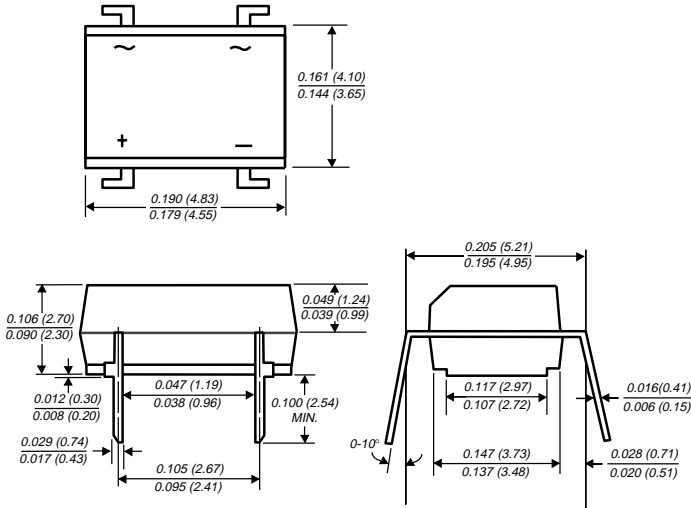


# MB2M THRU MB6M

## MINIATURE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

*Reverse Voltage - 200 to 600 Volts    Forward Current - 0.5 Ampere*

### Case Style MBM



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL recognized under Component Index, file number E54214
- ◆ Glass passivated chip junctions
- ◆ High surge overload rating: 35A peak
- ◆ Saves space on printed circuit board
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension



### 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

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

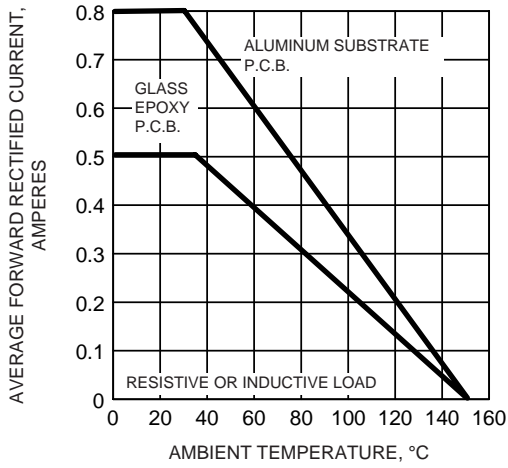
	SYMBOLS	MB2M	MB4M	MB6M	UNITS
Device marking code		2	4	6	
Maximum repetitive peak reverse voltage	VRRM	200	400	600	Volts
Maximum RMS voltage	VRMS	140	280	420	Volts
Maximum DC blocking voltage	VDC	200	400	600	Volts
Maximum average forward output rectified current at TA=30°C - on glass-epoxy P.C.B. (NOTE 1) on aluminum substrate (NOTE 2)	I(AV)		0.5 0.8		Amp
Peak forward surge current 8.3msec. single half sine-wave superimposed on rated load (JEDEC Method)	IFSM		35.0		Amps
Rating for fusing (t<8.3ms)	I²t		5.0		A²sec
Maximum instantaneous forward voltage drop per leg at 0.4A	VF		1.0		Volts
Maximum DC reverse current at rated DC blocking voltage per leg TA=25°C TA=125°C	IR		5.0 500		µA
Typical junction capacitance per leg (NOTE 3)	CJ		13.0		pF
Typical thermal resistance per leg (NOTE 1) (NOTE 1) (NOTE 2)	ROJL ROJA ROJA		20.0 85.0 70.0		°C/W
Operating junction and storage temperature range	TJ, TSTG		-55 to +150		°C

**NOTES:**

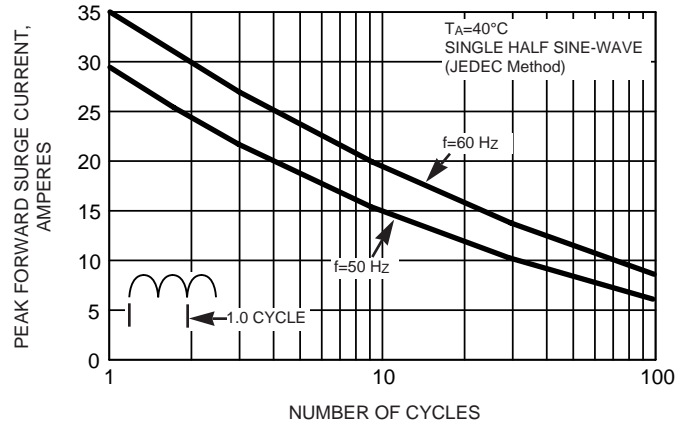
- (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pads
- (2) On aluminum substrate P.C.B. with an area of 0.8 x 0.8 x 0.25" (20 x 20 x 6.4mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

# RATINGS AND CHARACTERISTIC CURVES MB2M THRU MB6M

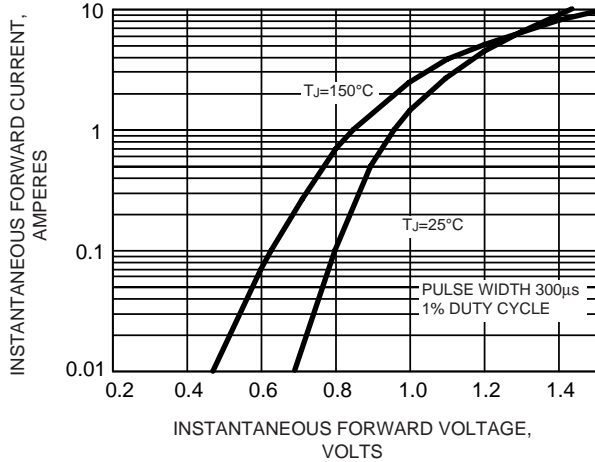
**FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



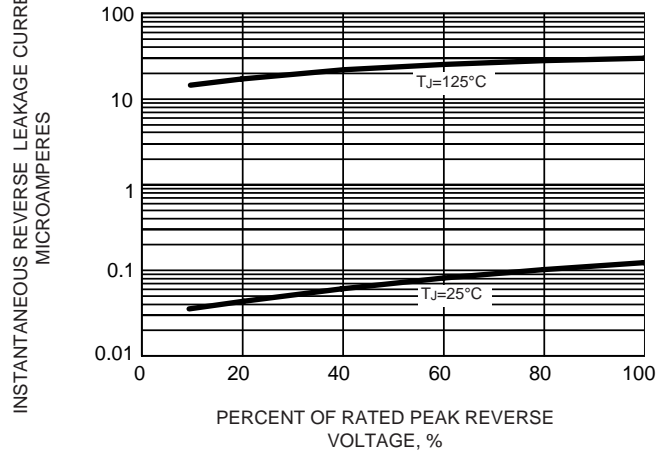
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



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



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



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

