

# MB2S-MB10S

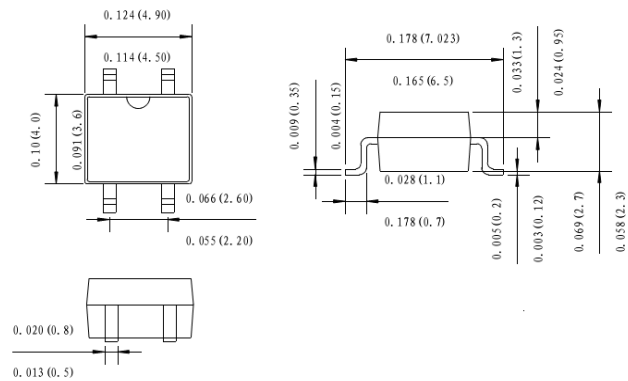
Single Phase 0.8 AMP Glass Passivated Bridge Rectifiers

## FEATURES

- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ✧ Small size, simple installation  
Pure tin plated terminal , Lead free. Leads solderable per MIL-STD-202, Method 208
- ✧ High surge current capability

## MECHANICAL DATA

- ✧ Case: Molded plastic body
- ✧ Mounting position : as Marking
- ✧ Weight: 0.12 grams



## VOLTAGE RANGE

200 to 1000 Volts

## CURRENT

0.8 Ampere

## Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	MB2S	MB4S	MB6S	MB8S	MB10S	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 Rectified Current On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$	0.8					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	35					A
Maximum Instantaneous Forward Voltage (Note 1) @ 0.4A	$V_F$	1.0					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 100					uA
Rating of fusing ( $t < 8.3ms$ )	$I^2T$	5.08					A <sup>2</sup> S
Typical Junction Capacitance Per Leg (Note 2)	$C_j$	13					pF
Typical Thermal Resistance (Note 3) (Note 4) (Note 3)	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	85 70 20					°C/W
Operating Temperature Range	$T_J$	- 55 to + 150					°C
Storage Temperature Range	$T_{STG}$	- 55 to + 150					°C

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Measure at 1.0MHz and Applied Reverse Voltage of 4.0 Volts D.C.

Note 3: On glass epoxy P.C.B. mounted on 0.05" x 0.05" (1.3mm x 1.3mm) pads

Note 4: On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20mm x 20mm) mounted on 0.05" x 0.05" (1.3mm x 1.3mm) solder pads

RATINGS AND CHARACTERISTICS CURVES (MB2S THRU MB10S)

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

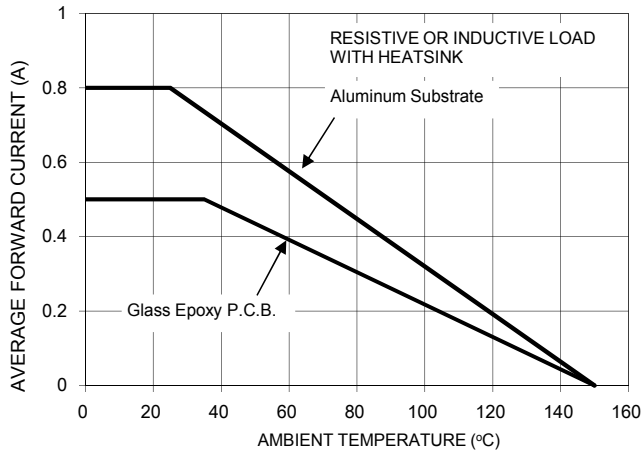


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER LEG

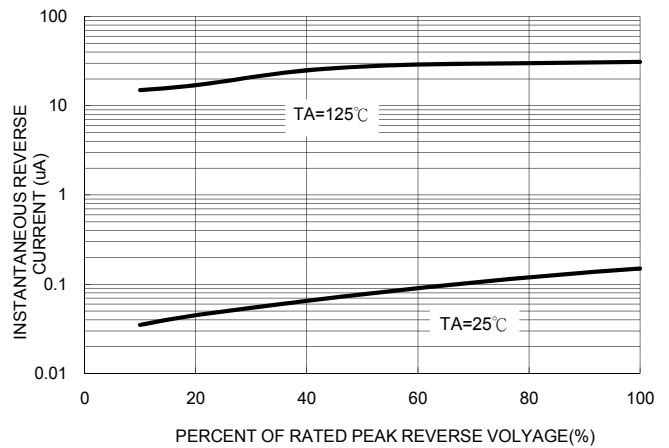


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

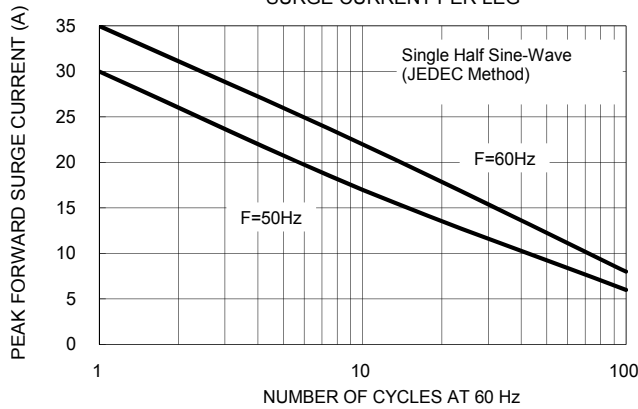


FIG. 4 TYPICAL JUNCTION CAPACITANCE PER LEG

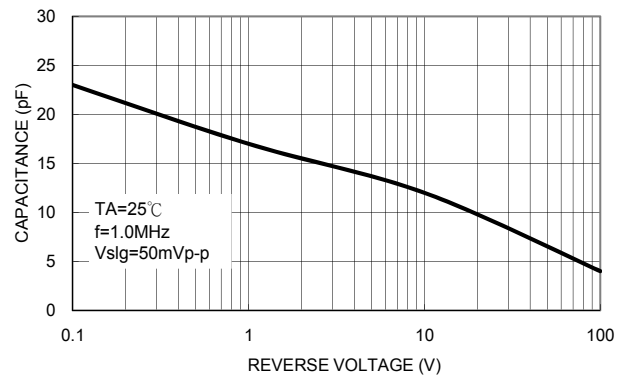


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER LEG

