



# MMSZ5221BS SERIES

## SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 2.4 to 75 Volts

**POWER** 200 mWatts

**SOD-323**

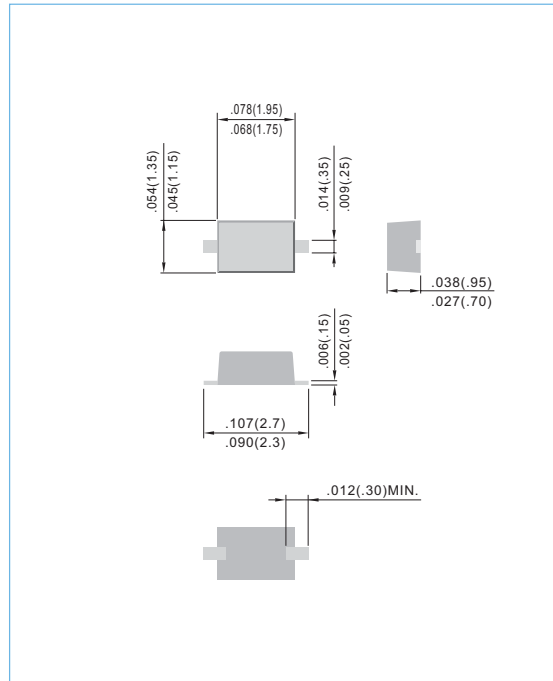
Unit: inch (mm)

### FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Pb free product : 99% Sn above can meet RoHS environment substance diective request

