

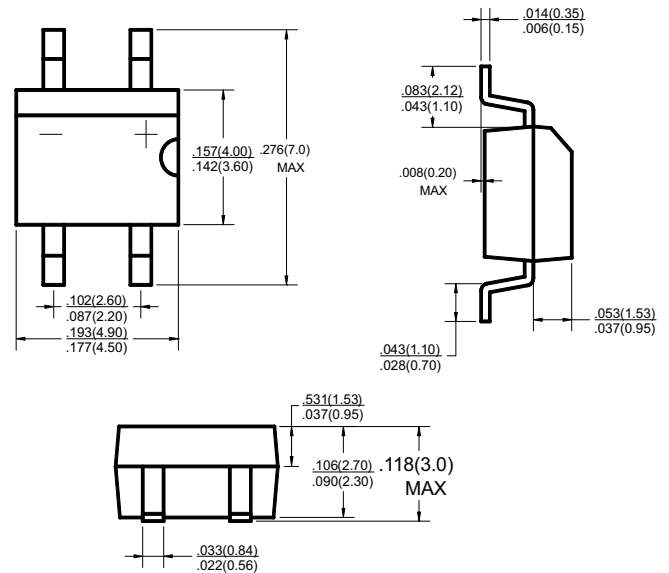
Glass Passivated Bridge Rectifiers  
Voltage Range 100 to 1000 Volts  
Current 0.8 / 1.0 Amperes

### FEATURES

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Low leakage results in inexpensive product
- High temperature soldering capability: 260°C/10 seconds/0.375" (9.5mm)
- Lead length at 5 lbs. (2.3kg) tension

### MECHANICAL DATA

- Molded plastic body
- Solder plated leads
- Polarity: As marked



**MBS**

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

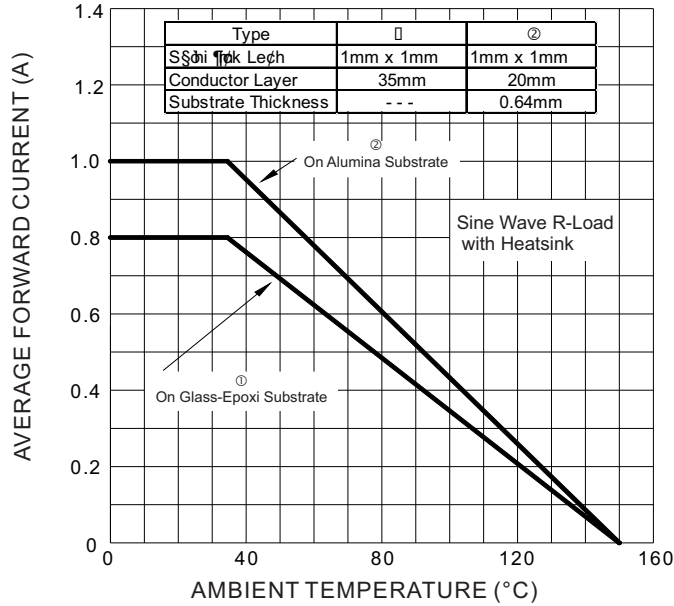
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Parameter	Symbol	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current • On glass-epoxy • On aluminum substrate	I <sub>(AV)</sub>	0.8 1.0						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	35						A
I <sup>2</sup> t for fusing (t < 8.3ms), non-repetitive	I <sup>2</sup> t	5.1						A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (IFM = 4.0A)	V <sub>F</sub>	1.05						V
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C At Rated DC Blocking Voltage per Leg @ T <sub>A</sub> = 125°C	I <sub>R</sub>	10 500						μA
Typical Thermal Resistance	R <sub>θJA</sub>	85 (Note 1) 70 (Note 2)						°C/W
	R <sub>θJL</sub>	20						
Operating Temperature Range	T <sub>J</sub>	-55 to +150						°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C

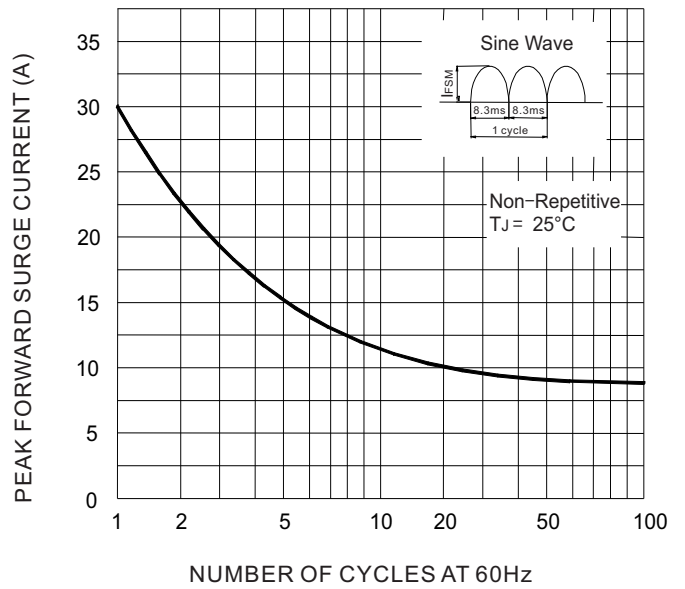
**NOTE:** 1. On glass epoxy mounted on 0.05"x0.05" (1.3x1.3mm) pads  
2. On aluminum substrate P.C.B. with an area of 0.8x0.8" (20x20mm) mounted on 0.05"x0.05" (1.3x1.3mm) solder pad.

**RATING & CHARACTERISTIC CURVES**

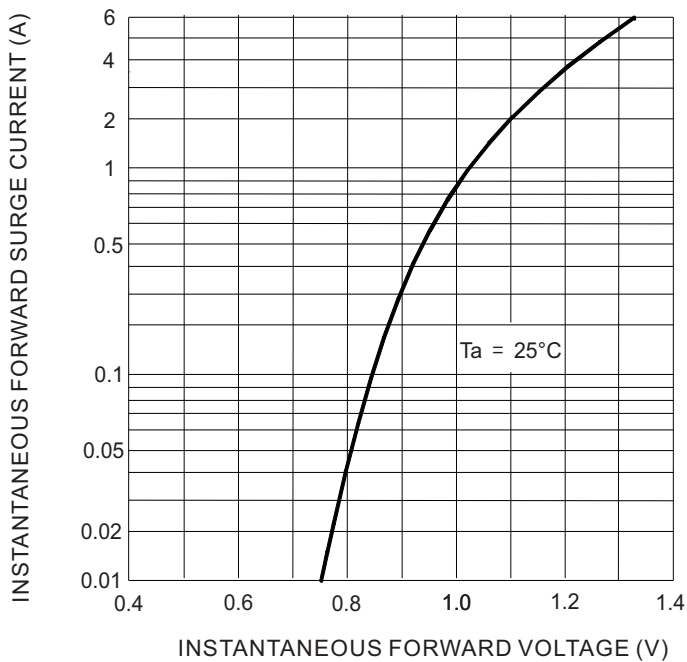
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

