



MB12F THRU MB120F

SINGLE PHASE 1.0 AMP SURFACE MOUNT BRIDGE RECTIFIERS

FEATURES

- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded plastic technique
- * High surge current capability
- * Polarity: Symbol molded on body
- * Mounting position: Any
- * Weight: 0.12 grams

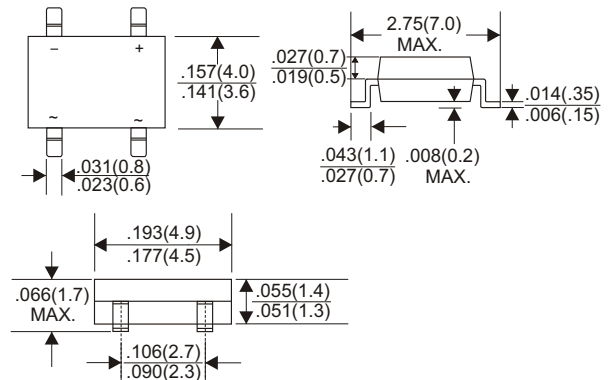
VOLTAGE RANGE

20 to 200 Volts

CURRENT

1.0 Ampere

MBF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	MB12F	MB14F	MB16F	MB18F	MB110F	MB115F	MB120F	UNIT
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	3.0							A
Maximum Forward Voltage Drop per Bridge Element at 1.0A D.C.	0.55	0.7	0.85	0.9				V
Maximum DC Reverse Current Ta=25°C	0.3	0.2	0.1					mA
at Rated DC Blocking Voltage Ta=125°C	10	5	2					mA
Typical Thermal Resistance R JA (Note 2)	100							°C/W
Operating Temperature Range, Tj	-55 — +150							°C
Storage Temperature Range, Tstg	-55 — +150							°C

NOTES: 1. Mounted on P.C. Board.
2. Thermal Resistance Junction to Ambient.

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RATING AND CHARACTERISTIC CURVES (MB12F THRU MB120F)

Fig.1 Forward Current Derating Curve

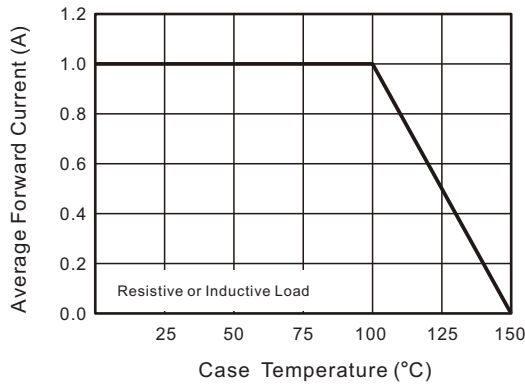


Fig.2 Typical Reverse Characteristics

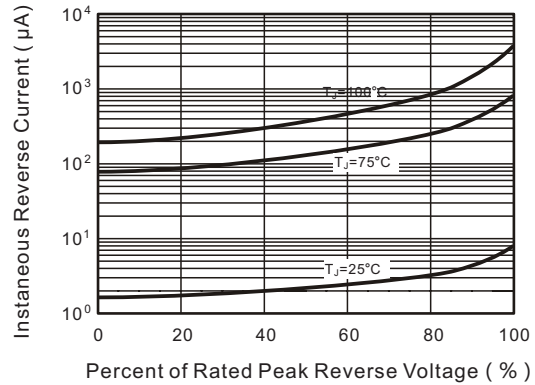


Fig.4 Typical Junction Capacitance

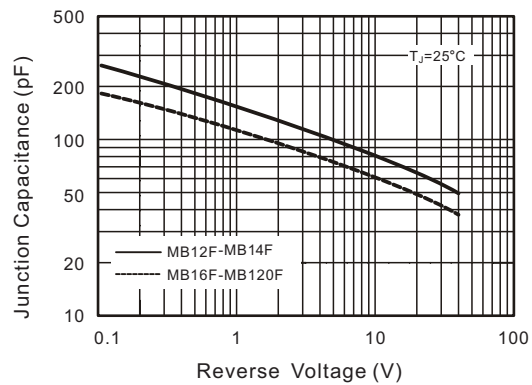


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

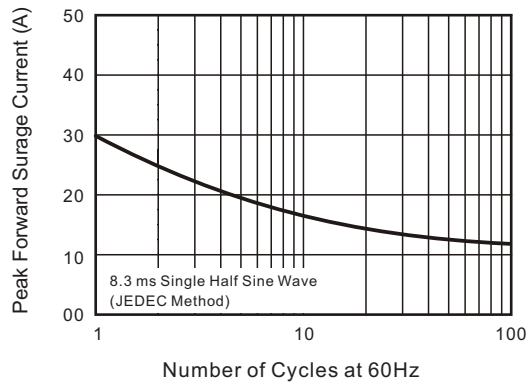


Fig.6- Typical Transient Thermal Impedance