### 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 5.0mm<sup>2</sup>(.013mm thick) land areas.



## MMSZ5221BS SERIES

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code	Package
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>1T</sub> @ I <sub>ZT</sub>		Z <sub>2K</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>			
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V		
MMSZ5221BS	2.4	2.28	2.52	30	20.0	1200	0.25	100	1.0	C1	SOD-323
MMSZ5222BS	2.5	2.38	2.63	30	20.0	1250	0.25	100	1.0	C2	SOD-323
MMSZ5223BS	2.7	2.57	2.84	30	20.0	1300	0.25	75	1.0	C3	SOD-323
MMSZ5225BS	3	2.85	3.15	30	20.0	1600	0.25	50	1.0	C5	SOD-323
MMSZ5226BS	3.3	3.14	3.47	28	20.0	1600	0.25	25	1.0	D1	SOD-323
MMSZ5227BS	3.6	3.42	3.78	24	20.0	1700	0.25	15	1.0	D2	SOD-323
MMSZ5228BS	3.9	3.71	4.10	23	20.0	1900	0.25	10	1.0	D3	SOD-323
MMSZ5229BS	4.3	4.09	4.52	22	20.0	2000	0.25	5.0	1.0	D4	SOD-323
MMSZ5230BS	4.7	4.47	4.94	19	20.0	1900	0.25	5.0	2.0	D5	SOD-323
MMSZ5231BS	5.1	4.85	5.36	17	20.0	1600	0.25	5.0	2.0	E1	SOD-323
MMSZ5232BS	5.6	5.32	5.88	11	20.0	1600	0.25	5.0	3.0	E2	SOD-323
MMSZ5234BS	6.2	5.89	6.51	7	20.0	1000	0.25	5.0	4.0	E4	SOD-323
MMSZ5235BS	6.8	6.46	7.14	5	20.0	750	0.25	3.0	5.0	E5	SOD-323
MMSZ5236BS	7.5	7.13	7.88	6	20.0	500	0.25	3.0	6.0	F1	SOD-323
MMSZ5237BS	8.2	7.79	8.61	8	20.0	500	0.25	3.0	6.0	F2	SOD-323
MMSZ5239BS	9.1	8.65	9.56	10	20.0	600	0.25	3.0	6.5	F4	SOD-323
MMSZ5240BS	10	9.50	10.50	17	20.0	600	0.25	3.0	8.0	F5	SOD-323
MMSZ5241BS	11	10.45	11.55	22	20.0	600	0.25	2.0	8.4	H1	SOD-323
MMSZ5242BS	12	11.40	12.60	30	20.0	600	0.25	1.0	9.1	H2	SOD-323
MMSZ5243BS	13	12.35	13.65	13	9.5	600	0.25	0.5	9.9	H3	SOD-323
MMSZ5244BS	14	13.30	14.70	15	9.0	600	0.25	0.1	10.5	H4	SOD-323
MMSZ5245BS	15	14.25	15.75	16	8.5	600	0.25	0.1	11.0	H5	SOD-323
MMSZ5246BS	16	15.20	16.80	17	7.8	600	0.25	0.1	12.0	J1	SOD-323
MMSZ5247BS	17	16.15	17.85	19	7.5	600	0.25	0.1	13.0	J2	SOD-323
MMSZ5248BS	18	17.10	18.90	21	7.0	600	0.25	0.1	14.0	J3	SOD-323
MMSZ5250BS	20	19.00	21.00	25	6.2	600	0.25	0.1	15.0	J5	SOD-323
MMSZ5251BS	22	20.90	23.10	29	5.6	600	0.25	0.1	17.0	K1	SOD-323
MMSZ5252BS	24	22.80	25.20	33	5.2	600	0.25	0.1	18.0	K2	SOD-323
MMSZ5254BS	27	25.65	28.35	41	5.0	600	0.25	0.1	21.0	K4	SOD-323
MMSZ5255BS	28	26.60	29.40	44	4.5	600	0.25	0.1	21.0	K5	SOD-323
MMSZ5256BS	30	28.50	31.50	49	4.2	600	0.25	0.1	23.0	M1	SOD-323
MMSZ5257BS	33	31.35	34.65	58	3.8	700	0.25	0.1	25.0	M2	SOD-323
MMSZ5258BS	36	34.20	37.80	70	3.4	700	0.25	0.1	27.0	M3	SOD-323
MMSZ5259BS	39	37.05	40.95	80	3.2	800	0.25	0.1	30.0	M4	SOD-323
MMSZ5260BS	43	40.85	45.15	93	3.0	900	0.25	0.1	33.0	M5	SOD-323
MMSZ5261BS	47	44.65	49.35	105	2.7	1000	0.25	0.1	36.0	N1	SOD-323
MMSZ5262BS	51	48.45	53.55	125	2.5	1100	0.25	0.1	39.0	N2	SOD-323
MMSZ5263BS	56	53.20	58.80	150	2.2	1300	0.25	0.1	43.0	N3	SOD-323
MMSZ5264BS	60	57.00	63.00	170	2.1	1400	0.25	0.1	46.0	N4	SOD-323
MMSZ5265BS	62	58.90	65.10	185	2.0	1500	0.25	0.1	47.0	N5	SOD-323
MMSZ5266BS	68	64.60	71.40	230	1.8	1600	0.25	0.1	52.0	P1	SOD-323
MMSZ5267BS	75	71.25	78.75	270	1.7	1400	0.25	0.1	56.0	P2	SOD-323



