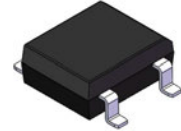


GSMB1S thru GSMB10S

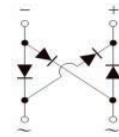
Surface Mount Glass Passivated Bridge Rectifiers
 Reverse Voltage 100V to 1000V Forward Current 1.0A

Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Glass passivated chip junction
- Low forward voltage drop, high current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



MBS



Schematic Diagram

Mechanical Data

- Case: MBS molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any
- Weight: 0.0044ounce, 0.125 gram (approximately)

Applications

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment and telecommunication applications.

Maximum Ratings & Electrical Characteristics

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

Parameter	Symbol	GSMB 1S	GSMB 2S	GSMB 4S	GSMB 6S	GSMB 8S	GSMB 10S	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	On Glass-Epoxy	0.8						A
	On AL Substrate	1.0						
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30						A
Maximum Instantaneous Forward Voltage at 1.0A DC	V_F	1.0						V
Rating for Fusing (t=8.3ms)	I^2t	5.0						A ² S
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5						uA
	$T_A=125^\circ\text{C}$	100						
Typical Junction Capacitance ¹	C_J	7.3						pF
Typical Thermal Resistance, Junction-Ambient ²	$R_{\theta JA}$	85						°C/W
Typical Thermal Resistance, Junction-Ambient ³	$R_{\theta JA}$	70						
Typical Thermal Resistance, Junction-Lead	$R_{\theta JL}$	20						
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150						°C

Notes:

1. Measured at 1MHZ and applied reverse voltage of 4.0 Volts.
2. On glass epoxy P.C.B. mounted on 0.05"x0.05" (1.3x1.3mm) pads.
3. On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20mm x 20mm) mounted on 0.05"x0.05" (1.3mmx1.3mm) solder pads.

GSMB1S thru GSMB10S

Surface Mount Glass Passivated Bridge Rectifiers
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Ratings and Characteristics Curves

