MMSZ5221B THRU MMSZ5267B

Zener Diodes

Reverse Voltage 2.4 - 75 Volts
Power Dissipation- 350 mW

FEATURES

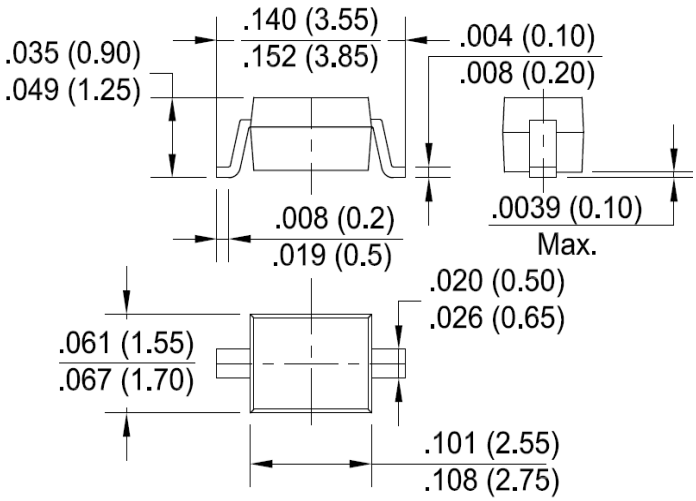
- Planar Die Construction
- Ultra-Small Surface Mount Package
- General purpose, Medium Current
- Ideally Suited for Automated Assembly Processes

MECHANICAL DATA

- Polarity:Color band denotes cathode end
- Case : Molded plastic, SOD-123
- Mounting Position:Any

Note: Products with logo HY® or hy® are made by HY Electronic (Cayman) Limited.

SOD-123



Package Outline Dimensions in Inches (Millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbol	Value	Unit
Forward Voltage (Note 2) @ I_F = 10mA	VF	0.9	V
Power Dissipation (Note 1)	P_D	350	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	357	℃/W
Junction Temperature Range	T_J	-55 to + 150	℃
Storage Temperature Range	T_{STG}	-55 to + 150	℃

Notes: 1. Device mounted on ceramic PCB; 7.6 mm x 9.4 mm x 0.87 mm with pad areas 25 mm2.

