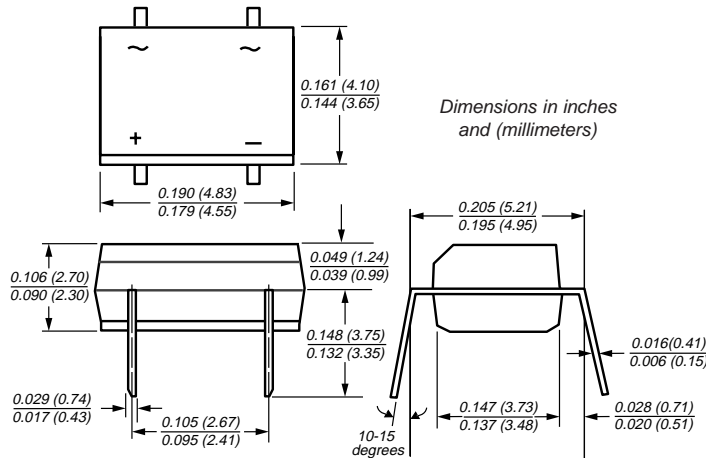


## Miniature Glass Passivated Single-Phase Bridge Rectifiers

Reverse Voltage 200 to 600V  
Forward Current 0.5A

Case Style MBM



### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junctions
- High surge overload rating: 35A peak
- Saves space on printed circuit boards
- Recommended for non-automotive applications

### Mechanical Data

**Case:** Molded plastic body over passivated junctions

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed: 260°C/10 seconds.

**Mounting Position:** Any **Weight:** 0.078 oz., 0.22 g

**Packaging codes-options:**  
45-100 per tube, 5K per carton

### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	MB2M	MB4M	MB6M	Unit
Device marking code		2	4	6	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	V
Maximum average forward output rectified current (see Fig. 1) on glass-epoxy P.C.B. on aluminum substrate	I <sub>F(AV)</sub>		0.5 <sup>(1)</sup> 0.8 <sup>(2)</sup>		A
Peak forward surge current 8.3msec single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>		35		A
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t		5.0		A <sup>2</sup> sec
Typical thermal resistance per leg	R <sub>θJA</sub> R <sub>θJA</sub> R <sub>θJL</sub>		85 <sup>(1)</sup> 70 <sup>(2)</sup> 20 <sup>(1)</sup>		°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>		-55 to +150		°C

### Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Max. instantaneous forward voltage drop per leg at 0.4A	V <sub>F</sub>		1.0		V
Maximum DC reverse current at rated DC blocking voltage per leg T <sub>A</sub> = 25°C T <sub>A</sub> = 125°C	I <sub>R</sub>		5.0 100		μA
Typical junction capacitance per leg <sup>(3)</sup>	C <sub>J</sub>		13		pF

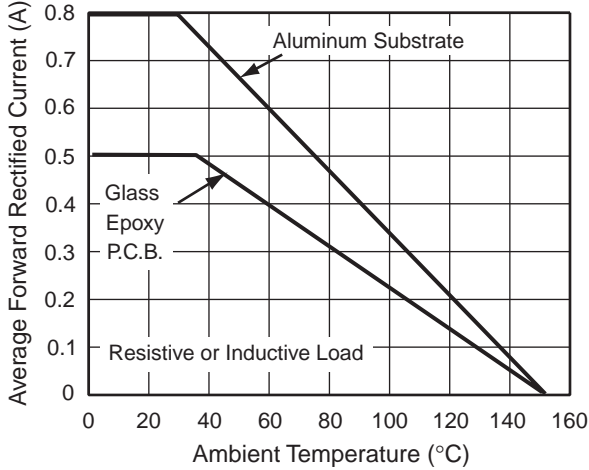
**Notes:** (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads

(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

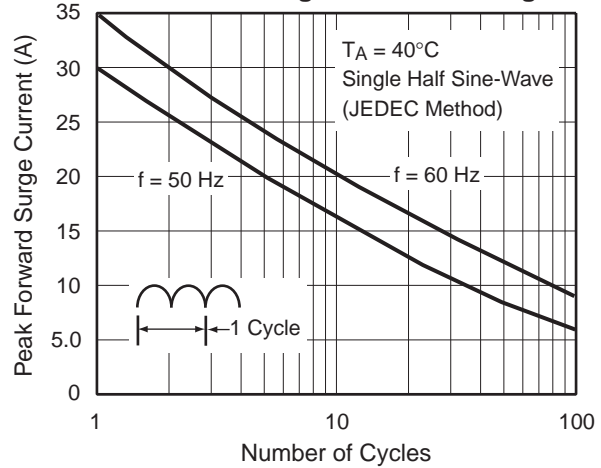
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

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

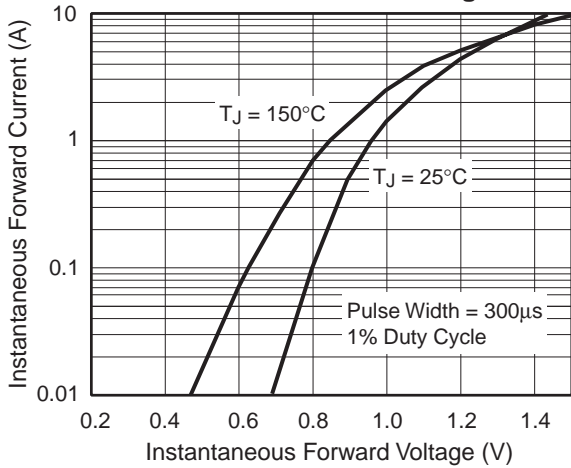
**Fig. 1 - Derating Curve for Output Rectified Current**



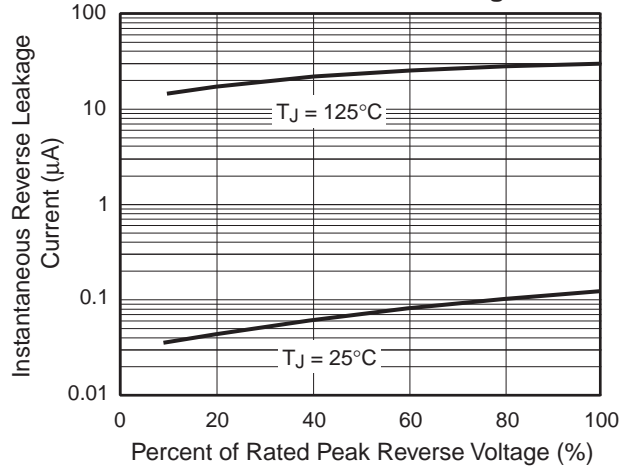
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



**Fig. 3 - Typical Forward Voltage Characteristics Per Leg**



**Fig. 4 - Typical Reverse Leakage Characteristics Per Leg**



**Fig. 5 - Typical Junction Capacitance Per Leg**

