PANJIT SEMI CONDUCTOR

MMSZ5229A SERIES

SURFACE MOUNT SILICON ZENER DIODES

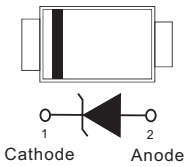
VOLTAGE 4.3 to 51 Volt **POWER** 500 mWatt

FEATURES

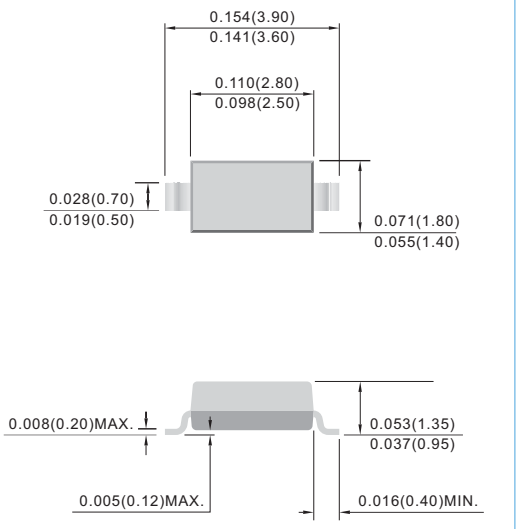
- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Apporx. Weight: 0.0004 ounces, 0.01 grams



SOD-123 Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation@T_A=25°C (Notes A)	P_D	500	mW
Operating Junction and StorageTemperature Range	T_J	-50 to +150	°C

NOTES:

A. Mounted on 5.0mm²(0.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

MMSZ5229A 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	
500 mWatts Zener Diodes										
MMSZ5229A	4.3	4.21	4.39	22	20.0	2000	0.25	5.0	1.0	D4
MMSZ5230A	4.7	4.61	4.79	19	20.0	1900	0.25	5.0	2.0	D5
MMSZ5231A	5.1	5.00	5.20	17	20.0	1600	0.25	5.0	2.0	E1
MMSZ5232A	5.6	5.49	5.71	11	20.0	1600	0.25	5.0	3.0	E2
MMSZ5234A	6.2	6.08	6.32	7	20.0	1000	0.25	5.0	4.0	E4
MMSZ5235A	6.8	6.66	6.94	5	20.0	750	0.25	3.0	5.0	E5
MMSZ5236A	7.5	7.35	7.65	6	20.0	500	0.25	3.0	6.0	F1
MMSZ5237A	8.2	8.04	8.36	8	20.0	500	0.25	3.0	6.0	F2
MMSZ5238A	8.7	8.53	8.87	8	20	600	0.25	3.0	6.5	F3
MMSZ5239A	9.1	8.92	9.28	10	20.0	600	0.25	3.0	6.5	F4
MMSZ5240A	10	9.80	10.20	17	20.0	600	0.25	3.0	8.0	F5
MMSZ5241A	11	10.78	11.22	22	20.0	600	0.25	3.0	8.4	H1
MMSZ5242A	12	11.76	12.24	30	20.0	600	0.25	2.0	9.1	H2
MMSZ5243A	13	12.74	13.26	13	9.5	600	0.25	1.0	9.9	H3
MMSZ5244A	14	13.72	14.28	15	9.0	600	0.25	0.5	10.5	H4
MMSZ5245A	15	14.70	15.30	16	8.5	600	0.25	0.5	11.0	H5
MMSZ5246A	16	15.68	16.32	17	7.8	600	0.25	0.1	12.0	J1
MMSZ5247A	17	16.66	17.34	19	7.5	600	0.25	0.1	13.0	J2
MMSZ5248A	18	17.64	18.36	21	7.0	600	0.25	0.1	14.0	J3
MMSZ5250A	20	19.60	20.40	25	6.2	600	0.25	0.1	15.0	J5
MMSZ5251A	22	21.56	22.44	29	5.6	600	0.25	0.1	17.0	K1
MMSZ5252A	24	23.52	24.48	33	5.2	600	0.25	0.1	18.0	K2
MMSZ5254A	27	26.46	27.54	41	5.0	600	0.25	0.1	21.0	K4
MMSZ5255A	28	27.44	28.56	44	4.5	600	0.25	0.1	21.0	K5
MMSZ5256A	30	29.40	30.60	49	4.2	600	0.25	0.1	23.0	M1
MMSZ5257A	33	32.34	33.66	58	3.8	700	0.25	0.1	25.0	M2
MMSZ5258A	36	35.28	36.72	70	3.4	700	0.25	0.1	27.0	M3
MMSZ5259A	39	38.22	39.78	80	3.2	800	0.25	0.1	30.0	M4
MMSZ5260A	43	42.14	43.86	93	3.0	900	0.25	0.1	33.0	M5
MMSZ5261A	47	46.06	47.94	105	2.7	1000	0.25	0.1	36.0	N1
MMSZ5262A	51	49.98	52.02	125	2.5	1100	0.25	0.1	39.0	N2

