

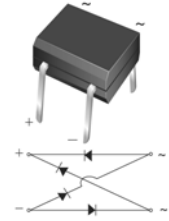
**VOLTAGE RANGE: 200 - 1000V**  
**CURRENT: 0.5 A**

### Features

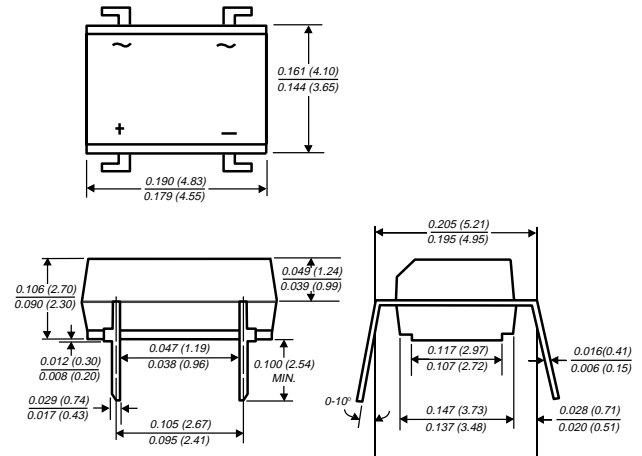
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed:  
 260°C/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability

### Mechanical Data

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on body
- Mounting Position: Any
- Weight: 0.078 ounce, 0.22 gram



MBM



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

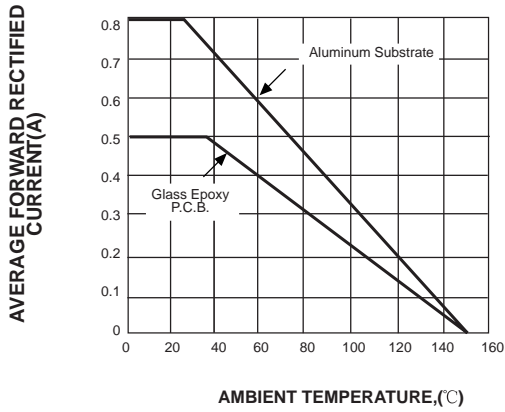
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MB2M	MB4M	MB6M	MB8M	MB10M	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 at $T_A=30^\circ\text{C}$ On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$	0.5					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30					A
Maximum instantaneous forward voltage drop per leg at 0.4A	$V_F$	1.0					V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5.0 500					$\mu\text{A}$ $\mu\text{A}$
Typical junction capacitance per leg (Note3)	$C_J$	15					pF
Typical thermal resistance per leg	$R(\theta)_{JA}$	75					$^\circ\text{C}/\text{W}$
Operating temperature range	$T_J$	-55 to +150					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150					$^\circ\text{C}$

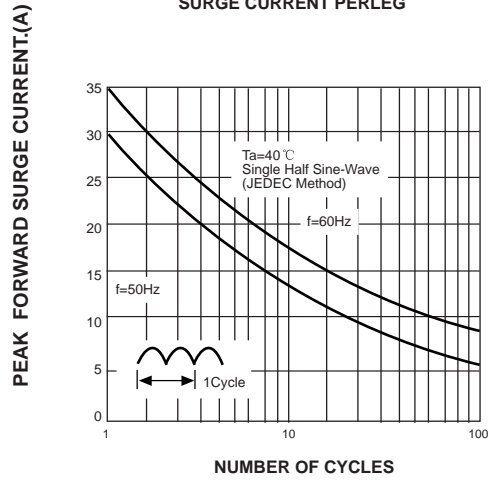
NOTES: 1. On glass epoxy P.C.B. mounted on 0.05x0.05" (1.3x1.3mm) pads  
 2. On aluminum substrate P.C.B. with on area of 0.8"x0.8" (20x20mm) mounted on 0.05x0.05" (1.3x1.3mm) solder pad  
 3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

### RATINGS AND CHARACTERISTIC CURVES MB2M THRU MB10M

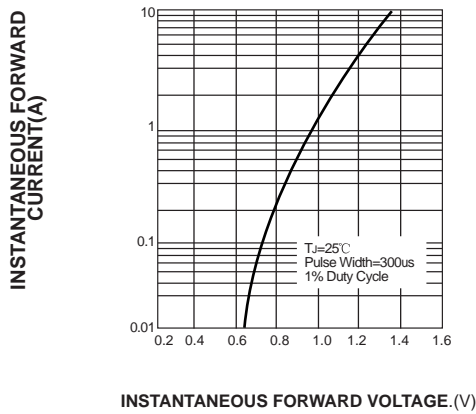
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR**



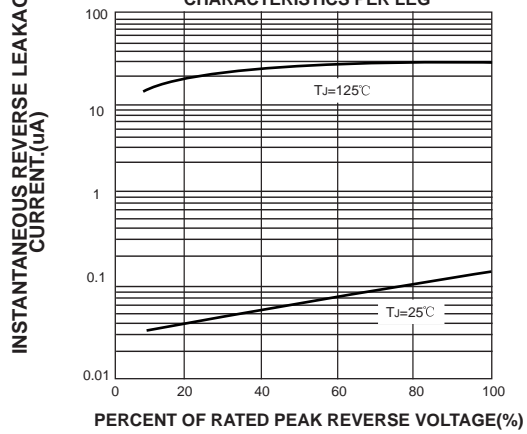
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG**

