

GSMB2F thru GSMB10F

Glass Passivated Bridge Rectifiers
Reverse Voltage 200V to 1000V Forward Current 0.8A

Features

- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 seconds



Package: MBF

Mechanical Data

- Case: Molded plastic
- Epoxy: Device has UL flammability classification 94V-0
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

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

Parameters		Symbol	GS MB2F	GS MB4F	GS MB6F	GS MB8F	GS MB10F	Unit
Peak Repetitive Reverse Voltage		V _{RRM}	200	400	600	800	1000	V
Working Peak Reverse Voltage		V _{RWM}						
DC Blocking Voltage		V _R						
RMS Reverse Voltage		V _{R(RMS)}	140	280	420	560	700	V
Average Rectified Output Current	On Glass-Epoxy P.C.B.	I _O	0.8					A
	On Aluminum Substrate							
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	30					A
I ² t Rating for Fusing (t < 8.3ms)		I ² t	10					A ² S
Forward Voltage per Element @ I _F =0.4A		V _{FM}	0.95					V
Peak Reverse Current At Rated DC Blocking Voltage	T _A =25°C	I _{RM}	10					μA
	T _A =125°C		150					
Typical Junction Capacitance Per Leg ²		C _J	25					pF
Typical Thermal Resistance Per Leg ¹		R _{θJA}	62.5					°C/W
		R _{θJL}	25					°C/W
Operating and Storage Temperature Range		T _J , T _{STG}	-55 to +150					°C

Notes:

1. On aluminum substrate P.C.B. with an area of 0.8×0.8" (20×20mm) mounted on 0.05×0.05" (1.3×1.3mm) solder pad.
2. On glass epoxy P.C.B. mouted on 0.05×0.05" (1.3×1.3mm) pads.

