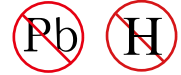




**SURFACE MOUNT RECTIFIER**

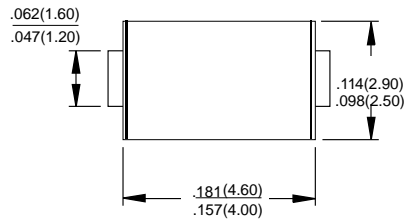


**VOLTAGE- 50 to 1000 Volts CURRENT - 1.0 Amperes**

**FEATURES**

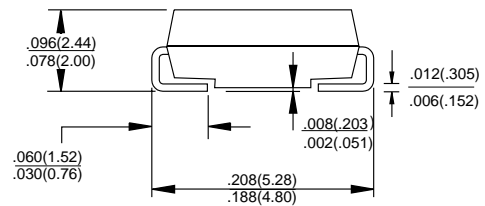
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic package has UL Flammability Classification 94V-0
- Low forward drop
- Glass passivated dip Junction
- High temperature soldering : 260 °C / 10 seconds at terminals
- Pb free product at available: 99% Sn above meet RoHS environment substance directive request

SMA/DO-214AC Unit:inch(mm)



**MECHANICAL DATA**

- Case : JEDEC DO-214AC molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Standard packaging : 12mm tape (EIA-481)



**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	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Current, at TL=75°C	I <sub>F(AV)</sub>	1								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC method)	I <sub>FSM</sub>	30								A
Maximum Forward Voltage at 1.0A	V <sub>F</sub>	1.1								V
Maximum DC Reverse Current at T <sub>A</sub> =25°C	I <sub>R</sub>	5								uA
Rated DC Blocking Voltage T <sub>A</sub> =125°C		100								
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	2.5								pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	15								°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150								°C

**NOTES:**

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

# DEVICE CHARACTERISTICS

## GS1A THRU GS1M

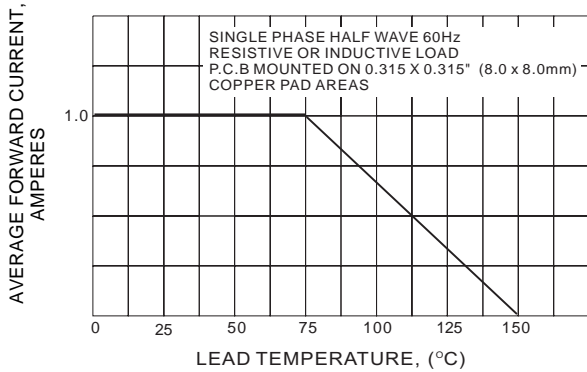


Fig. 1-FORWARD CURRENT DERATING CURVE

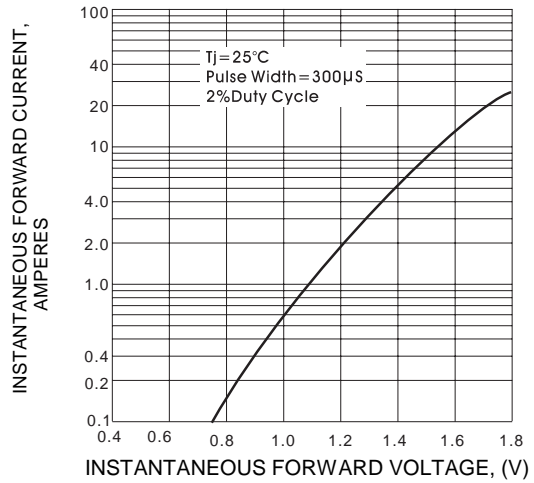


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

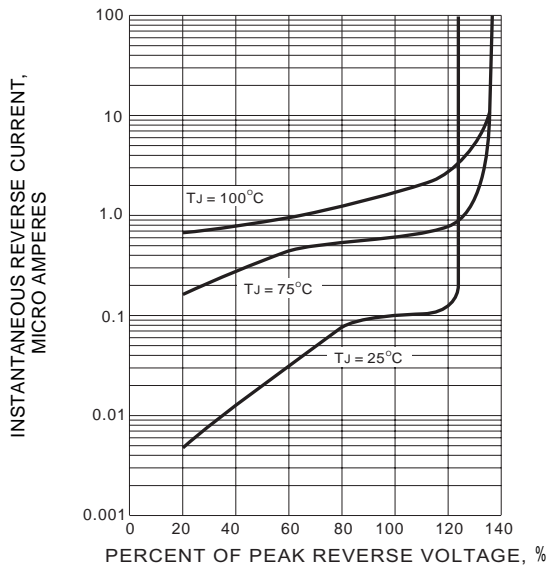


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

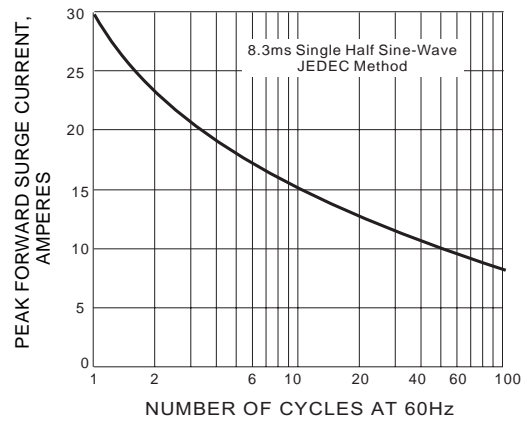


Fig. 4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

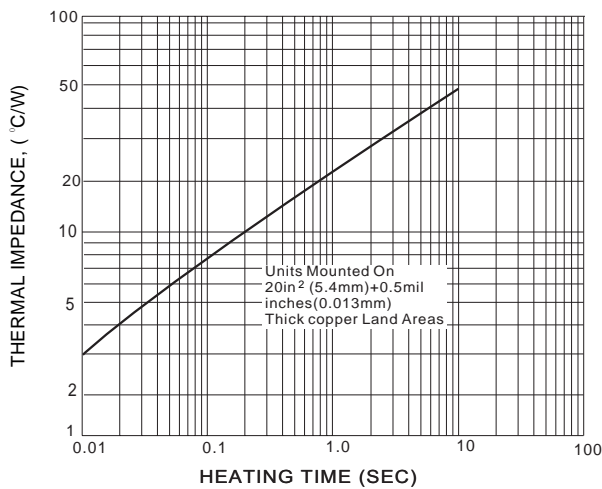


Fig. 5-TRANSIENT THERMAL IMPEDANCE

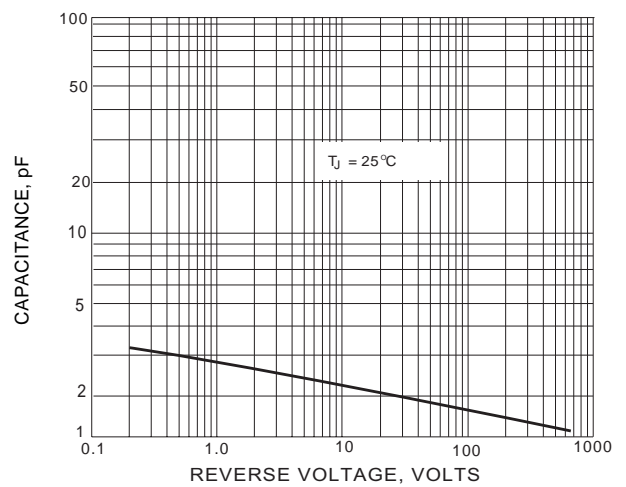


Fig. 6-TYPICAL JUNCTION CAPACITANCE