



# S2GF SERIES

## SURFACE MOUNT RECTIFIER

**VOLTAGE** 400-1000 Volts **CURRENT** 2 Amperes

**SMBF** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Glass passivated junction
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SMBF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity : Color band denotes cathode end



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

| PARAMETER   | SYMBOL                               | S2GF        | S2JF | S2KF | S2MF | UNITS  |
|---|--------------------------------------|-------------|------|------|------|--------|
| Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                     | 400         | 600  | 800  | 1000 | V      |
| RMS Voltage   | V <sub>RMS</sub>                     | 280         | 420  | 560  | 700  | V      |
| DC Blocking Voltage   | V <sub>R</sub>                       | 400         | 600  | 800  | 1000 | V      |
| Average Forward Current   | I <sub>F(AV)</sub>                   | 2.0         |      |      |      | A      |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I <sub>FSM</sub>                     | 60          |      |      |      | A      |
| Forward Voltage at 2.0A   | V <sub>F</sub>                       | 1.1         |      |      |      | V      |
| DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C                              | I <sub>R</sub>                       | 1.0         |      |      |      | μA     |
| Typical Junction capacitance V <sub>R</sub> =4V, 1MHz   | C <sub>J</sub>                       | 10          |      |      |      | pF     |
| Typical Thermal Resistance ,Junction to Lead (Note 1)<br>Junction to Ambient (Note 1)             | R <sub>θJL</sub><br>R <sub>θJA</sub> | 22<br>62.5  |      |      |      | °C / W |
| Operating Junction Temperature and Storage Temperature Range                                      | T <sub>J</sub> , T <sub>STG</sub>    | -55 to +150 |      |      |      | °C     |

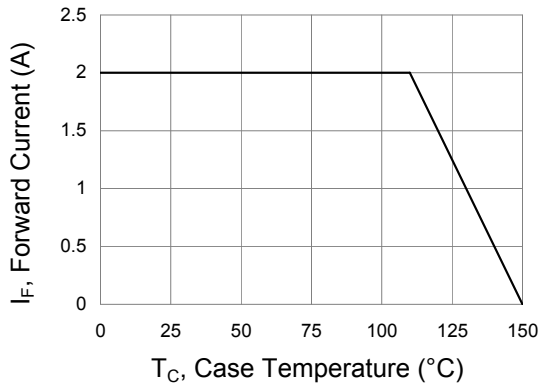
#### NOTES :

1. Mounted on 48cm<sup>2</sup> FR-4 PCB.

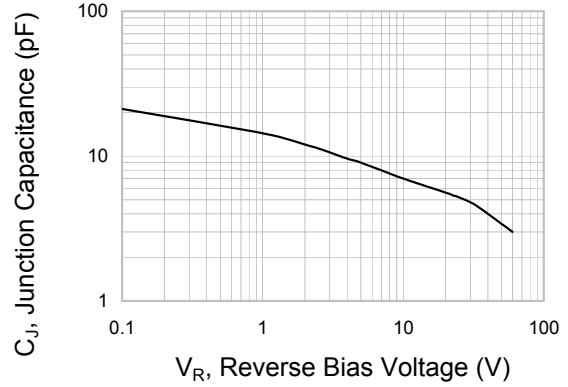


# S2GF SERIES

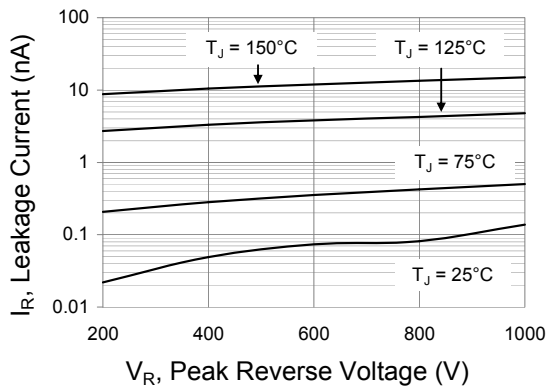
## RATING AND CHARACTERISTIC CURVES



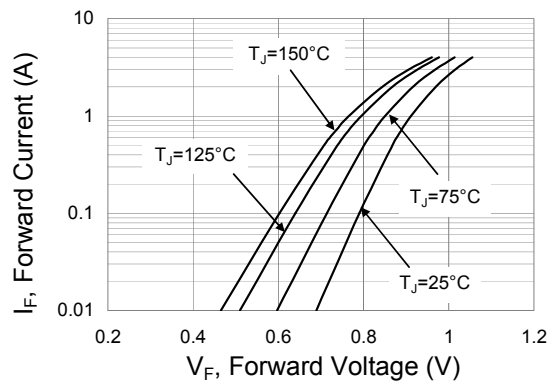
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

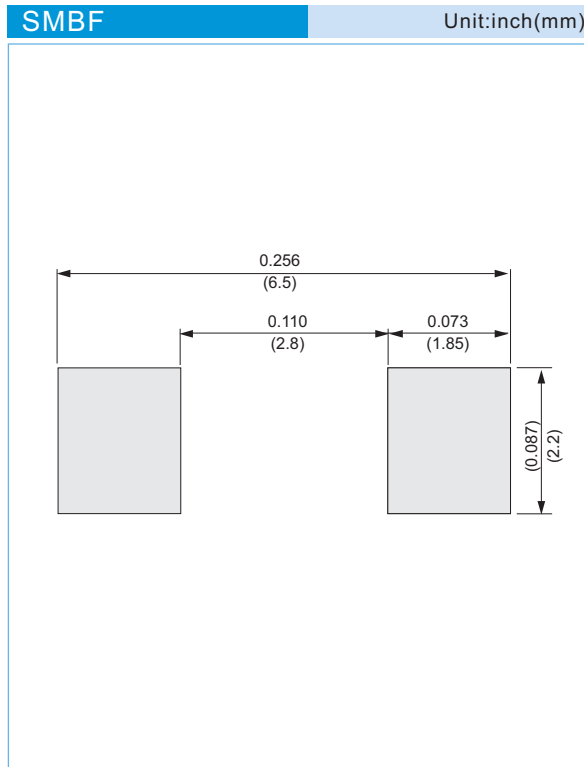


**Fig.4 Typical Forward Characteristics**



# S2GF SERIES

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2012

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.

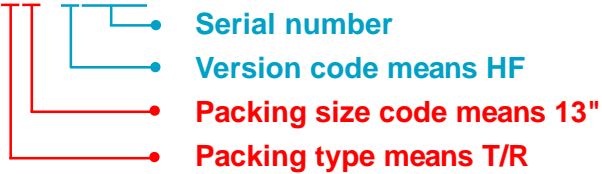


## S2GF SERIES

For example :

**RB500V-40\_R2\_00001**

Part No.



| 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 |
| T/B                    | <b>A</b>             | N/A               | <b>0</b>             | <b>HF</b>                 | <b>0</b>             | serial number                         |
| T/R                    | <b>R</b>             | 7"                | <b>1</b>             | <b>RoHS</b>               | <b>1</b>             | serial number                         |
| B/P                    | <b>B</b>             | 13"               | <b>2</b>             |                           |                      |                                       |
| T/P                    | <b>T</b>             | 26mm              | <b>X</b>             |                           |                      |                                       |
| TRR                    | <b>S</b>             | 52mm              | <b>Y</b>             |                           |                      |                                       |
| TRL                    | <b>L</b>             | PBCU              | <b>U</b>             |                           |                      |                                       |
| FORMING                | <b>F</b>             | PBCD              | <b>D</b>             |                           |                      |                                       |

Part No\_packing code\_Version

S2GF\_R2\_00001

S2GF\_00001