Ratings and Characteristics Curves

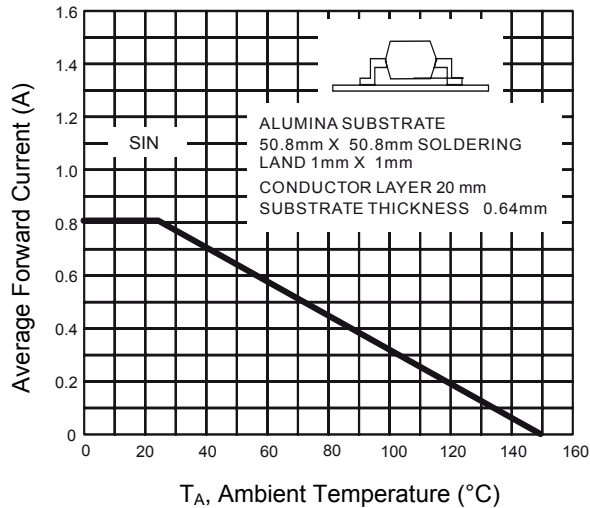


Figure 1. Maximum Forward Current Derating Curve

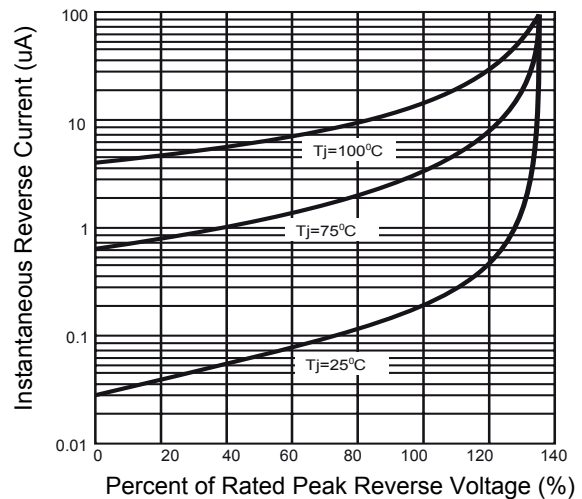


Figure 2. Typical Reverse Characteristics per Bridge Element

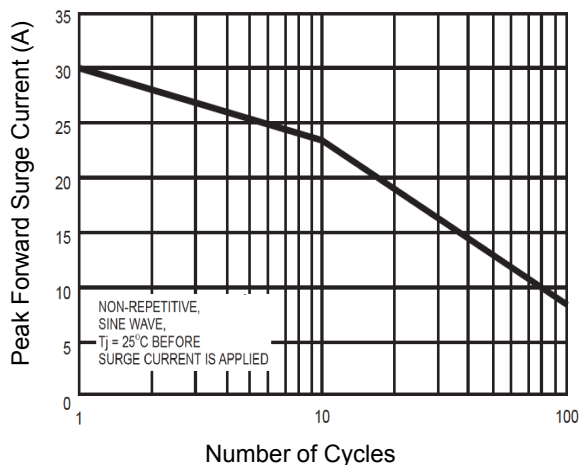


Figure 3. Maximum Non-Repetitive Forward Surge Current

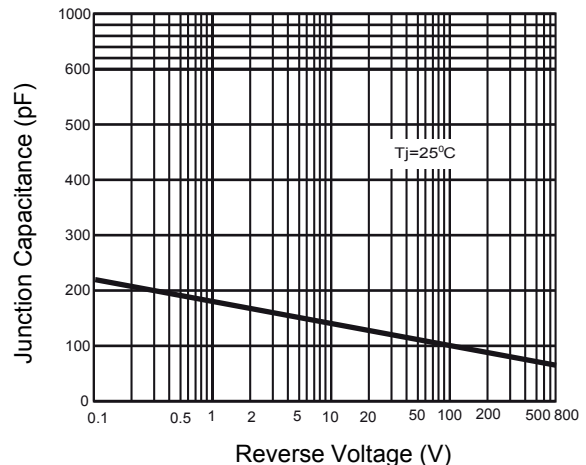


Figure 4. Typical Junction Capacitance

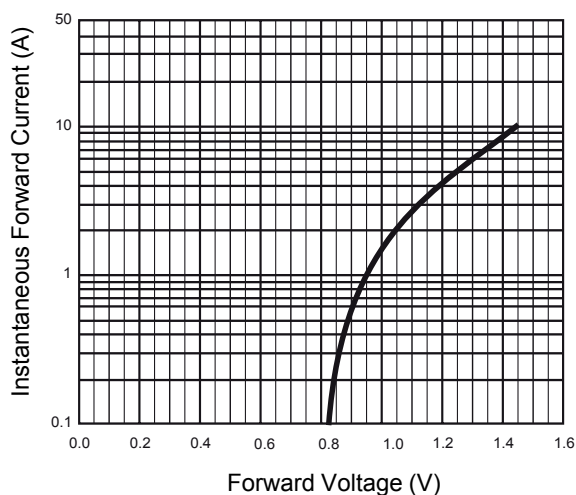
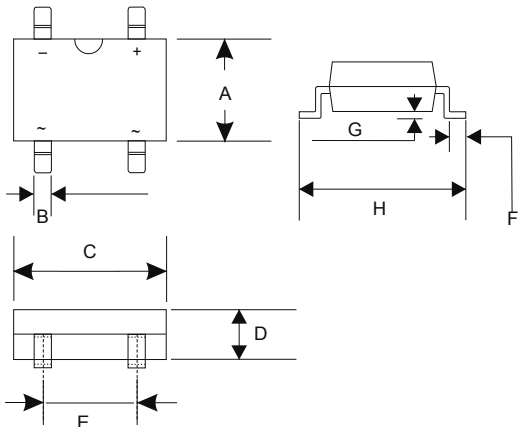


Figure 5. Typical Forward Characteristics

Package Outline Dimensions (MBF)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	3.60	4.00	0.142	0.158
B	0.45	1.05	0.018	0.042
C	4.50	4.90	0.177	0.193
D	1.30	1.60	0.051	0.063
E	2.20	2.80	0.086	0.109
F	0.55	1.90	0.022	0.075
G	0.35 REF		0.012 REF	
H	-	7.50	-	0.296

Order Information

Device	Package	Marking	Carrier	Quantity
GSMB2F	MBF	MB2F	Tape & Reel	3,000pcs / Reel
GSMB4F	MBF	MB4F	Tape & Reel	3,000pcs / Reel
GSMB6F	MBF	MB6F	Tape & Reel	3,000pcs / Reel
GSMB8F	MBF	MB8F	Tape & Reel	3,000pcs / Reel
GSMB10F	MBF	MB10F	Tape & Reel	3,000pcs / Reel