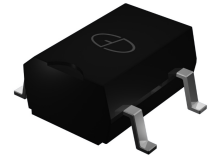


MB2SHF thru MB12SHF

Glass Passivated Bridge Rectifiers
 Reverse Voltage 200 to 1200V Forward Current 0.5A

Features

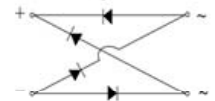
- Glass passivated bridge rectifiers
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High temperature soldering guaranteed:260°C/10 seconds



Package:
TO-269AA (MBS)

Mechanical Data

- Case:Molded plastic body over passivated junctions
- Terminals: plated leads solderable per MIL-STD-750,Method 2026
- Mounting position: any
- Weight: 0.078oz., 0.22g



Schematic Diagram

Maximum Ratings and Electrical Characteristics

($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	MB2SHF	MB4SHF	MB6SHF	MB8SHF	MB10SHF	MB12SHF	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	1200	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	840	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	1200	V
Maximum Average Forward Output Current (see Fig.1) on glass-epoxy P.C.B on aluminum substrate	$I_{F(AV)}$	0.5 ⁽¹⁾ 0.8 ⁽²⁾						A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load, JEDEC method)	I_{FSM}	35						A
Rating for Fusig (t<8.3ms)	I^2t	5.0						A ² sec
Maximum Instantaneous Forward Voltage Drop per Leg at 0.4A	V_F	1.0						V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Leg	I_R	5 100						μA
Typical Thermal Resistance per Leg	$R_{\theta JA}$	85 ⁽¹⁾						$^\circ\text{C/W}$
	$R_{\theta JA}$	70 ⁽²⁾						
	$R_{\theta JL}$	20 ⁽¹⁾						
Typical Junction Capacitance at 4.0V,1.0MHz	C_J	13						pF
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^\circ\text{C}$

Notes: 1. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads

2. 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

MB2SHF thru MB12SHF

Glass Passivated Bridge Rectifiers
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Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

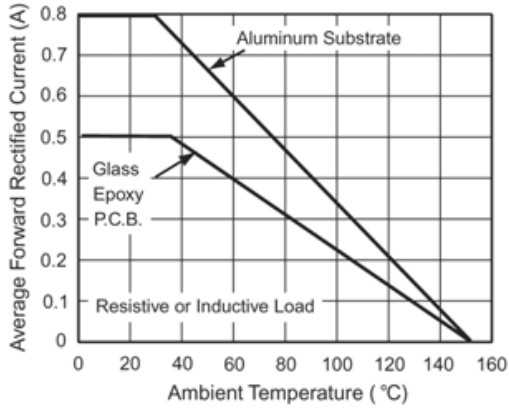


Figure 1. Derating Curve for Output Rectified Current

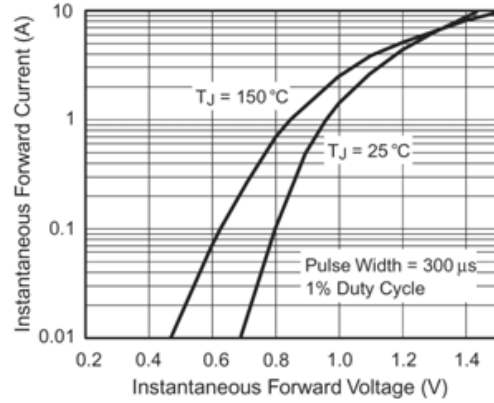


Figure 3. Typical Forward Voltage Characteristics Per Leg

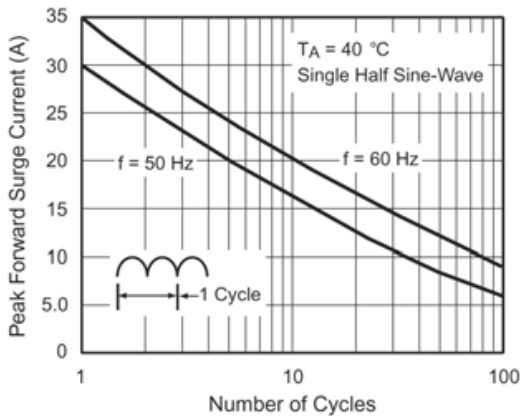


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

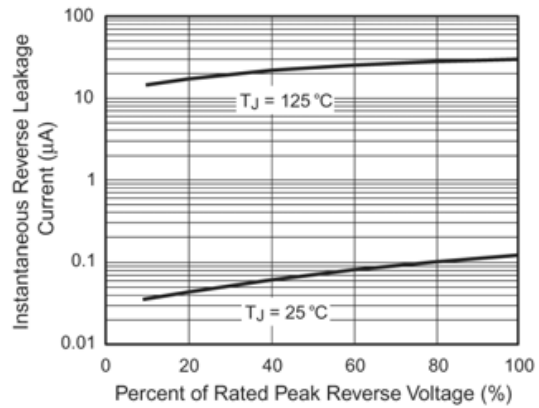


Figure 4. Typical Reverse Leakage Characteristics Per Leg

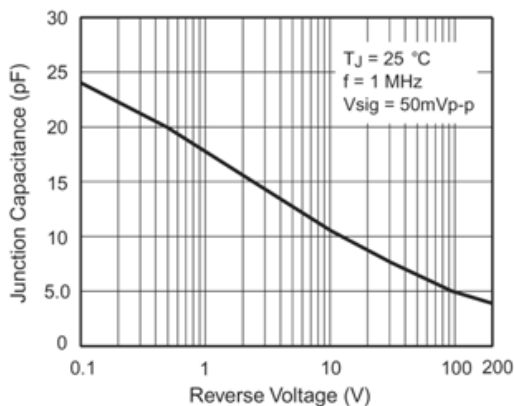


Figure 5. Typical Junction Capacitance Per Leg

MB2SHF thru MB12SHF

Glass Passivated Bridge Rectifiers
 Reverse Voltage 200 to 1200V Forward Current 0.5A

Package Outline Dimensions

in inches (millimeters)

TO-269AA (MBS)

