



### SURFACE MOUNT RECTIFIER

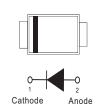
VOLTAGE 400~1000 Volt "CURRENT 2 Ampere

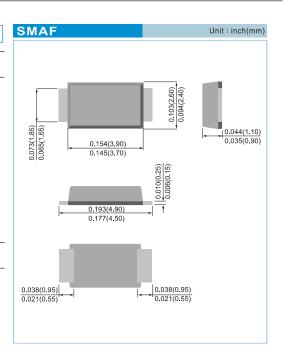
#### **FEATURES**

- · For surface mounted applications in order to optimize board space
- · 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 Chip Junction
- Ultra Thin Profile Package for Space Constrained Utilization
- · Package suitable for Automated Handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### **MECHANICAL DATA**

- · Case: SMAF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0011 ounce, 0.0328 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                 | GS2GF                                 | GS2JF     | GS2KF | GS2MF | UNITS |   |
|---|------------------------|---------------------------------------|-----------|-------|-------|-------|---|
| Maximum Recurrent Peak Reverse Voltag   | $V_{RRM}$              | 400                                   | 600       | 800   | 1000  | V     |   |
| Maximum RMS Voltage   | V <sub>RMS</sub>       | 280                                   | 420       | 560   | 700   | V     |   |
| Maximum DC Blocking Voltage   |                        | V <sub>DC</sub>                       | 400       | 600   | 800   | 1000  | ٧ |
| Maximum Average Forward Current   |                        | I <sub>F(AV)</sub>                    | 2         |       |       |       |   |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load |                        | I <sub>FSM</sub>                      |           | Α     |       |       |   |
| Maximum Forward Voltage at 2A   |                        | V <sub>F</sub>                        |           | V     |       |       |   |
| Maximum DC Reverse Current at Rated DC Blocking<br>Voltage                          |                        | I <sub>R</sub>                        |           | μА    |       |       |   |
| Typical Junction Capacitance (V <sub>R</sub> =4V, f=1MHz)                           |                        | CJ                                    |           | pF    |       |       |   |
| Typical Thermal Restistance   | (Notes 1)<br>(Notes 2) | $R_{_{\Theta JL}}$ $R_{_{\Theta JA}}$ | 25<br>150 |       |       |       |   |
| Operating and Storage Temperature Range   |                        | $T_J,T_STG$                           |           | °C    |       |       |   |

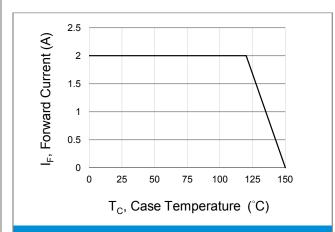
NOTES: 1. Mounted on an FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area

2. Mounted on an FR4 PCB, single-sided copper, mini pad.

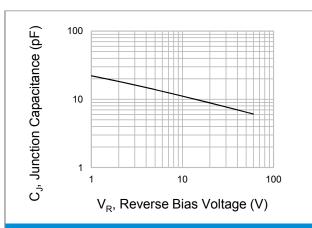
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**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

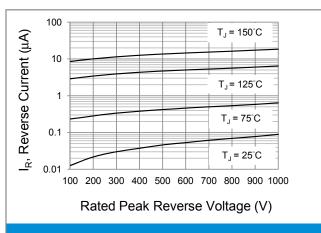
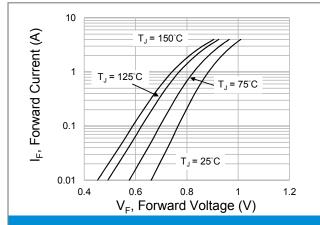


Fig.3 Typical Reverse Characteristics



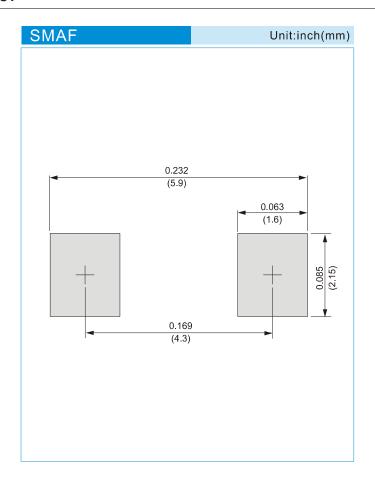
**Fig.4 Typical Forward Characteristics** 

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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





## Part No\_packing code\_Version

GS2GF\_R1\_00001 GS2GF\_R2\_00001

## For example:



| Packing Code XX                      |                      |                                   |                      | Version Code XXXXX |                      |                                       |  |
|--------------------------------------|----------------------|-----------------------------------|----------------------|--------------------|----------------------|---------------------------------------|--|
| 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)        | Α                    | N/A                               | 0 HF                 |                    | 0                    | serial number                         |  |
| Tape and Reel<br>(T/R)               | R                    | 7"                                | 1 RoHS               |                    | 1                    | serial number                         |  |
| Bulk Packing<br>(B/P)                | В                    | 13"                               | 2                    |                    |                      |                                       |  |
| Tube Packing<br>(T/P)                | Т                    | 26mm                              | Х                    |                    |                      |                                       |  |
| Tape and Reel (Right Oriented) (TRR) | S                    | 52mm                              | Y                    |                    |                      |                                       |  |
| Tape and Reel (Left Oriented) (TRL)  | L                    | PANASERT T/B CATHODE UP<br>(PBCU) | U                    |                    |                      |                                       |  |
| FORMING                              | F                    | PANASERT T/B CATHODE DOWN (PBCD)  | D                    |                    |                      |                                       |  |

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