VI.   Bridge Rectifier

Single-Phase Silicon Bridge Rectifiers
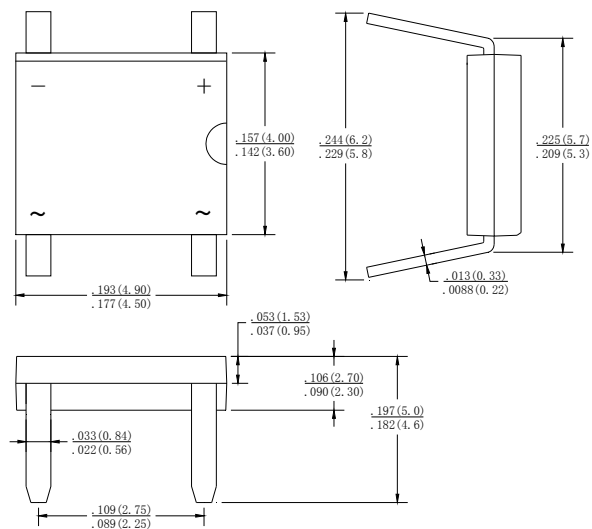## MB2M~MB10M   (Package: MBM)

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 @Ta = 40	Io			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 @Ta = 25 rated DC blocking voltage per leg @Ta = 125	I_R			5.0 500			μA
Typical thermal resistance (Note)	Rth-JC			75			/W
Operating junction temperature range	Tj			-55 to +150			
Storage temperature range	Tstg			-55 to +150			

Note:
Thermal resistance: Junction to Case.

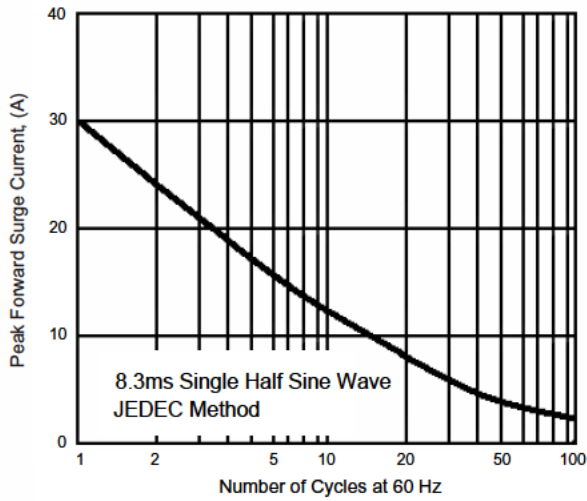# Ratings and Characteristic Curves of MB2M~MB10M

Fig.1 Maximum Non-Repetitive Forward
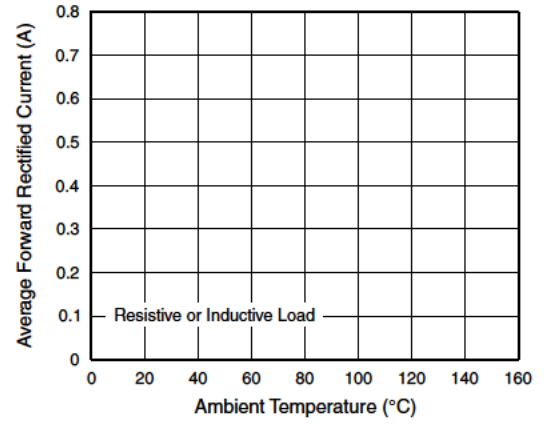Surge Current per Bridge Element
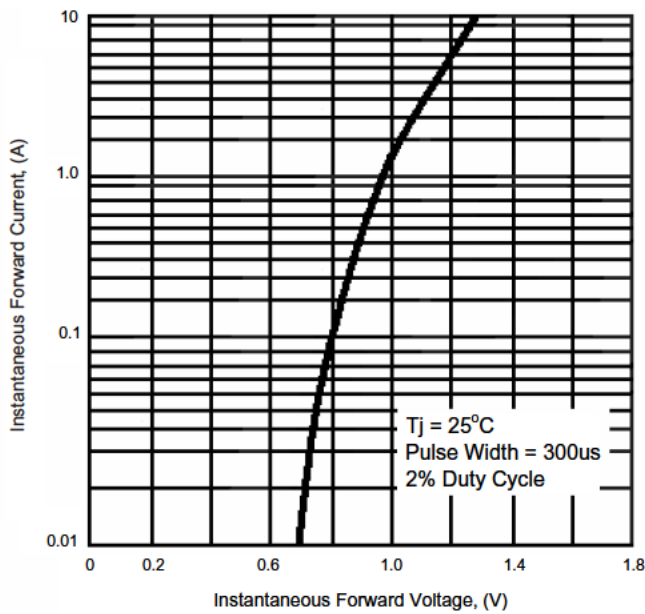
Fig.2 Derating Curve for Output Rectified Current
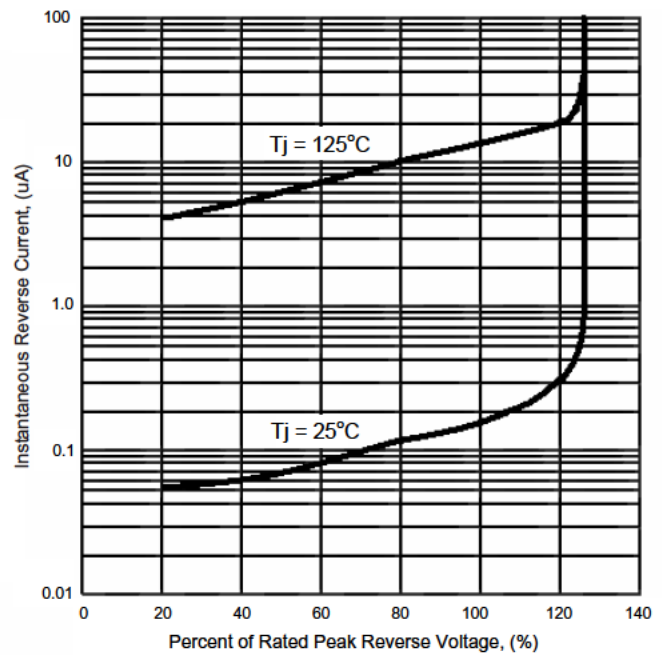
Fig.3 Typical Instantaneous Forward
Characteristics per Bridge Element

Fig.4 Typical Reverse Characteristics per Bridge Element