



# GS2GF~GS2MF

## SURFACE MOUNT RECTIFIER

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

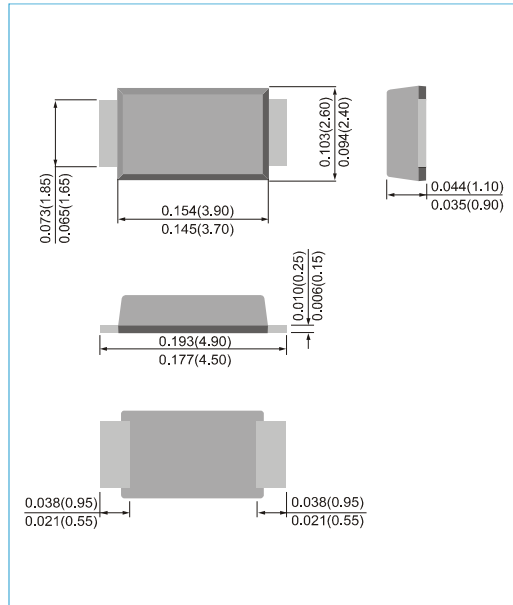
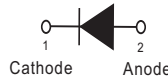
**SMAF** Unit : inch(mm)

### 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 comply with EU RoHS 2011/65/EU directives
- 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

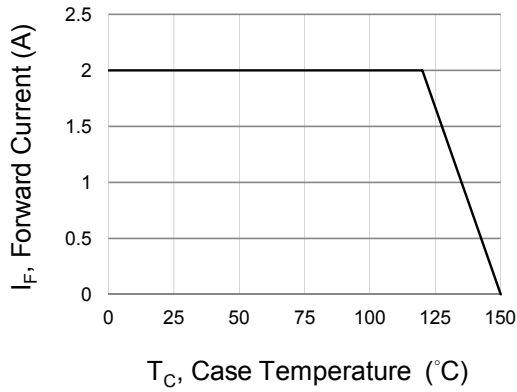
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	GS2GF	GS2JF	GS2KF	GS2MF	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	400	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	2				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	70				A
Maximum Forward Voltage at 2A	$V_F$	1.1				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	1				$\mu A$
Typical Junction Capacitance ( $V_R=4V$ , $f=1MHz$ )	$C_J$	18				pF
Typical Thermal Resistance (Notes 1) (Notes 2)	$R_{\theta JL}$ $R_{\theta JA}$	25 150				$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				$^{\circ}C$

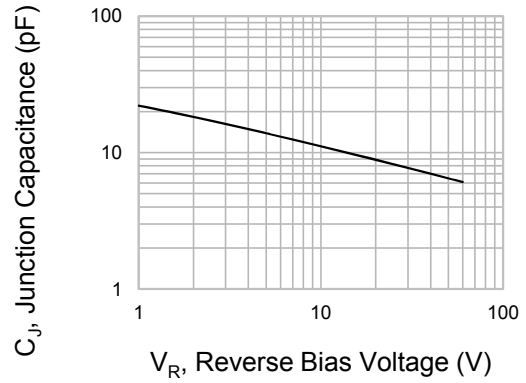
NOTES : 1. Mounted on an FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area  
2. Mounted on an FR4 PCB, single-sided copper, mini pad.



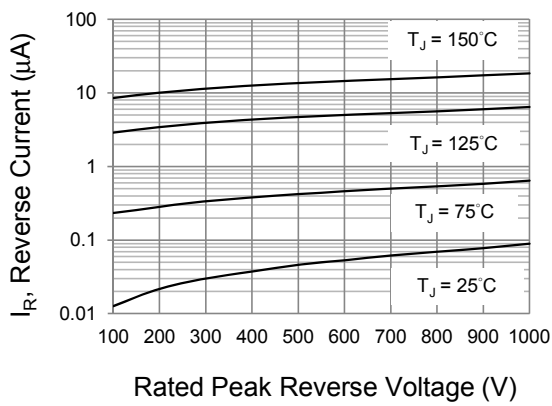
## GS2GF~GS2MF



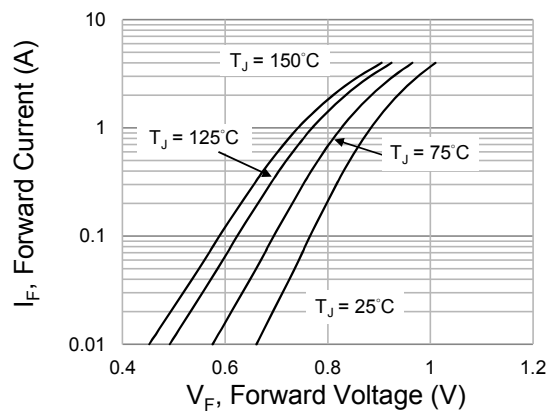
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

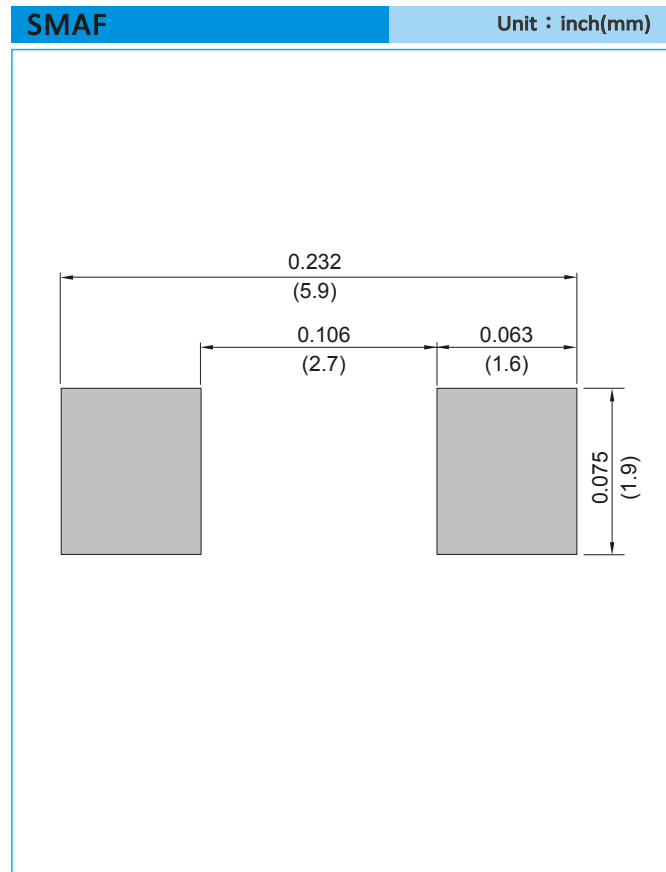


**Fig.4 Typical Forward Characteristics**



## GS2GF~GS2MF

### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel



## GS2GF~GS2MF

### Part No\_packing code\_Version

GS2GF\_R1\_00001

GS2GF\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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