



# MMSZ4689HEWS

## SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE**

**5.1 Volt**

**POWER**

**500 mWatt**

**SOD-323HE**

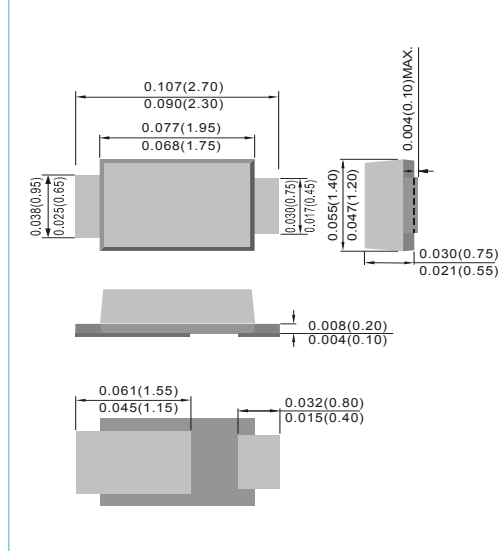
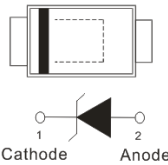
Unit : inch(mm)

### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-323HE, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.0002 ounce, 0.005 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation (Notes A)	$P_D$	500	mW
Typical Thermal Resistance (Notes A)	$R_{\theta JA}$ $R_{\theta JL}$	250 150	$^{\circ}C/W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^{\circ}C$

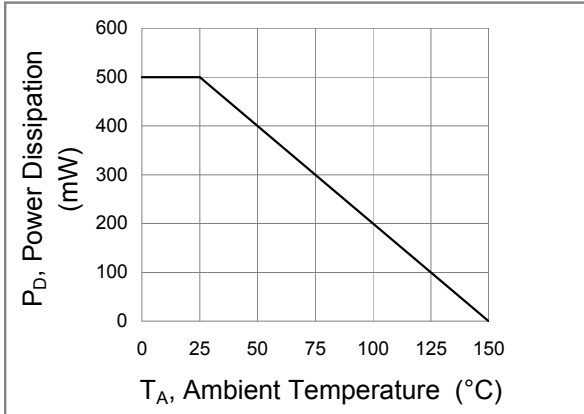
Part Number	Nominal Zener Voltage			Max. Zener Impedance	Max Reverse Leakage Current		Marking Code
	$V_Z @ I_{ZT}$				$I_R @ V_R$		
	Nom. V	Min. V	Max. V	mA	$\mu A$	V	
MMSZ4689HEWS	5.1	4.85	5.36	0.05	10	3	HCU

**NOTES:**

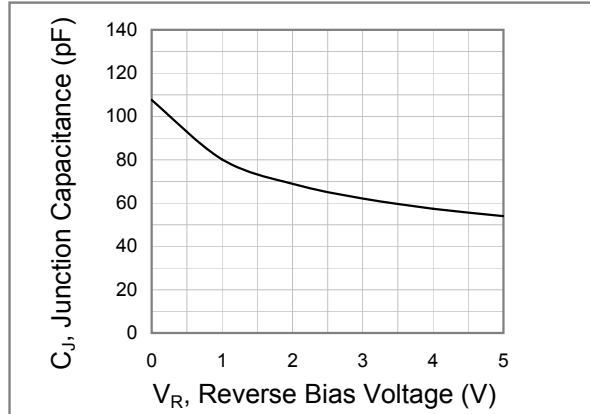
A. Mounted FR-5 PCB with minimum recommend pad layout.(PJ\_004 REV.0)