2. Tested with pulses, Tp≤1.0ms.

ELECTRICAL CHARACTERISTICS

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Type Number	Device Marking	Zener voltage			Test current	Zener impedance		I_{ZK}	Leakage current	
		V_Z @ I_{ZT} (Volts)			I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}		I_R	V_R
		min.	nom.	max.	mA	(Ω)Max	(Ω)Max	mA	uA	Volts
MMSZ5221B	C1	2.28	2.4	2.52	20.0	30	1200	0.25	100	1.0
MMSZ5223B	C3	2.57	2.7	2.84	20.0	30	1300	0.25	75	1.0
MMSZ5225B	C5	2.85	3.0	3.15	20.0	29	1600	0.25	50	1.0
MMSZ5226B	G1	3.14	3.3	3.47	20.0	28	1600	0.25	25	1.0
MMSZ5227B	G2	3.42	3.6	3.78	20.0	24	1700	0.25	15	1.0
MMSZ5228B	G3	3.71	3.9	4.10	20.0	23	1900	0.25	10	1.0
MMSZ5229B	G4	4.09	4.3	4.52	20.0	22	2000	0.25	5.0	1.0
MMSZ5230B	G5	4.47	4.7	4.94	20.0	19	1900	0.25	5.0	2.0
MMSZ5231B	E1	4.85	5.1	5.36	20.0	17	1600	0.25	5.0	2.0
MMSZ5232B	E2	5.32	5.6	5.88	20.0	11	1600	0.25	5.0	3.0
MMSZ5233B	E3	5.70	6.0	6.30	20.0	7	1600	0.25	5.0	3.5
MMSZ5234B	E4	5.89	6.2	6.51	20.0	7	1000	0.25	5.0	4.0
MMSZ5235B	E5	6.46	6.8	7.14	20.0	5	750	0.25	3.0	5.0
MMSZ5236B	F1	7.13	7.5	7.88	20.0	6	500	0.25	3.0	6.0
MMSZ5237B	F2	7.79	8.2	8.61	20.0	8	500	0.25	3.0	6.5
MMSZ5238B	F3	8.27	8.7	9.14	20.0	8	600	0.25	3.0	6.5
MMSZ5239B	F4	8.65	9.1	9.56	20.0	10	600	0.25	3.0	7.0
MMSZ5240B	F5	9.50	10	10.50	20.0	17	600	0.25	3.0	8.0
MMSZ5241B	H1	10.45	11	11.55	20.0	22	600	0.25	2.0	8.4
MMSZ5242B	H2	11.40	12	12.60	20.0	30	600	0.25	1.0	9.1
MMSZ5243B	H3	12.35	13	13.65	9.5	13	600	0.25	0.5	9.9
MMSZ5244B	H4	13.30	14	14.70	9.0	15	600	0.25	0.1	10
MMSZ5245B	H5	14.25	15	15.75	8.5	16	600	0.25	0.1	11
MMSZ5246B	J1	15.20	16	16.80	7.8	17	600	0.25	0.1	12
MMSZ5248B	J3	17.10	18	18.90	7.0	21	600	0.25	0.1	14
MMSZ5250B	J5	19.00	20	21.00	6.2	25	600	0.25	0.1	15
MMSZ5251B	K1	20.90	22	23.10	5.6	29	600	0.25	0.1	17
MMSZ5252B	K2	22.80	24	25.20	5.2	33	600	0.25	0.1	18
MMSZ5253B	K3	23.75	25	26.25	5.0	35	600	0.25	0.1	19
MMSZ5254B	K4	25.65	27	28.35	4.6	41	600	0.25	0.1	21
MMSZ5255B	K5	26.60	28	29.40	4.5	44	600	0.25	0.1	21
MMSZ5256B	M1	28.50	30	31.50	4.2	49	600	0.25	0.1	23
MMSZ5257B	M2	31.35	33	34.65	3.8	58	700	0.25	0.1	25
MMSZ5258B	M3	34.20	36	37.80	3.4	70	700	0.25	0.1	27
MMSZ5259B	M4	37.05	39	40.95	3.2	80	800	0.25	0.1	30
MMSZ5260B	M5	40.85	43	45.15	3.0	93	900	0.25	0.1	33
MMSZ5261B	N1	44.65	47	49.35	2.7	105	1000	0.25	0.1	36
MMSZ5262B	N2	48.45	51	53.55	2.5	125	1100	0.25	0.1	39
MMSZ5263B	N3	53.20	56	58.80	2.2	150	1300	0.25	0.1	43
MMSZ5265B	N5	58.90	62	65.10	2.0	185	1400	0.25	0.1	47
MMSZ5266B	P1	64.60	68	71.40	1.8	230	1600	0.25	0.1	52
MMSZ5267B	P2	71.25	75	78.75	1.7	270	1700	0.25	0.1	56

