

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

MB2M THRU MB10M

VOLTAGE RANGE
CURRENT

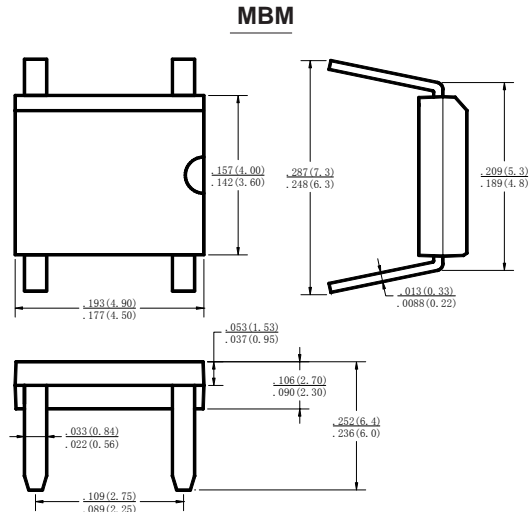
200 to 1000 Volts
0.5/0.8 Ampere

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
- Terminals : Plated leads solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbols marked on case
- Mounting Position : Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	MB2M	MB4M	MB6M	MB8M	MB10M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	VOLTS
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 0.8					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					Amps
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.0					Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5.0 500					μA μA
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.



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FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR

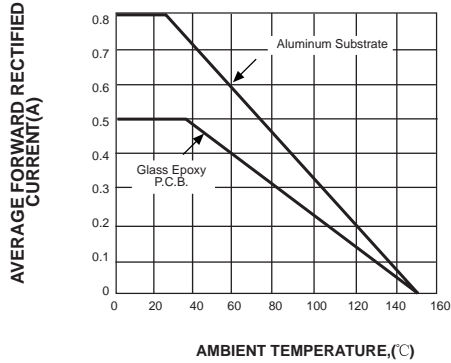


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

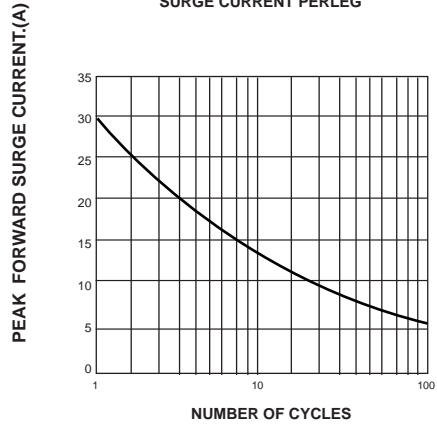


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

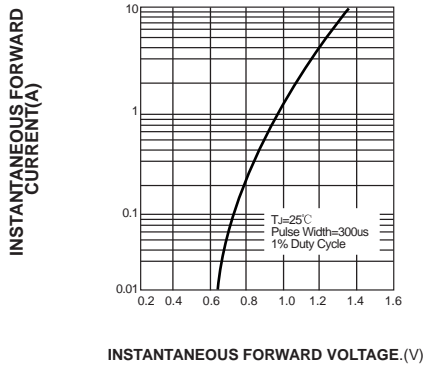


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