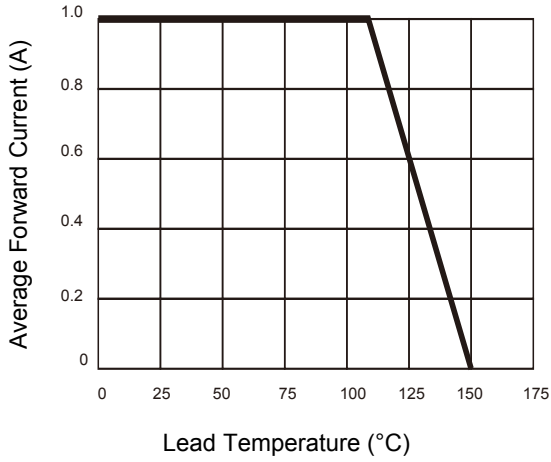


Figure 1. Typical Forward Current Vs. Lead Temperature Derating Curve

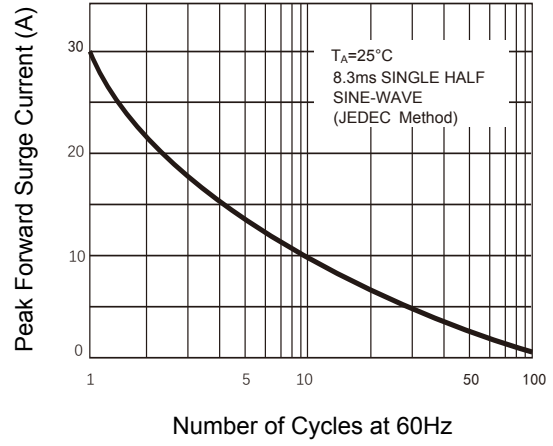


Figure 2. Maximum Non-Repetitive Forward Surge Current

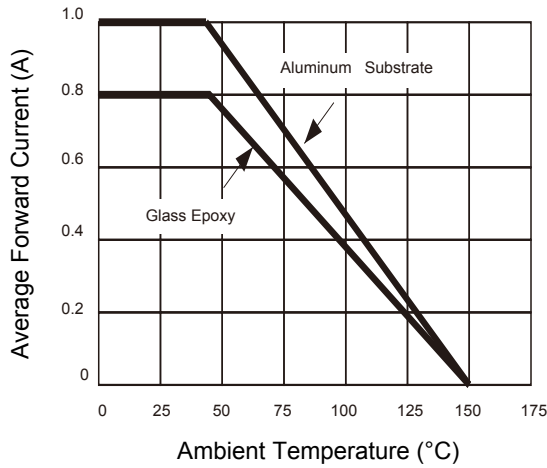


Figure 3. Typical Forward Current Vs. Ambient Derating Curve

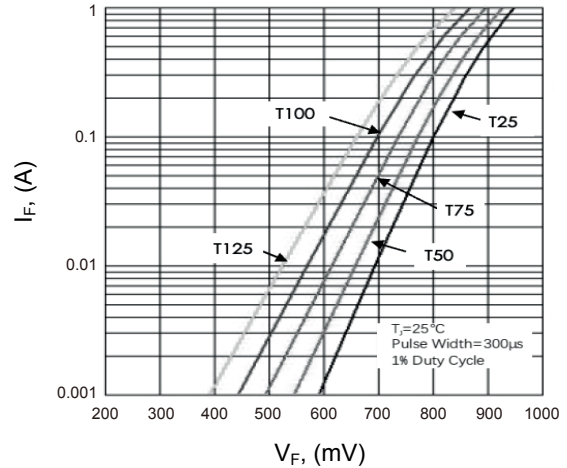


Figure 4. Typical Forward Characteristics

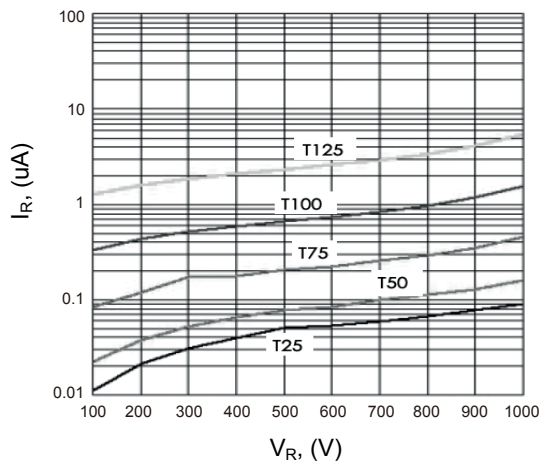


Figure 5. Typical Reverse Characteristics

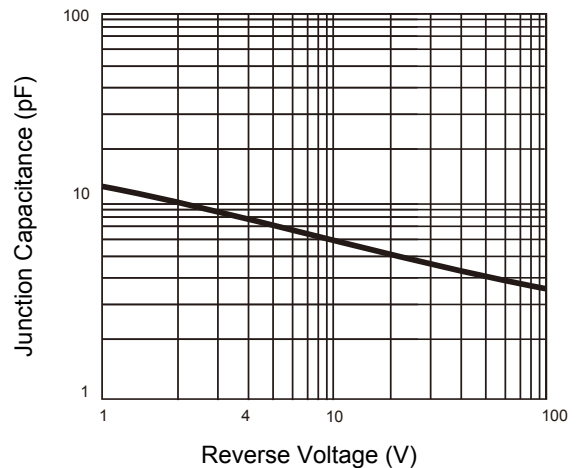
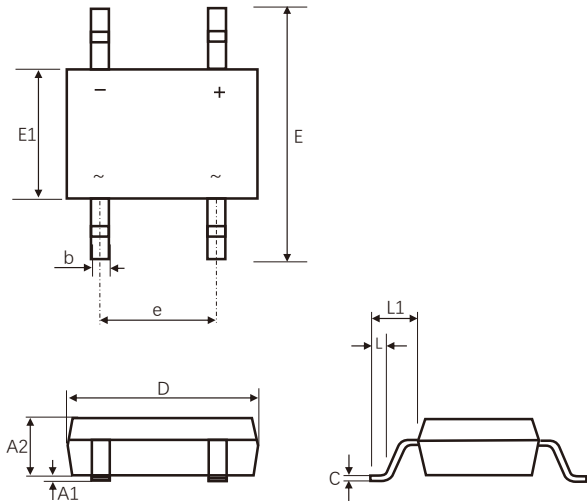


Figure 6. Typical Junction Capacitance

GSMB1S thru GSMB10S

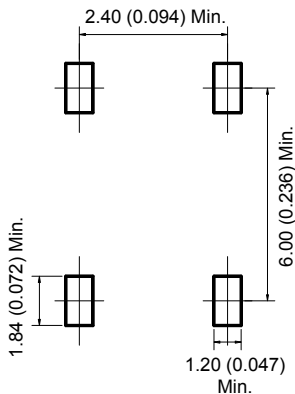
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Package Outline Dimensions (MBS)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A1	0.05	0.20	0.002	0.008
A2	2.30	2.70	0.090	0.106
b	0.50	0.80	0.019	0.031
c	0.15	0.35	0.006	0.014
D	4.50	4.90	0.177	0.193
E	6.40	7.00	0.252	0.276
E1	3.60	4.10	0.142	0.161
e	2.30	2.70	0.090	0.106
L	0.70	1.10	0.028	0.043
L1	1.30	1.70	0.051	0.067

Recommended Pad Layout



Unit: mm (Inch)