

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

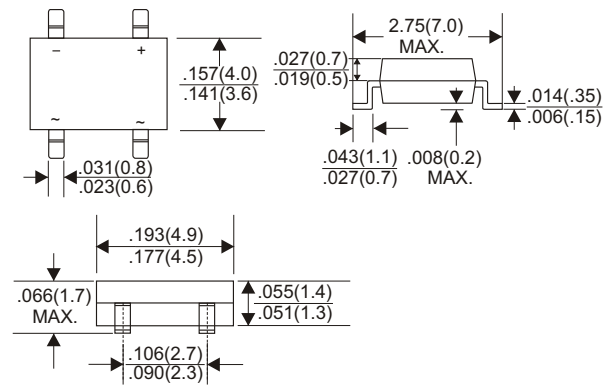
VOLTAGE RANGE

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 at Rated DC Blocking Voltage	0.3		0.2		0.1			mA
	10		5		2			mA
Typical Thermal Resistance R _{JA} (Note 2)	100							°C/W
Operating Temperature Range, T _J	-55 — +150							°C
Storage Temperature Range, T _{STG}	-55 — +150							°C

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

RATING AND CHARACTERISTIC CURVES (MB12F THRU MB120F)

Fig.1 Forward Current Derating Curve

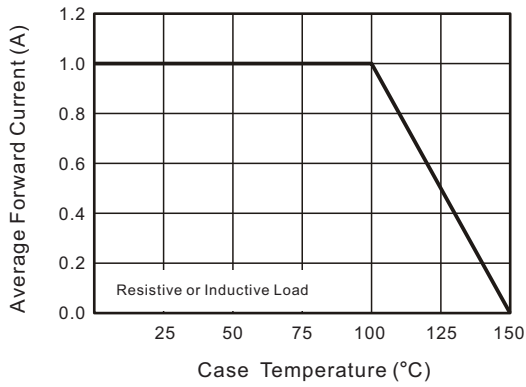


Fig.2 Typical Reverse Characteristics

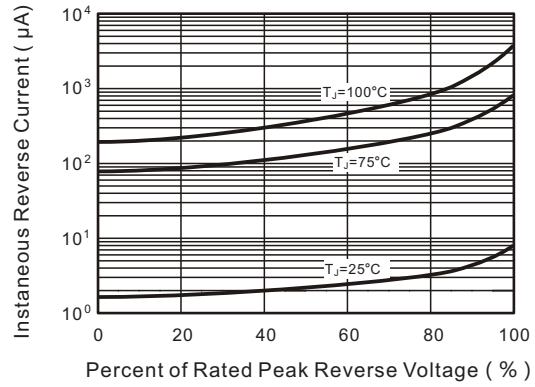


Fig.4 Typical Junction Capacitance

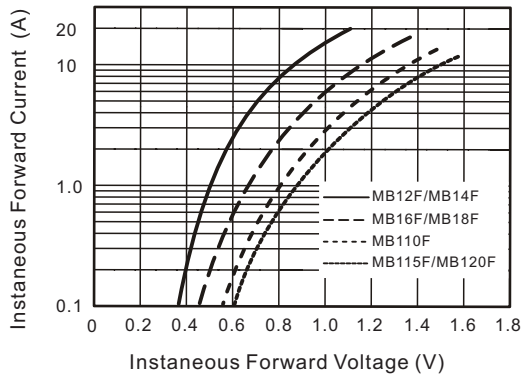
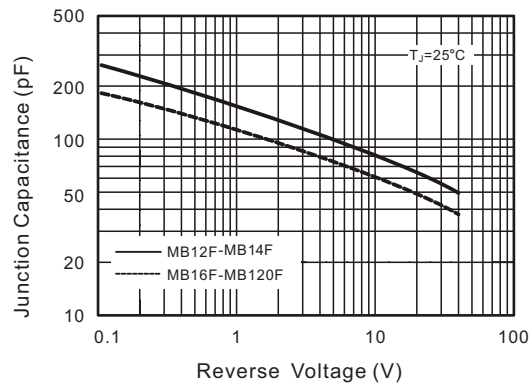


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

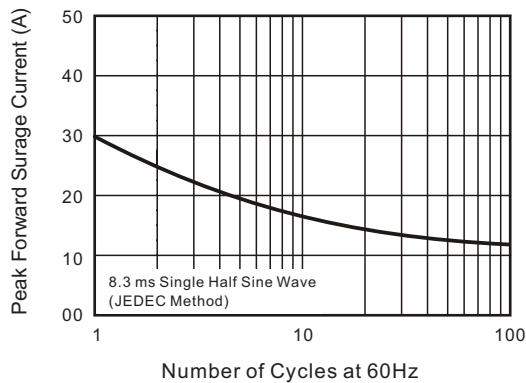


Fig.6- Typical Transient Thermal Impedance

