

## GS2A-A THRU GS2M-A

### SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 2.0A



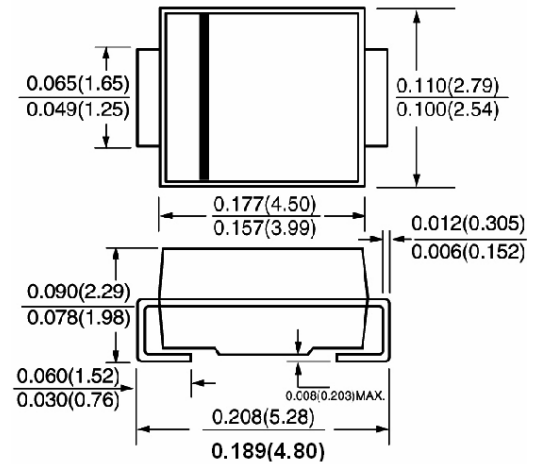
#### FEATURE

Ideal for surface mount pick and place application  
 Low profile package  
 Built-in strain relief  
 High surge capability  
 High temperature soldering guaranteed  
 260°C/10sec/at terminals

#### MECHANICAL DATA

Terminal: Plated axial leads solderable per  
 MIL-STD 202E, method 208C  
 Case: Molded with UL-94 class V-0 recognized Flame  
 Retardant Epoxy  
 Polarity: color band denotes cathode

#### SMA / DO-214AC



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

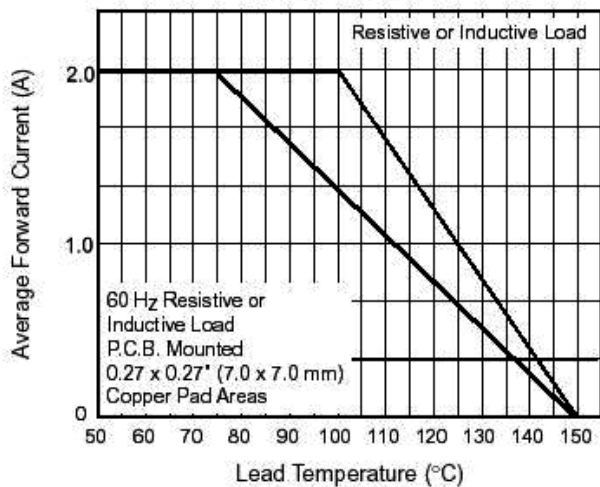
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,  
 for capacitive load, derate current by 20%)

|  | SYMBOL              | GS<br>2A-A   | GS<br>2B-A | GS<br>2D-A | GS<br>2G-A | GS<br>2J-A | GS<br>2K-A | GS2<br>M-A | units      |
|--|---------------------|--------------|------------|------------|------------|------------|------------|------------|------------|
| 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 Rectified  | I <sub>f(av)</sub>  | 2.0          |            |            |            |            |            |            | A          |
| Peak Forward Surge Current 8.3ms single<br>half sine-wave superimposed on rated load | I <sub>fsm</sub>    | 50.0         |            |            |            |            |            |            | A          |
| Maximum Forward Voltage at rated Forward<br>current                                  | V <sub>f</sub>      | 1.1          |            |            |            |            |            |            | V          |
| Maximum DC Reverse Current Ta =25°C<br>at rated DC blocking voltage Ta =125°C        | I <sub>r</sub>      | 5.0<br>150.0 |            |            |            |            |            |            | μ A<br>μ A |
| Typical Junction Capacitance (Note 1)  | C <sub>j</sub>      | 30.0         |            |            |            |            |            |            | pF         |
| Typical Thermal Resistance (Note 2)  | R <sub>th(jl)</sub> | 16.0         |            |            |            |            |            |            | °C/W       |
| Storage and Operating Temperature  | T <sub>stg</sub>    | -50 to +150  |            |            |            |            |            |            | °C         |

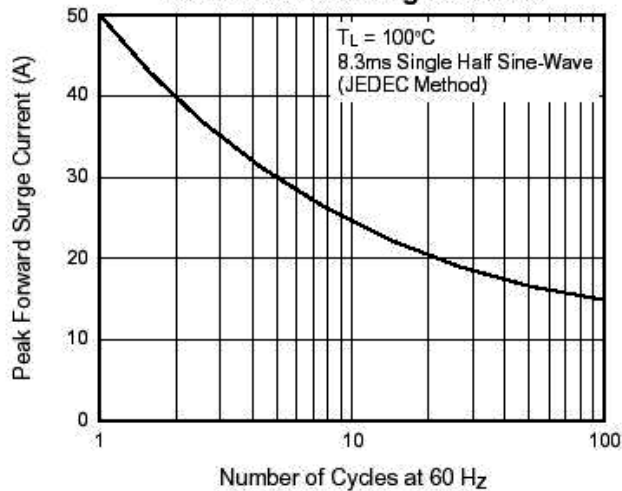
#### Note:

1. Measured at 1.0 MHZ and applied voltage of 4.0Vdc
2. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

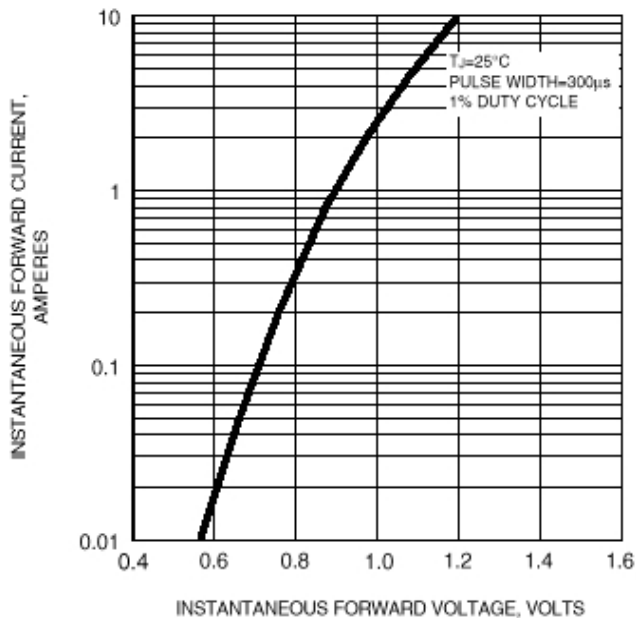
**Fig. 1 — Forward Current Derating Curve**



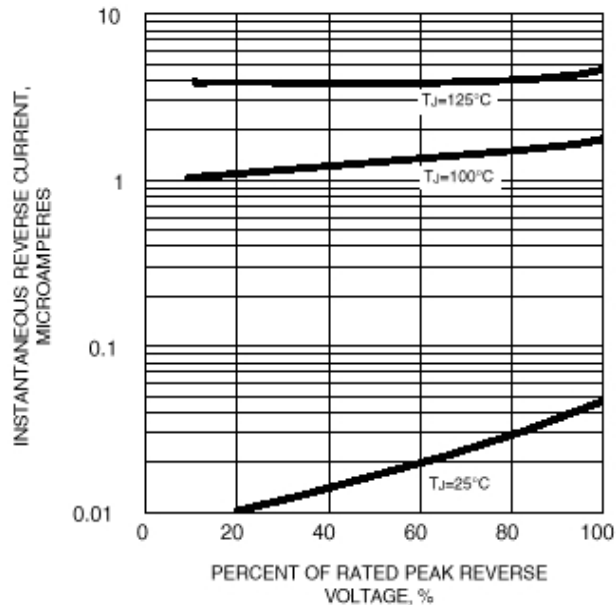
**Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

