



# GS1AWZ~GS1MWZ

## SURFACE MOUNT GENERAL PURPOSE RECTIFIER

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.0 Amperes

SMA(W)

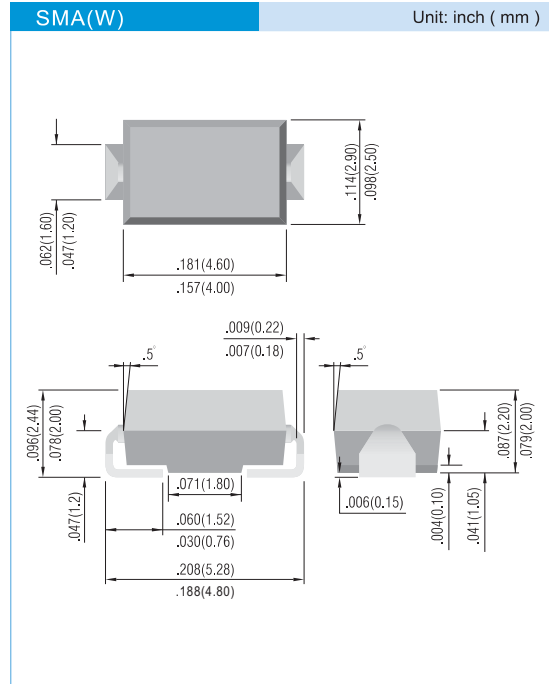
Unit: inch ( mm )

### FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Low Forward Drop
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Junction
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SMA(W) molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12 mm tape (EIA-481)
- Weight: 0.002 ounce, 0.064 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

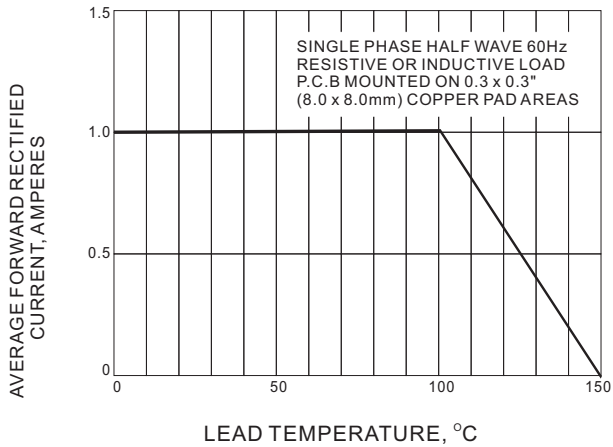
PARAMETER	SYMBOL	GS1AWZ	GS1BWZ	GS1DWZ	GS1GWZ	GS1JWZ	GS1KWZ	GS1MWZ	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at $T_L=50^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30							A
Maximum Forward Voltage at 1.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	$I_R$	0.5 10							$\mu\text{A}$
Typical Junction capacitance (Note 1)	$C_J$	12							pF
Typical Junction Resistance(Note 2)	$R_{\theta JL}$	30							$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

NOTES:1. Measured at 1 MHz and applied  $V_r = 4.0$  volts.  
2. 8.0 mm<sup>2</sup> ( .013mm thick ) land areas.

