

# MMSZ4691WS SERIES

## SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 6.2 ~ 15 Volts **POWER** 200 mWatts

**SOD-323**

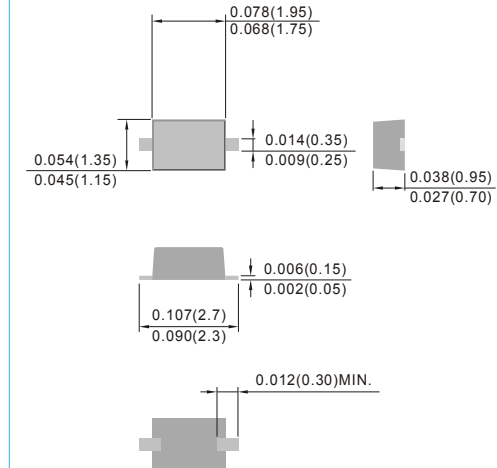
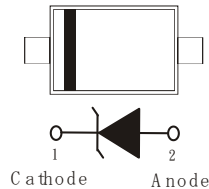
Unit : inch(mm)

### FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in comply with EU RoHS 2002/95/EC directives.
- 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 denotes cathode end
- Approx. Weight: 0.00014 ounces, 0.0041 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Maximum Power Dissipation (Note 1)	$P_D$	200	mW
Typical Thermal Resistance , Junction to Ambient (Note 1) Junction to Case (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	625 400	°C/W
Operating Junction Temperature and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

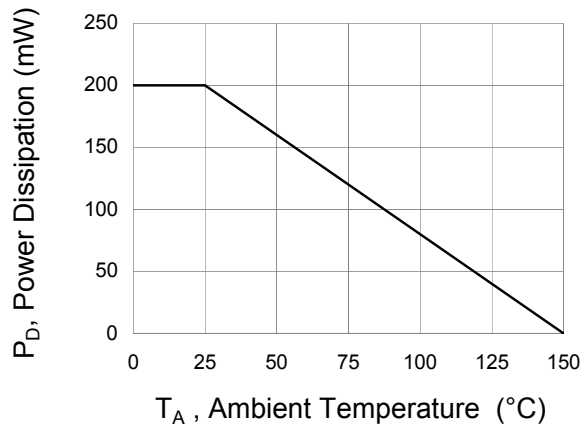
Part Number	Nominal Zener Voltage			Max. Zener Impedance	Max Reverse Leakage Current		Marking Code
	V <sub>z</sub> @ I <sub>zT</sub>				I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	mA	μA	V	
MMSZ4691WS	6.2	5.89	6.51	0.05	10	5	CA
MMSZ4692WS	6.8	6.46	7.14	0.05	10	5.1	CX
MMSZ4702WS	15	14.25	15.75	0.05	0.05	11.4	DM

### NOTES:

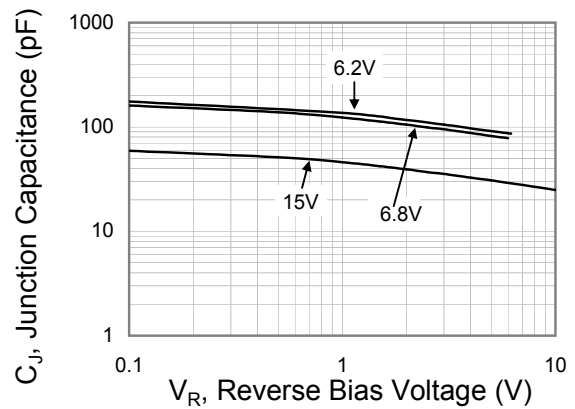
1. Mounted on 48cm<sup>2</sup> FR-4 PCB Board.

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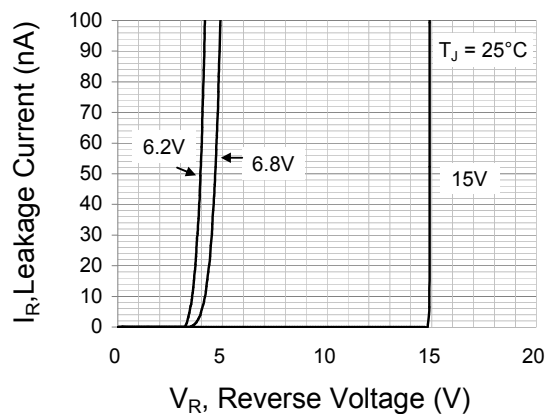
## RATING AND CHARACTERISTIC CURVES



