

CURRENT 2.0 Ampere  
 VOLTAGE RANG 50 to 1000 Volts

# GS2ABF THRU GS2MBF

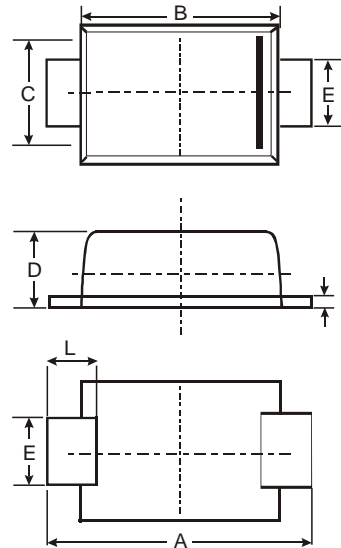
## FEATURES

- Plastic package has underwrites laboratory flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass Passivated chip junction
- High temperature soldering guaranteed
- 250°C/10 second at terminals

## MECHANICAL DATA

- Case: JEDED SMBF molded plastic over glass passivated chip
- Terminals: Solder plated, Solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.003ounce, 0.090gram

## SMBF



Dim	Min	Max	Typ
A	5.45	5.55	5.50
B	4.27	4.33	4.30
C	3.57	3.63	3.60
D	1.32	1.38	1.35
E	1.96	2.00	1.98
H	0.019	0.021	0.20
L	0.73	0.77	0.75
<b>All Dimensions in mm</b>			

## MAXIMUM RATINGS & THERMAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOLS	GS2A	GS2B	GS2D	GS2G	GS2J	GS2K	GS2M	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) $T_L=100^\circ\text{C}$	$I_{FSM}$	50							Amps
Typical Thermal Resistance (NOTE 1)	$R_{\theta JA}$	53							°C/W
	$R_{\theta JL}$	16							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							°C

## ELECTRICAL CHARACTERISTICS

	SYMBOLS	GS2A	GS2B	GS2D	GS2G	GS2J	GS2K	GS2M	UNIT
Maximum Instantaneous Forward Voltage at 1.5A	$V_F$	1.15							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0							µA
	$T_A = 125^\circ\text{C}$	125							
Typical Reverse Recovery Time at $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$	$T_{rr}$	2.0							µs
Typical junction capacitance at 4.0V, 1MHz	$C_J$	30							pF

### Notes:

- Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.3×0.3" (8.0 × 8.0mm) copper pad areas.

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RATING AND CHARACTERISTIC CURVES GS2A Thru GS2M

FIG.1-FORWARD CURRENT DERATING CURVE

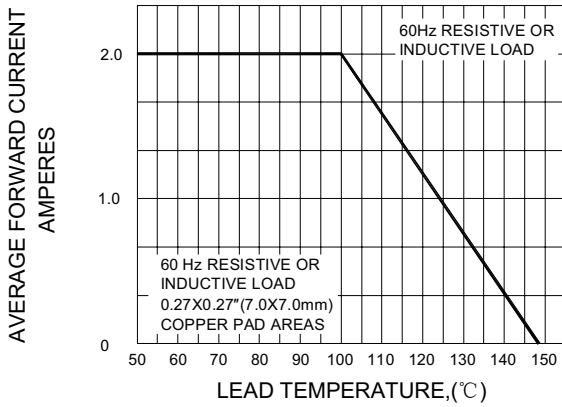


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

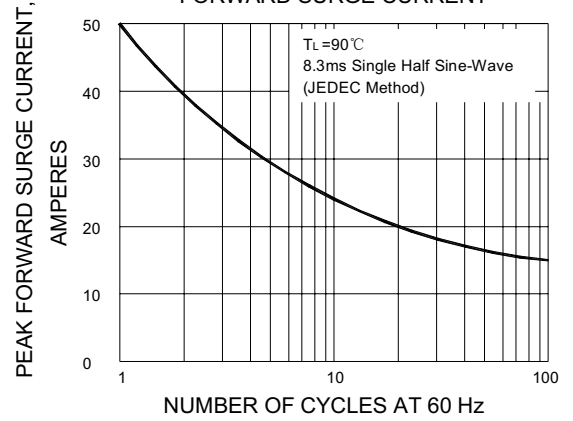


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

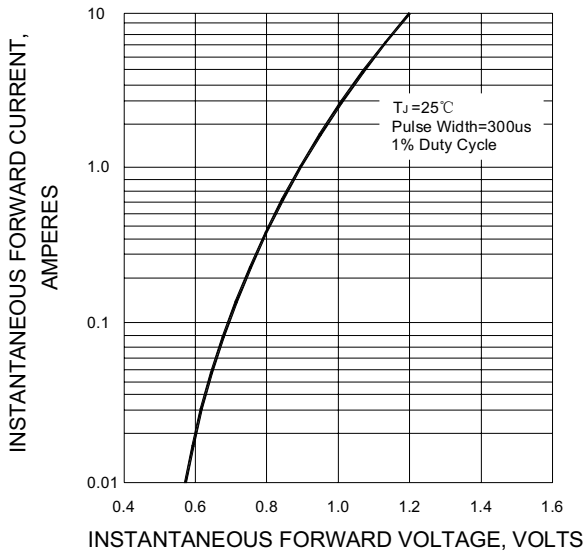


FIG.4-TYPICAL REVERSE CHARACTERISTICS

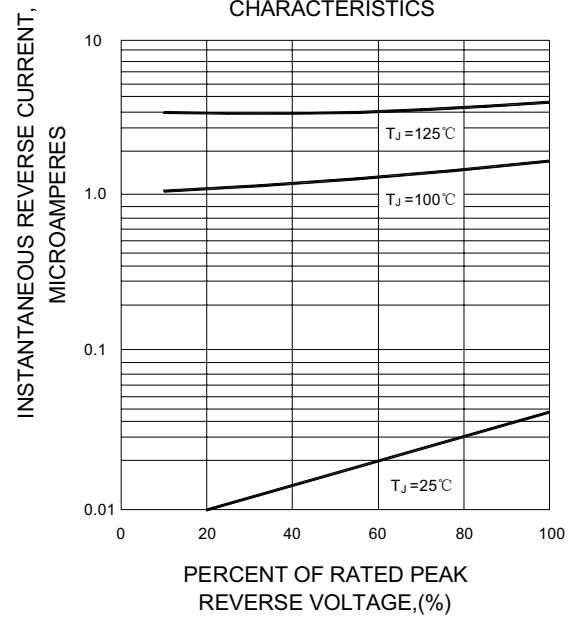


FIG.5-TYPICAL JUNCTION CAPACITANCE

