



MMSZ5229AS SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 4.3 to 51 Volt

POWER 200 mWatt

SOD-323

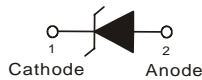
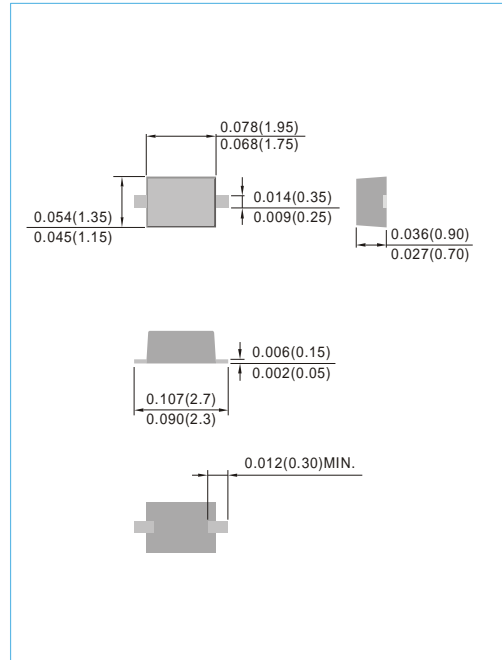
Unit : inch(mm)

FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band cathode
- Appox Weight: 0.00014 ounces, 0.0041 grams



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	$^{\circ}\text{C}$

NOTES:

A. Mounted on 5 mm²(0.013mm thick) land areas.



MMSZ5229AS SERIES

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{VT} @ I _{ZT}		Z _{VK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
200 mWatts Zener Diodes										
MMSZ5229AS	4.3	4.21	4.39	22	20	2000	0.25	5	1	D4
MMSZ5230AS	4.7	4.61	4.79	19	20	1900	0.25	5	2	D5
MMSZ5231AS	5.1	5	5.2	17	20	1600	0.25	5	2	E1
MMSZ5232AS	5.6	5.49	5.71	11	20	1600	0.25	5	3	E2
MMSZ5234AS	6.2	6.08	6.32	7	20	1000	0.25	5	4	E4
MMSZ5235AS	6.8	6.66	6.94	5	20	750	0.25	3	5	E5
MMSZ5236AS	7.5	7.35	7.65	6	20	500	0.25	3	6	F1
MMSZ5237AS	8.2	8.04	8.36	8	20	500	0.25	3	6	F2
MMSZ5238AS	8.7	8.53	8.87	8	20	600	0.25	3	6.5	F3
MMSZ5239AS	9.1	8.92	9.28	10	20	600	0.25	3	6.5	F4
MMSZ5240AS	10	9.8	10.2	17	20	600	0.25	3	8	F5
MMSZ5241AS	11	10.78	11.22	22	20	600	0.25	2	8.4	H1
MMSZ5242AS	12	11.76	12.24	30	20	600	0.25	1	9.1	H2
MMSZ5243AS	13	12.74	13.26	13	9.5	600	0.25	0.5	9.9	H3
MMSZ5244AS	14	13.72	14.28	15	9	600	0.25	0.1	10.5	H4
MMSZ5245AS	15	14.7	15.3	16	8.5	600	0.25	0.1	11	H5
MMSZ5246AS	16	15.68	16.32	17	7.8	600	0.25	0.1	12	J1
MMSZ5247AS	17	16.66	17.34	19	7.5	600	0.25	0.1	13	J2
MMSZ5248AS	18	17.64	18.36	21	7	600	0.25	0.1	14	J3
MMSZ5250AS	20	19.6	20.4	25	6.2	600	0.25	0.1	15	J5
MMSZ5251AS	22	21.56	22.44	29	5.6	600	0.25	0.1	17	K1
MMSZ5252AS	24	23.52	24.48	33	5.2	600	0.25	0.1	18	K2
MMSZ5254AS	27	26.46	27.54	41	5	600	0.25	0.1	21	K4
MMSZ5255AS	28	27.44	28.56	44	4.5	600	0.25	0.1	21	K5
MMSZ5256AS	30	29.4	30.6	49	4.2	600	0.25	0.1	23	M1
MMSZ5257AS	33	32.34	33.66	58	3.8	700	0.25	0.1	25	M2
MMSZ5258AS	36	35.28	36.72	70	3.4	700	0.25	0.1	27	M3
MMSZ5259AS	39	38.22	39.78	80	3.2	800	0.25	0.1	30	M4
MMSZ5260AS	43	42.14	43.86	93	3	900	0.25	0.1	33	M5
MMSZ5261AS	47	46.06	47.94	105	2.7	1000	0.25	0.1	36	N1
MMSZ5262AS	51	49.98	52.02	125	2.5	1100	0.25	0.1	39	N2



