

VI. Bridge Rectifier

Single-Phase Silicon Bridge Rectifiers MB2M~MB10M

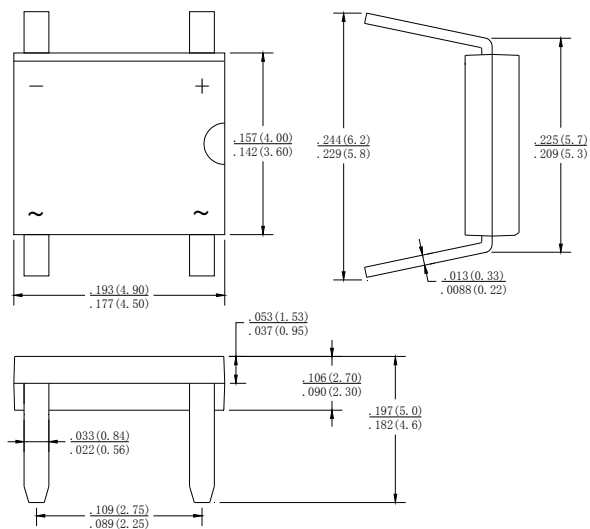
(Package: MBM)

FEATURES

- Reliable low cost construction utilizing molded plastic technique.
- High surge current capability.
- Saves space on printed circuit boards.
- High temperature soldering guaranteed:
260 / 10 seconds at 5 lbs (2.3 Kg) tension.

MECHANICAL DATA

- Case : Molded plastic.
- Terminals : Plated leads.
- Polarity : Polarity symbols marked on case.
- Mounting position : Any.
- Weight : 0.140 grams



Case: MBM
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Characteristic	Symbol	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 @ $T_a = 40$	I_o	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 at 0.4A	V_F	1.1					Volts
Maximum DC reverse current at rated DC blocking voltage per leg	I_R	5.0 500					μA
Typical thermal resistance (Note)	R_{th-JC}	75					/W
Operating junction temperature range	T_j	-55 to +150					
Storage temperature range	T_{stg}	-55 to +150					

Note:
Thermal resistance: Junction to Case.

Ratings and Characteristic Curves of MB2M~MB10M

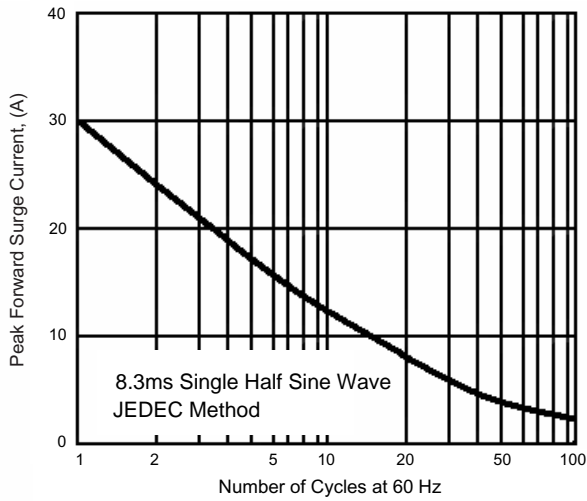


Fig.1 Maximum Non-Repetitive Forward Surge Current per Bridge Element

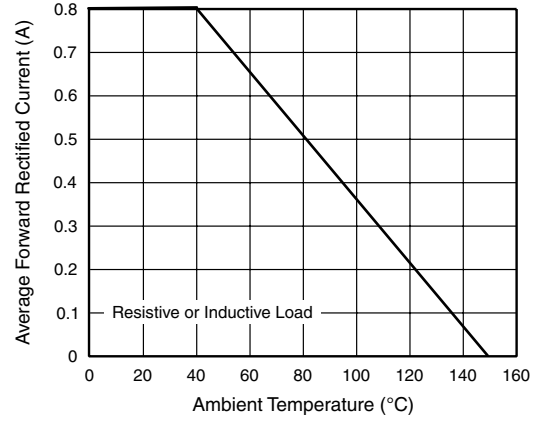


Fig.2 Derating Curve for Output Rectified Current

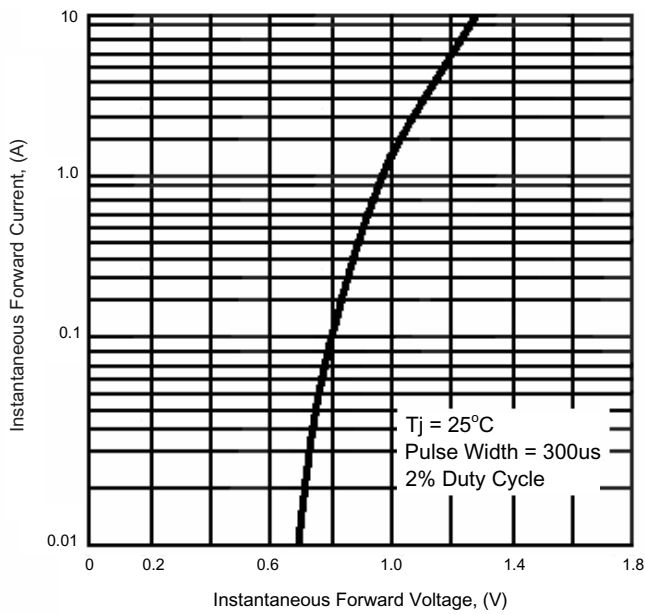


Fig.3 Typical Instantaneous Forward Characteristics per Bridge Element

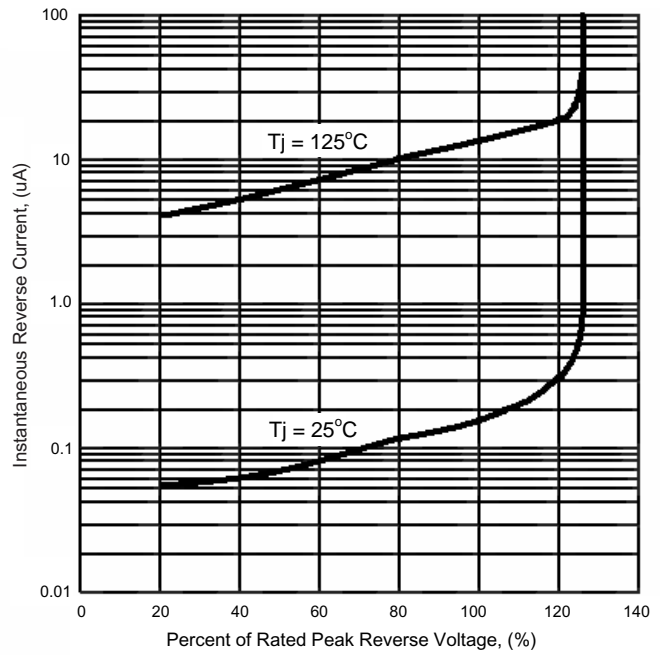


Fig.4 Typical Reverse Characteristics per Bridge Element