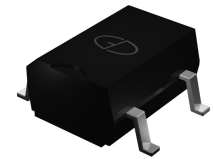


MB2ST thru MB10ST

Glass Passivated Bridge Rectifiers
 Reverse Voltage 200 to 1000V Forward Current 0.5A

Features

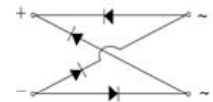
- Glass passivated bridge rectifiers
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds



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	MB2ST	MB4ST	MB6ST	MB8ST	MB10ST	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	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}	30					A
Rating for Fusig (t<8.3ms)	i^2t	3.0					A ² sec
Maximum Instantaneous Forward Voltage Drop per Leg at 0.4A	V_F	1.00					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

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

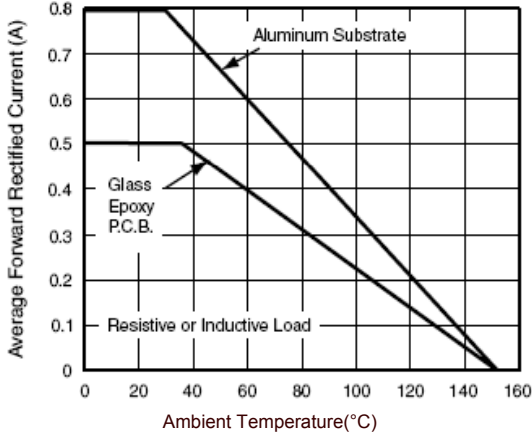


Figure 1. Derating Curve for Output Rectified Current

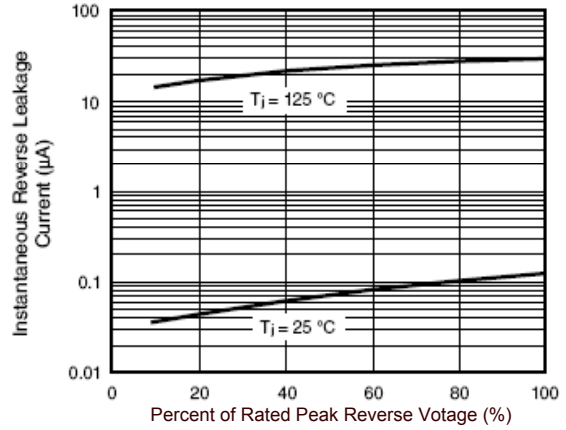


Figure 4. Typical Reverse Leakage Characteristics Per Leg

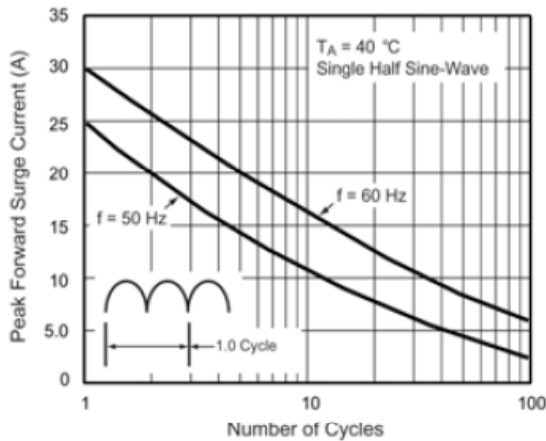


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

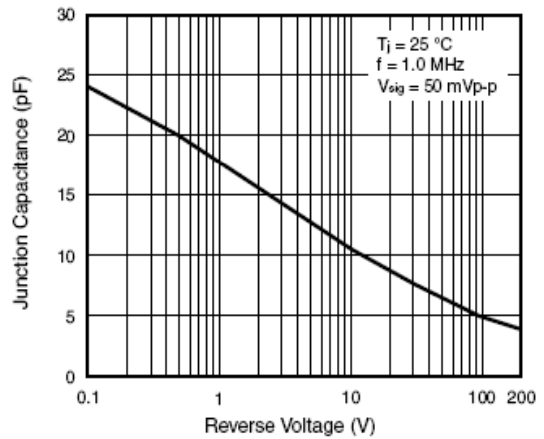


Figure 5. Typical Junction Capacitance Per Leg

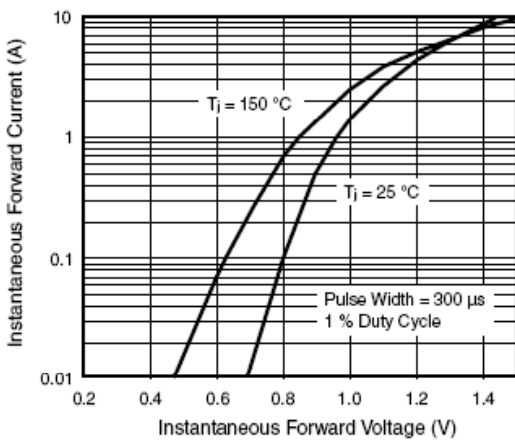


Figure 3. Typical Forward Voltage Characteristics Per Leg

Package Outline Dimensions

in inches (millimeters)

TO-269AA (MBS)