MMSZ5229AS SERIES

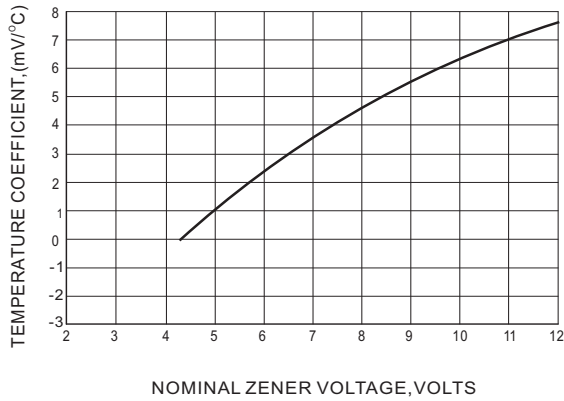


Fig.1 TEMPERATURE COEFFICIENTS

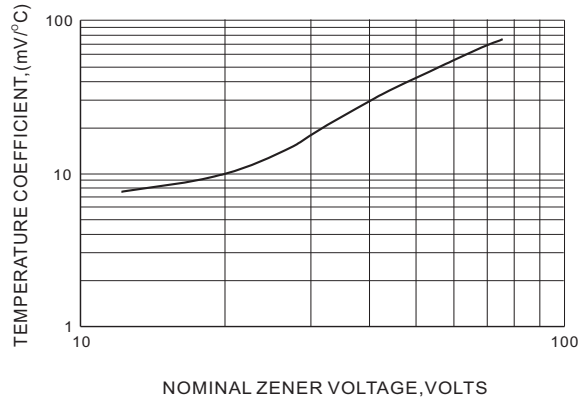


Fig.2 TEMPERATURE COEFFICIENTS

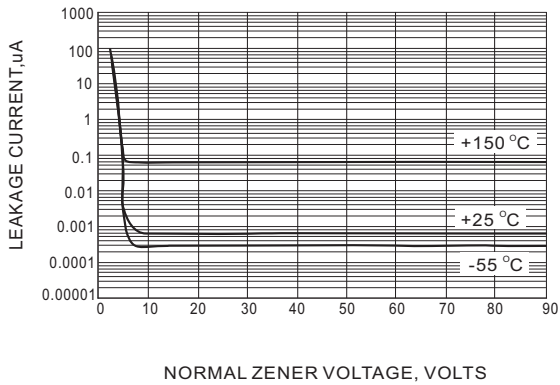


Fig. TYPICAL LEAKAGE CURRENT

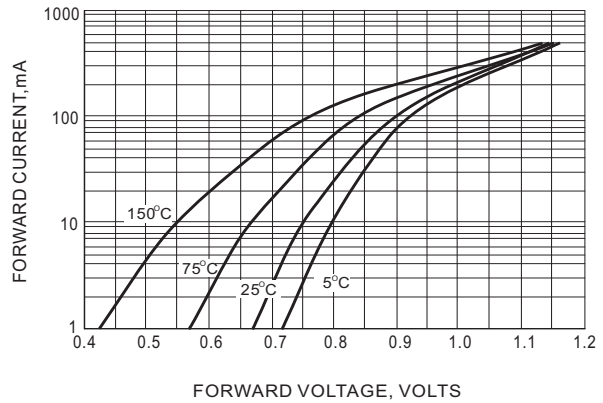


Fig.4 TYPICAL FORWARD VOLTAGE

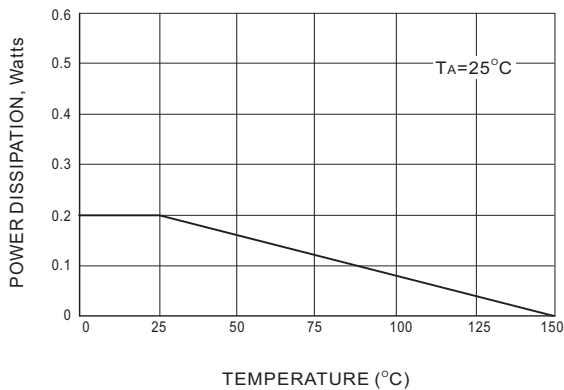


Fig.5 STEADY STATE POWER DERATING

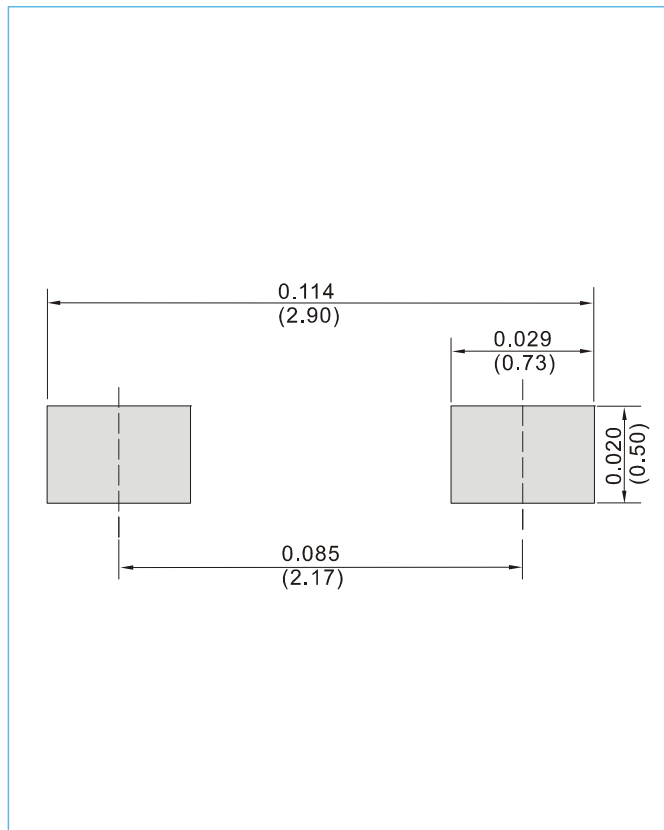


MMSZ5229AS SERIES

MOUNTING PAD LAYOUT

SOD-323

Unit : inch(mm)



ORDER INFORMATION

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



MMSZ5229AS SERIES

Part No_packing code_Version

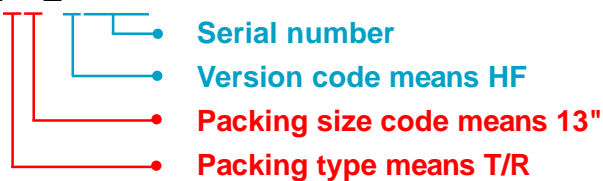
MMSZ5229AS_R1_00001

MMSZ5229AS_R2_00001

For example :

RB500V-40 **R2** **00001**

Part No.



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



MMSZ5229AS SERIES

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.