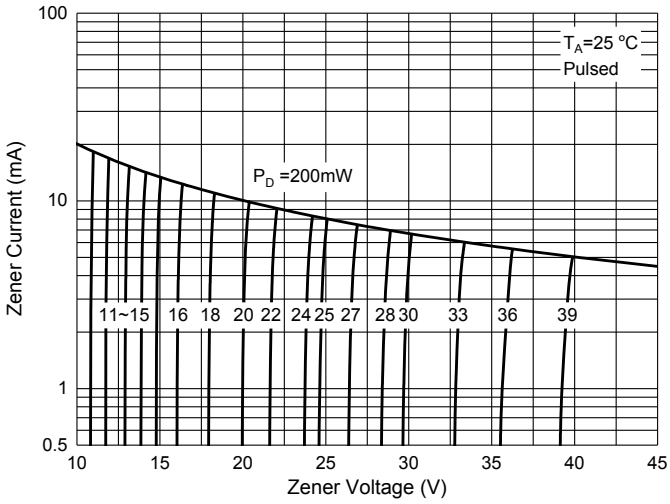


Fig. 3 - Typical Zener Breakdown Characteristics



Ordering Information

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

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