## MMSZ5221BS SERIES

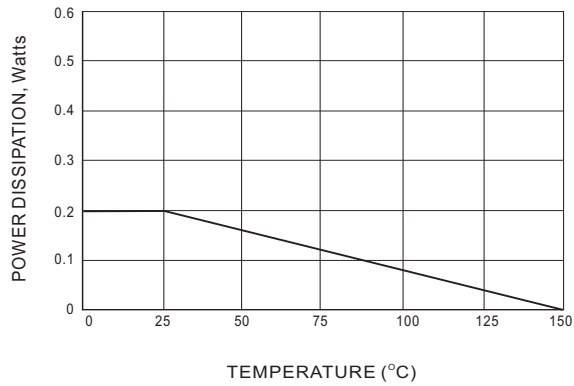


Fig.1 STEADY STATE POWER DERATING

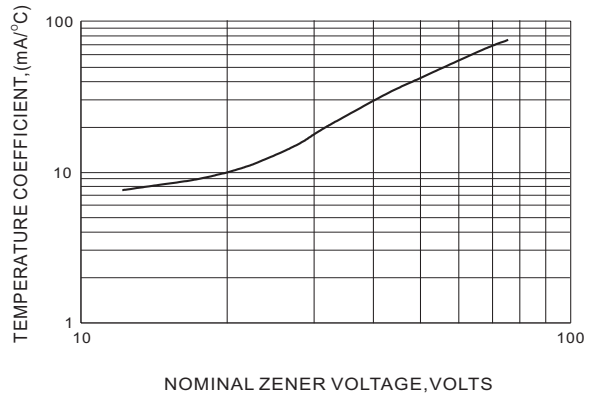


Fig.2 TEMPERATURE COEFFICIENTS

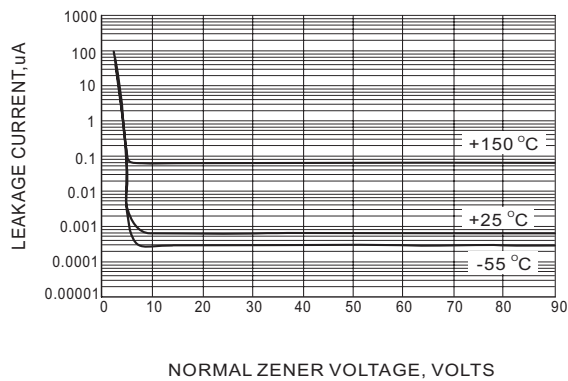


Fig.3 TYPICAL LEAKAGE CURRENT

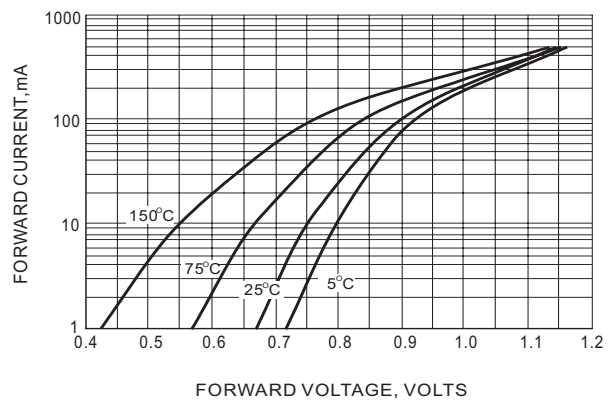
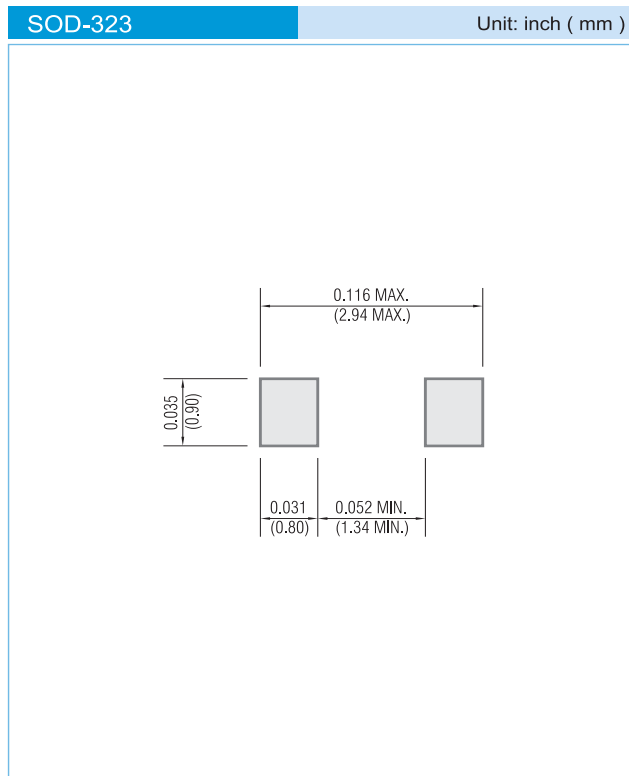


Fig.4 TYPICAL FORWARD VOLTAGE



## 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 2005

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.