



MMSZ5221BS SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4 to 51 Volts

POWER 200 mWatts

SOD-323

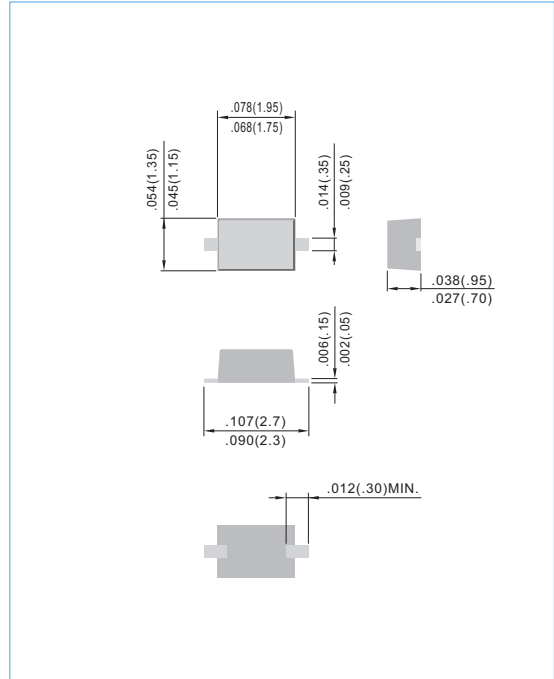
Unit: inch (mm)

FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.0041 grams
- Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation @ $T_A=25^{\circ}\text{C}$ (Note A)	P_D	200	mW
Operating Junction and Storage Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$

NOTE :

A. Mounted on 5.0mm²(.013mm thick) land areas.



MMSZ5221BS SERIES

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
200 mWatts Zener Diodes										
MMSZ5221BS	2.4	2.28	2.52	30	20.0	1200	0.25	100	1.0	C1
MMSZ5222BS	2.5	2.38	2.63	30	20.0	1250	0.25	100	1.0	C2
MMSZ5223BS	2.7	2.57	2.84	30	20.0	1300	0.25	75	1.0	C3
MMSZ5225BS	3	2.85	3.15	30	20.0	1600	0.25	50	1.0	C5
MMSZ5226BS	3.3	3.14	3.47	28	20.0	1600	0.25	25	1.0	D1
MMSZ5227BS	3.6	3.42	3.78	24	20.0	1700	0.25	15	1.0	D2
MMSZ5228BS	3.9	3.71	4.10	23	20.0	1900	0.25	10	1.0	D3
MMSZ5229BS	4.3	4.09	4.52	22	20.0	2000	0.25	5.0	1.0	D4
MMSZ5230BS	4.7	4.47	4.94	19	20.0	1900	0.25	5.0	2.0	D5
MMSZ5231BS	5.1	4.85	5.36	17	20.0	1600	0.25	5.0	2.0	E1
MMSZ5232BS	5.6	5.32	5.88	11	20.0	1600	0.25	5.0	3.0	E2
MMSZ5234BS	6.2	5.89	6.51	7	20.0	1000	0.25	5.0	4.0	E4
MMSZ5235BS	6.8	6.46	7.14	5	20.0	750	0.25	3.0	5.0	E5
MMSZ5236BS	7.5	7.13	7.88	6	20.0	500	0.25	3.0	6.0	F1
MMSZ5237BS	8.2	7.79	8.61	8	20.0	500	0.25	3.0	6.0	F2
MMSZ5238BS	8.7	8.27	9.14	8	20.0	600	0.25	3.0	6.5	F3
MMSZ5239BS	9.1	8.65	9.56	10	20.0	600	0.25	3.0	6.5	F4
MMSZ5240BS	10	9.50	10.50	17	20.0	600	0.25	3.0	8.0	F5
MMSZ5241BS	11	10.45	11.55	22	20.0	600	0.25	2.0	8.4	H1
MMSZ5242BS	12	11.40	12.60	30	20.0	600	0.25	1.0	9.1	H2
MMSZ5243BS	13	12.35	13.65	13	9.5	600	0.25	0.5	9.9	H3
MMSZ5244BS	14	13.30	14.70	15	9.0	600	0.25	0.1	10.5	H4
MMSZ5245BS	15	14.25	15.75	16	8.5	600	0.25	0.1	11.0	H5
MMSZ5246BS	16	15.20	16.80	17	7.8	600	0.25	0.1	12.0	J1
MMSZ5247BS	17	16.15	17.85	19	7.5	600	0.25	0.1	13.0	J2
MMSZ5248BS	18	17.10	18.90	21	7.0	600	0.25	0.1	14.0	J3
MMSZ5250BS	20	19.00	21.00	25	6.2	600	0.25	0.1	15.0	J5
MMSZ5251BS	22	20.90	23.10	29	5.6	600	0.25	0.1	17.0	K1
MMSZ5252BS	24	22.80	25.20	33	5.2	600	0.25	0.1	18.0	K2
MMSZ5254BS	27	25.65	28.35	41	5.0	600	0.25	0.1	21.0	K4
MMSZ5255BS	28	26.60	29.40	44	4.5	600	0.25	0.1	21.0	K5
MMSZ5256BS	30	28.50	31.50	49	4.2	600	0.25	0.1	23.0	M1
MMSZ5257BS	33	31.35	34.65	58	3.8	700	0.25	0.1	25.0	M2
MMSZ5258BS	36	34.20	37.80	70	3.4	700	0.25	0.1	27.0	M3
MMSZ5259BS	39	37.05	40.95	80	3.2	800	0.25	0.1	30.0	M4
MMSZ5260BS	43	40.85	45.15	93	3.0	900	0.25	0.1	33.0	M5
MMSZ5261BS	47	44.65	49.35	105	2.7	1000	0.25	0.1	36.0	N1
MMSZ5262BS	51	48.45	53.55	125	2.5	1100	0.25	0.1	39.0	N2