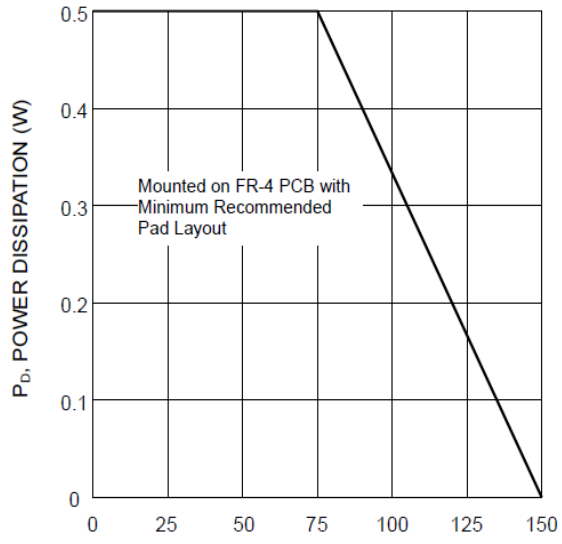

Fig. 1 Power Derating Curve

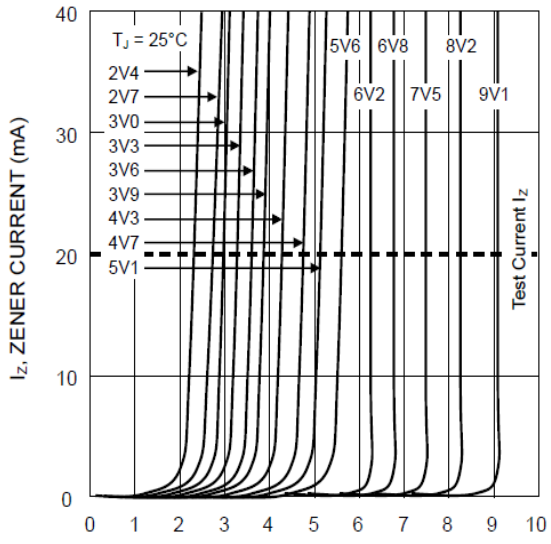

Fig. 2 Zener Breakdown Characteristics

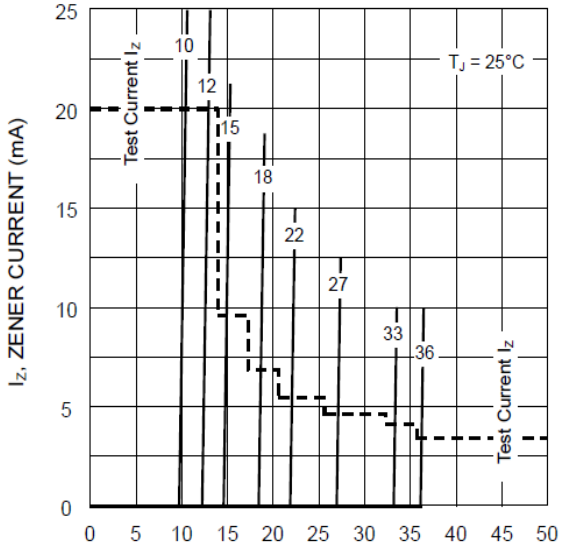

Fig. 3 Zener Breakdown Characteristics

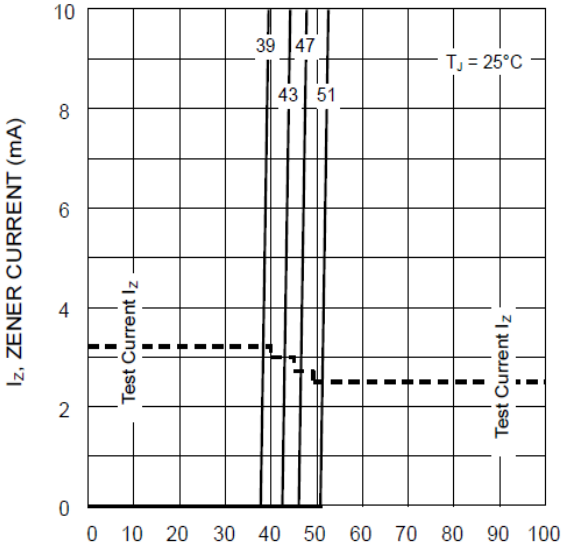

Fig. 4 Zener Breakdown Characteristics

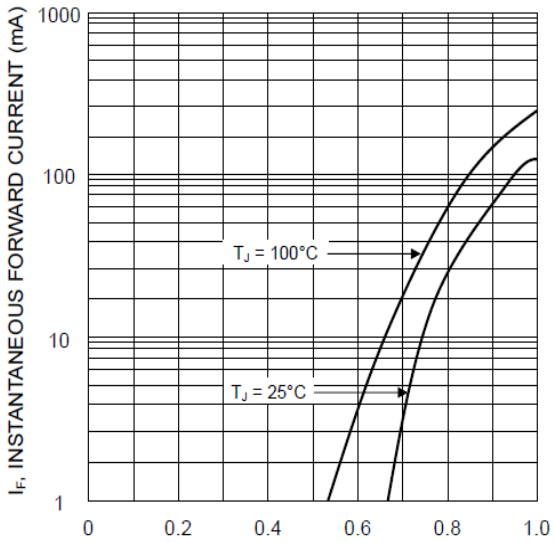

Fig. 5 Typical Forward Characteristics

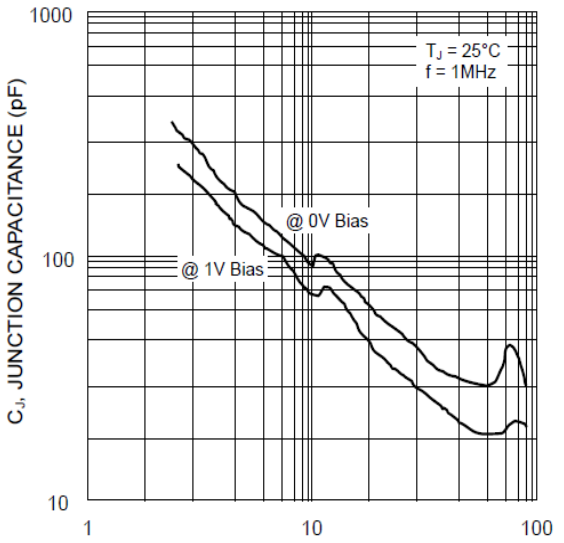

Fig. 6 Junction Capacitance vs. Nominal Zener Voltage

The curve above is for reference only.

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