



# MMSZ5229A SERIES

## SURFACE MOUNT SILICON ZENER DIODES

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

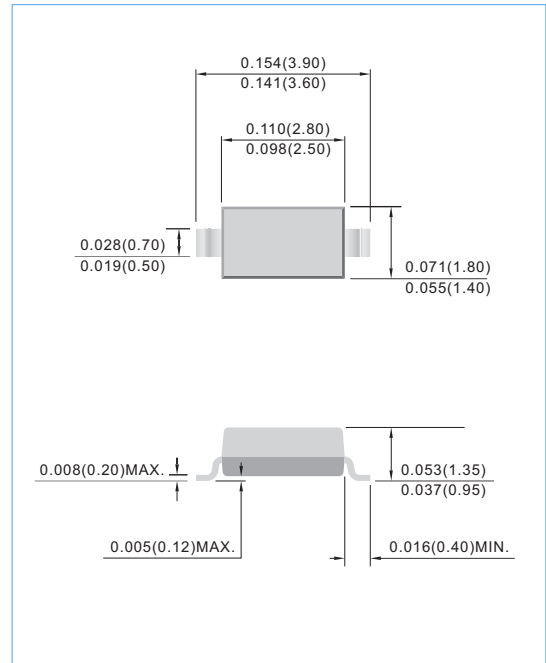
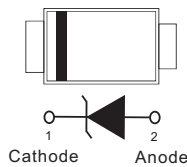
**SOD-123**      Unit : inch(mm)

### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

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



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation@T <sub>A</sub> =25°C (Notes A)	P <sub>D</sub>	500	mW
Operating Junction and Storage Temperature Range	T <sub>J</sub>	-50 to +150	°C

### NOTES:

- A. Mounted on 5.0mm<sup>2</sup>(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 <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</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	
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



## MMSZ5229A SERIES



Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

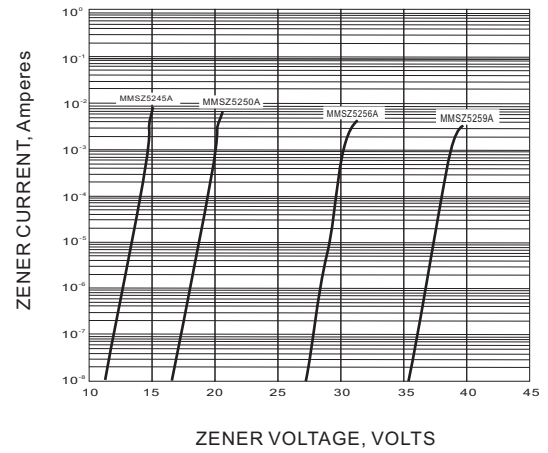
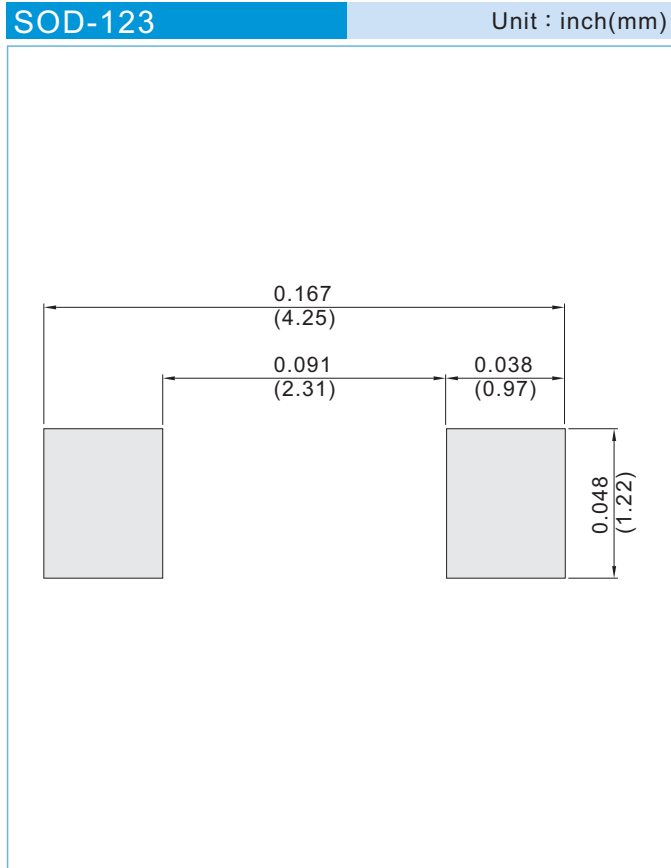


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT



## MMSZ5229A SERIES

### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel



## MMSZ5229A SERIES

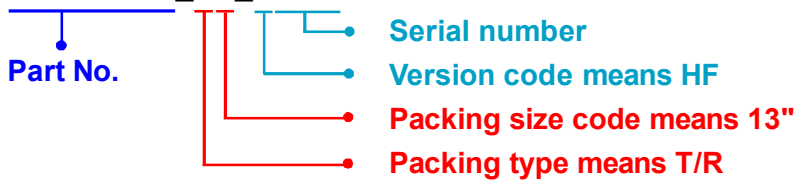
### Part No\_packing code\_Version

MMSZ5229A\_R1\_00001

MMSZ5229A\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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



## MMSZ5229A 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.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Panjit\(强茂\)](#)