MMSZ5221BS SERIES

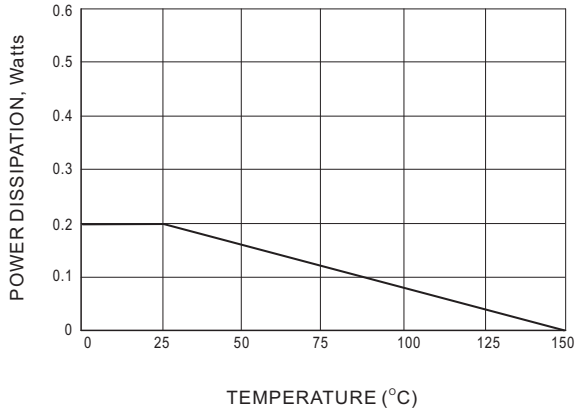


Fig.1 STEADY STATE POWER DERATING

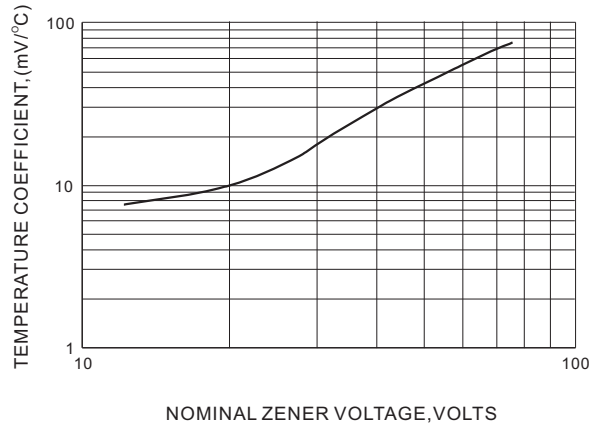


Fig.2 TEMPERATURE COEFFICIENTS

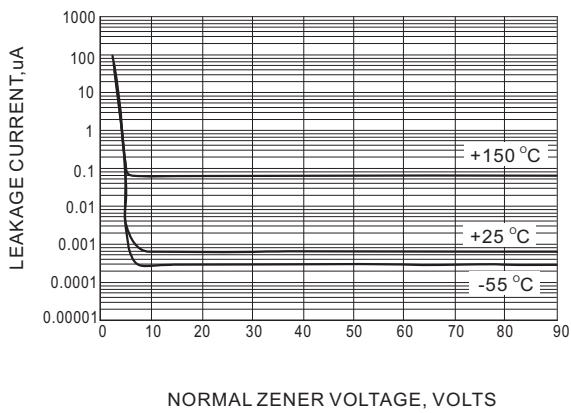


Fig.3 TYPICAL LEAKAGE CURRENT

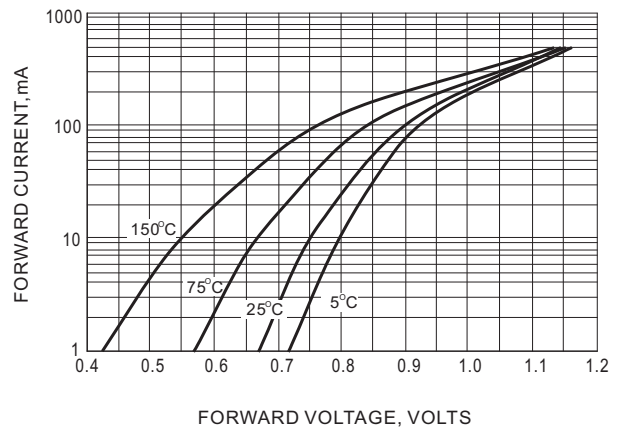
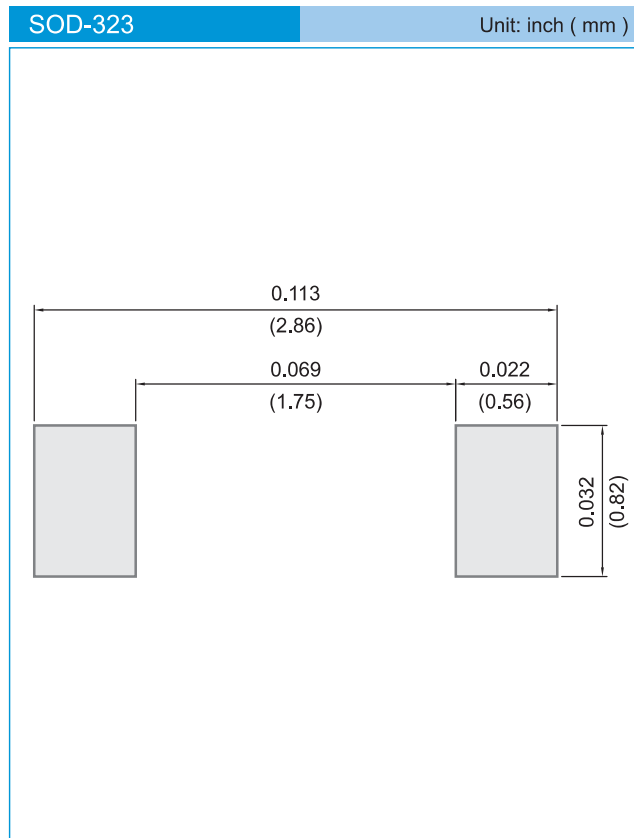


Fig.4 TYPICAL FORWARD VOLTAGE



MMSZ5221BS SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K per 7" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2009

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.