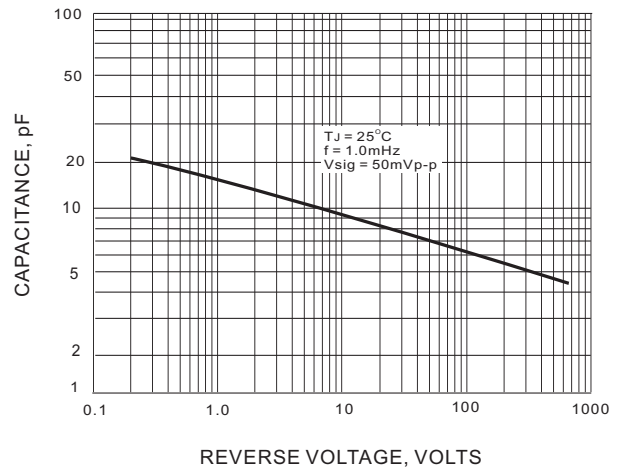


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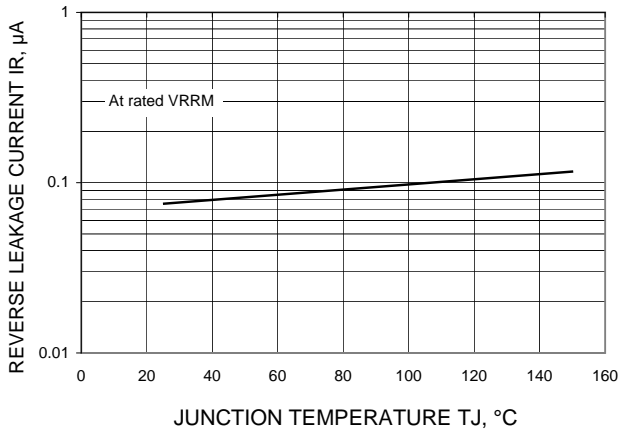
## RATING AND CHARACTERISTIC CURVES



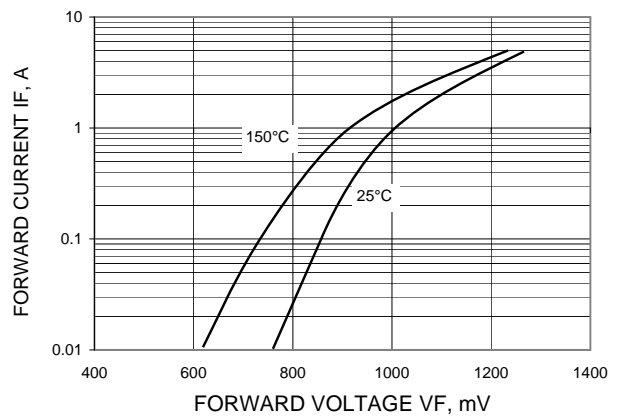
**Fig.1 FORWARD CURRENT DERATING CURVE**



**Fig.2 TYPICAL JUNCTION CAPACITANCE**



**Fig.3 TYPICAL REVERSE LEAKAGE**

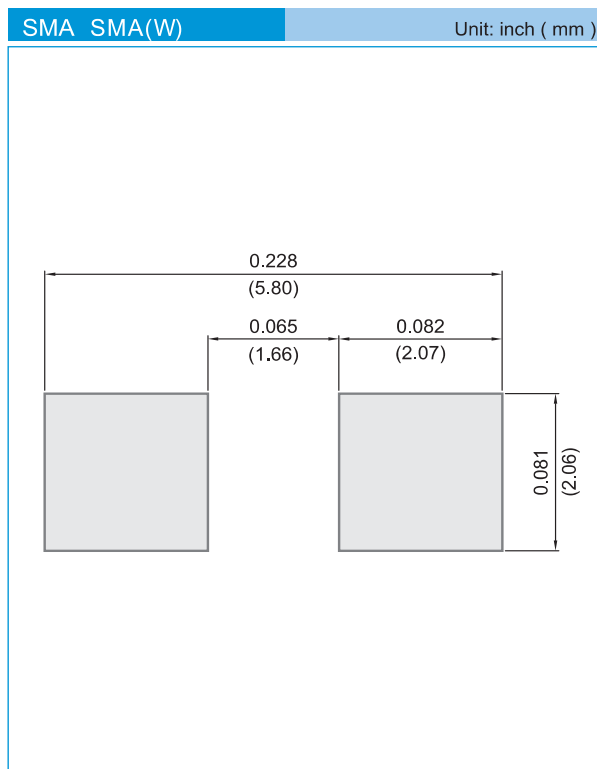


**Fig.4 TYPICAL FORWARD VOLTAGE**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 7.5K per 13" plastic Reel
  - T/R - 1.8Kper 7" plastic Reel

## LEGAL STATEMENT

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