MMSZ5229A SERIES

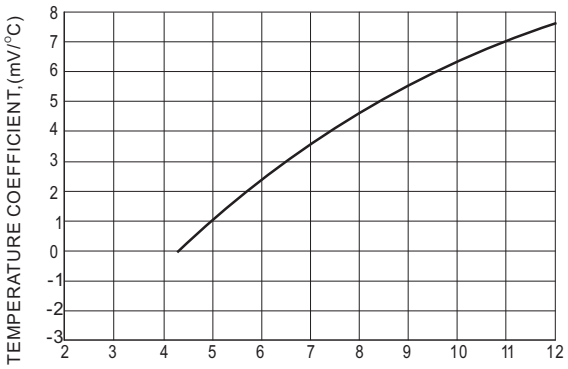


Fig.1 TEMPERATURE COEFFICIENTS

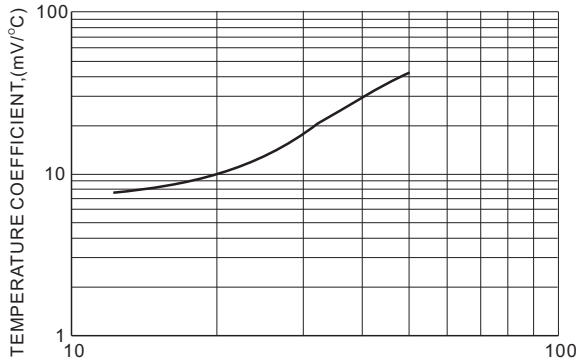


Fig.2 TEMPERATURE COEFFICIENTS

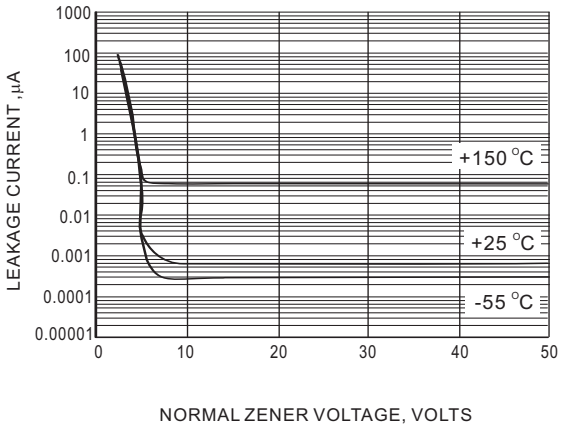


Fig.3 TYPICAL LEAKAGE CURRENT

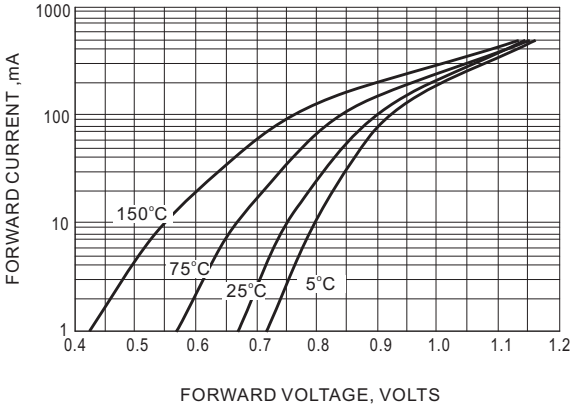


Fig.4 TYPICAL FORWARD VOLTAGE

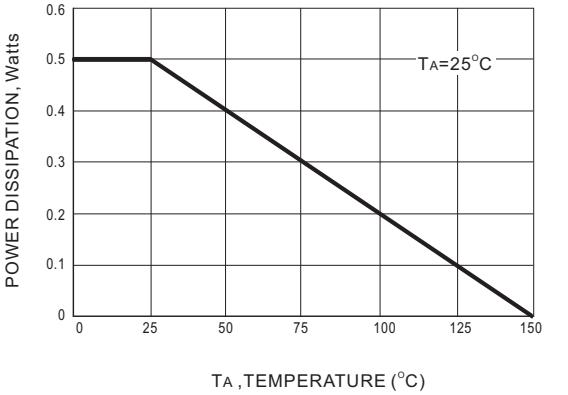


Fig.5 STEADY STATE POWER DERATING

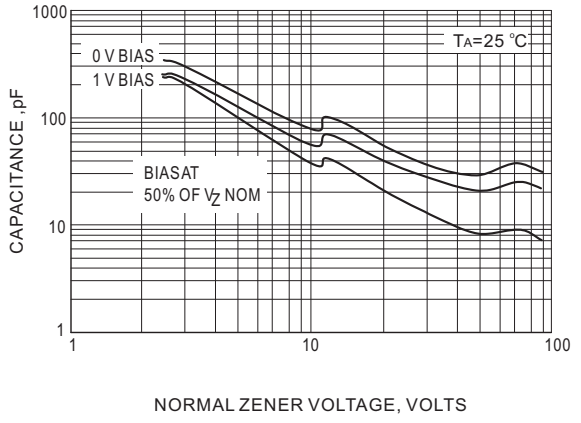


Fig.6 TYPICAL CAPACITANCE

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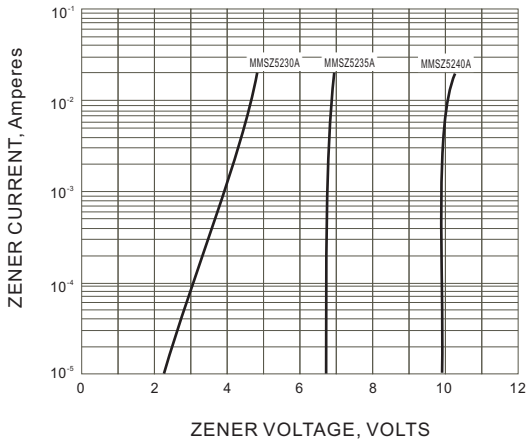


Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

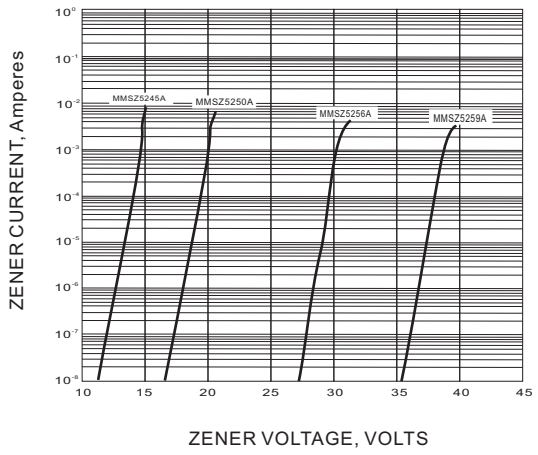
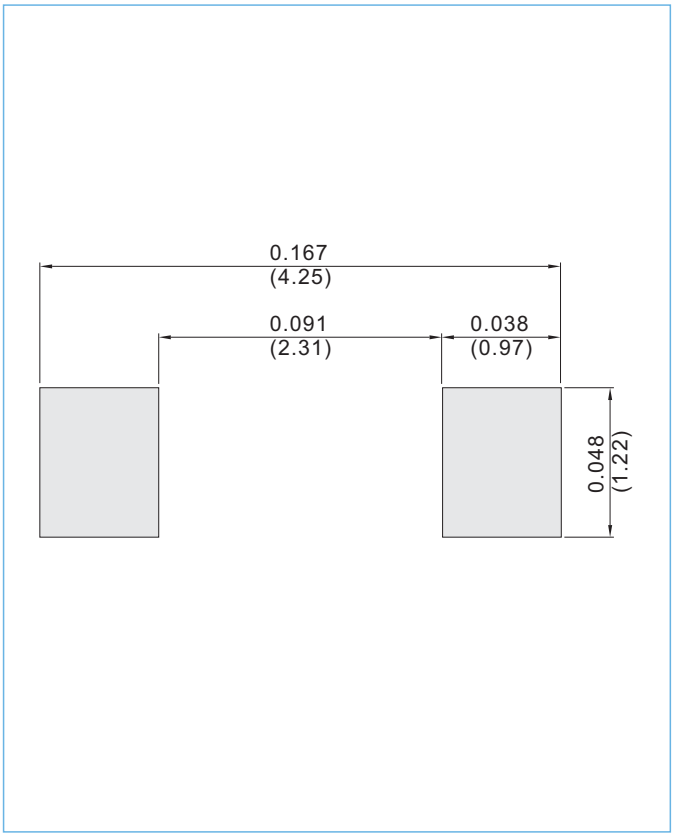


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

MMSZ5229A SERIES

MOUNTING PAD LAYOUT

SOD-123 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

MMSZ5229A SERIES

Part No_packing code_Version

MMSZ5229A_R1_00001
MMSZ5229A_R2_00001

For example :

RB500V-40_R2_00001

- Part No.
- Packing type means T/R
- Packing size code means 13"
- Version code means HF
- Serial number

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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MMSZ5245AS_R1_00001 S100_R1_00001 BAV70_R1_00101 P4SMAJ180A_R1_00001 S1G_R2_00001
SS20100FL_R1_00001 BSS8402DW_R1_00001 BZT52-B8V2S_R1_00001 ER2004CT_TO_00001
MMSZ5242B_R1_00001 GS1010FL-LE_R1_00001 PJSD24TS-AU_R1_000A1 SB34AFC_R1_00001
SB36AFC-AU_R1_000A1 BAV99_R1_00001 PSDH6060CCS1_T0_00001 S3JA_R2_00001
SB34AFC-AU_R1_000A1 UF808_T0_00001 ZMM55-C43_R1_10001 PSDB1560L1_T0_00001