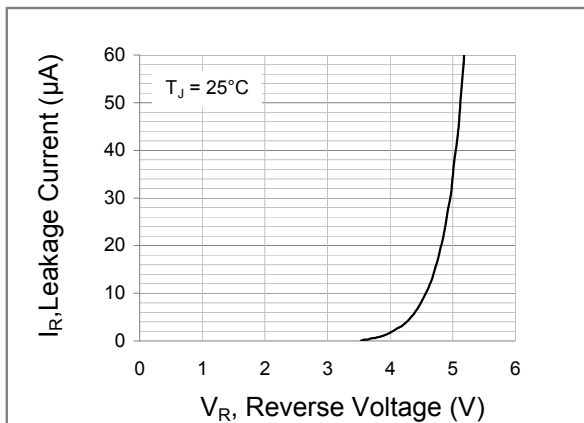
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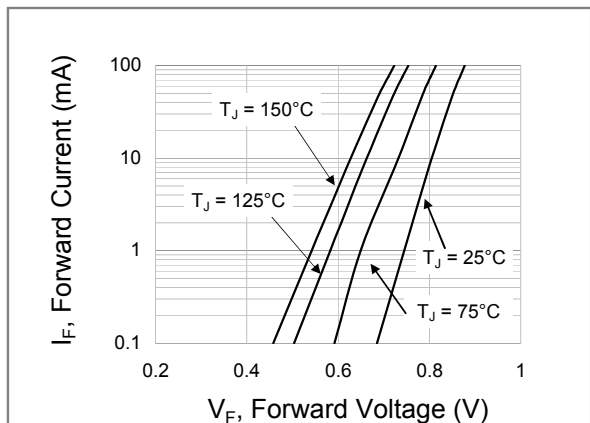
**Fig.1 Steady-State Power Derating Curve**



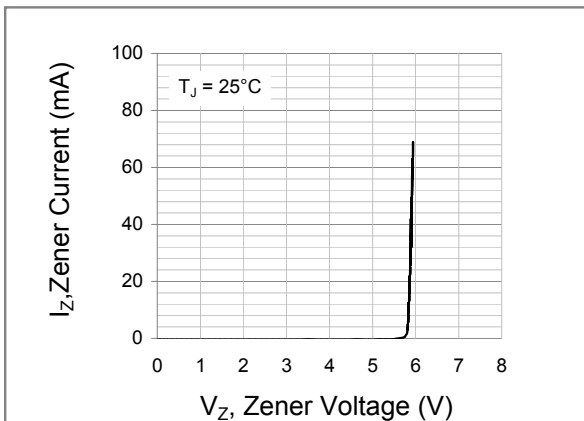
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Leakage Characteristics**



**Fig.4 Typical Forward Characteristics**

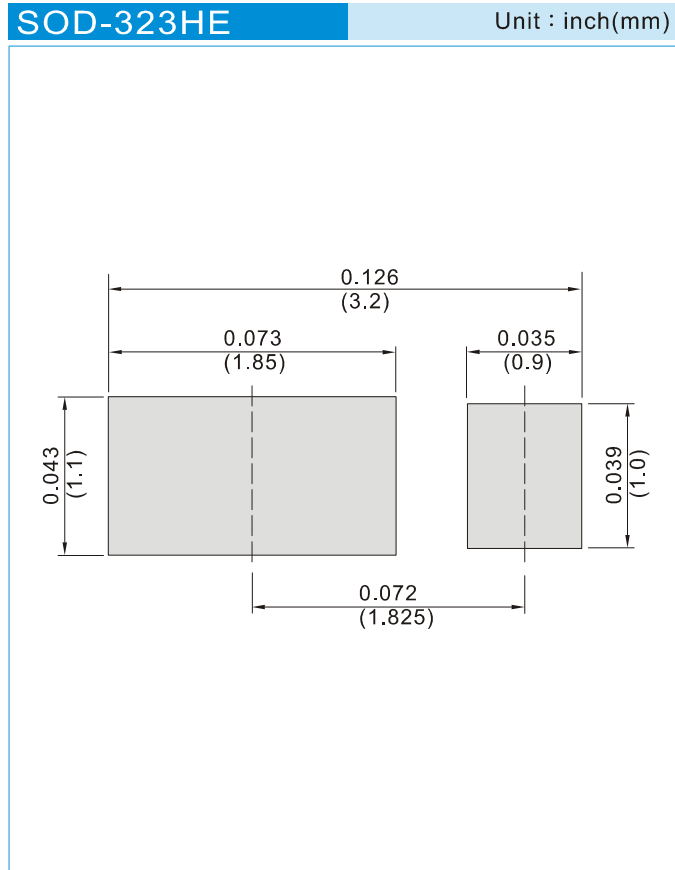


**Fig.5 Typical Zener Characteristics**



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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

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



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## Part No\_packing code\_Version

MMSZ4689HEWS\_R1\_00001

MMSZ4689HEWS\_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>			



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