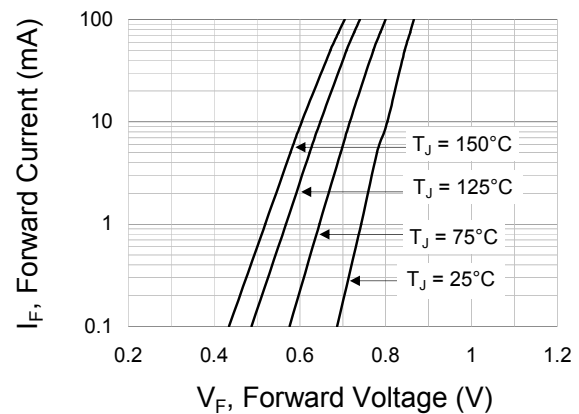
**Fig.1 Power Derating Curve**



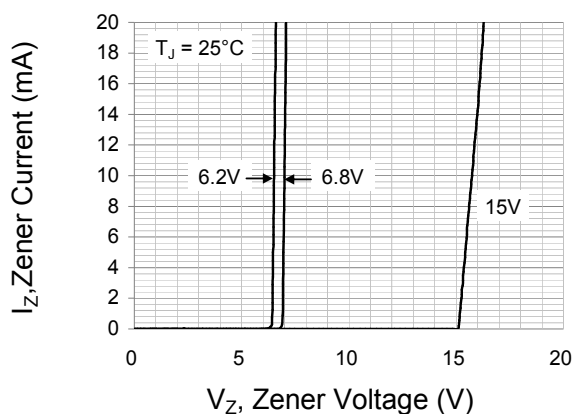
**Fig.2 Typical Junction Capacitance**



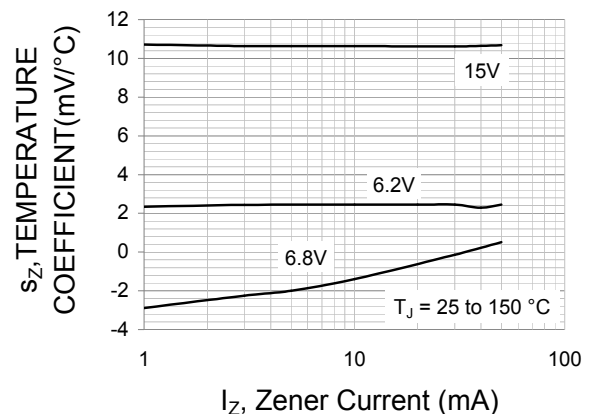
**Fig.3 Typical Leakage Characteristics**



**Fig.4 Typical Forward Characteristics**



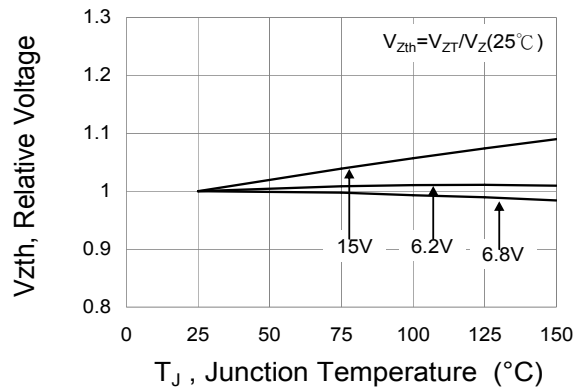
**Fig.5 Typical Zener Characteristics**



**Fig.6 Temperature coefficient as a function of working current; typical values**

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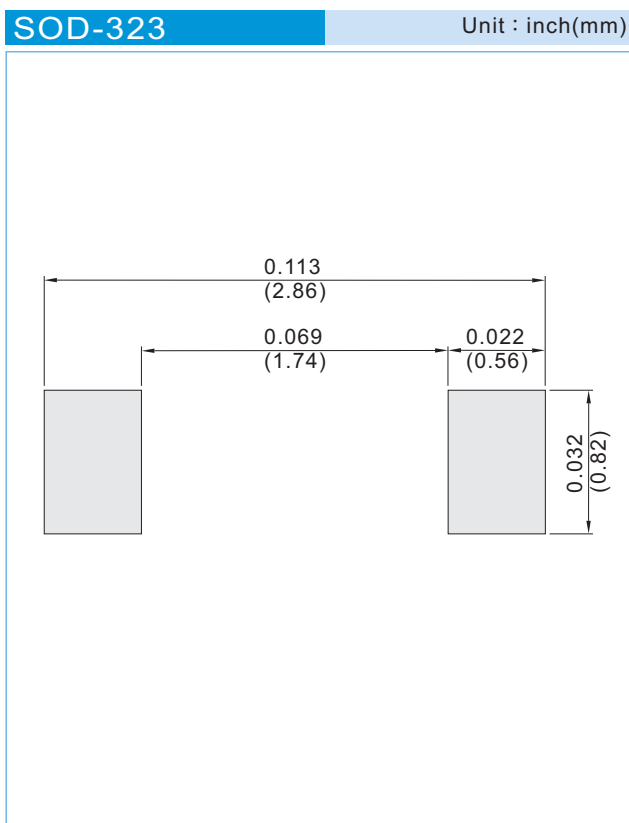
### RATING AND CHARACTERISTIC CURVES



**Fig.10 Junction temperature of working voltage vs junction temperature**

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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

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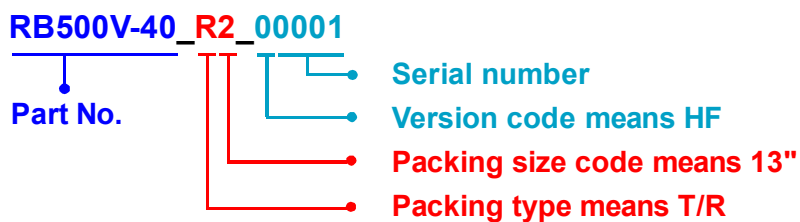
## MMSZ4691WS SERIES

### Part No\_packing code\_Version

MMSZ4691WS\_R1\_00001

MMSZ4691WS\_R2\_00001

For example :



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
T/B	<b>A</b>	N/A	<b>0</b>	HF	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	RoHS	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			



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