



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

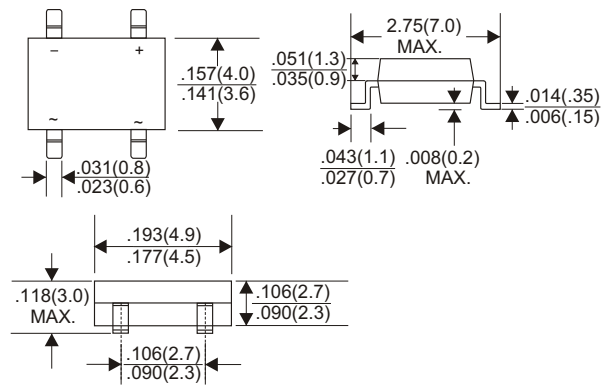
VOLTAGE RANGE

20 to 200 Volts

CURRENT

1.0 Ampere

MBS



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 | MB12S | MB14S | MB16S | MB18S | MB110S | MB115S | MB120S | 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 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, 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 (MB12S THRU MB120S)

Fig.1 Forward Current Derating Curve

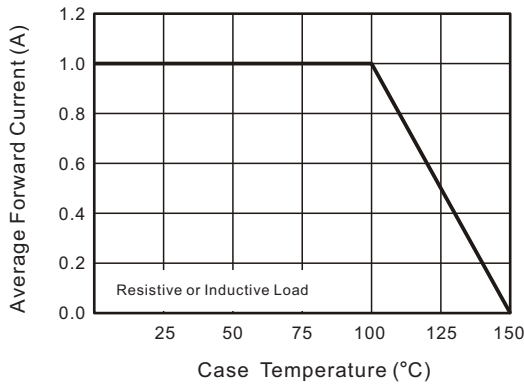


Fig.2 Typical Reverse Characteristics

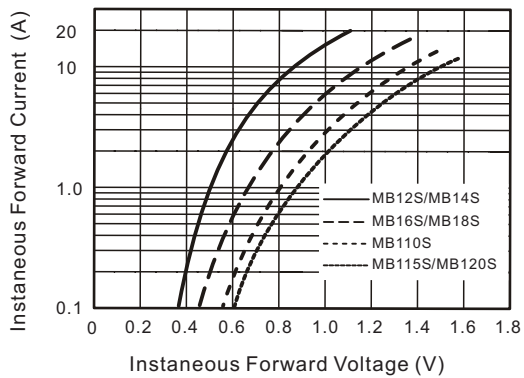
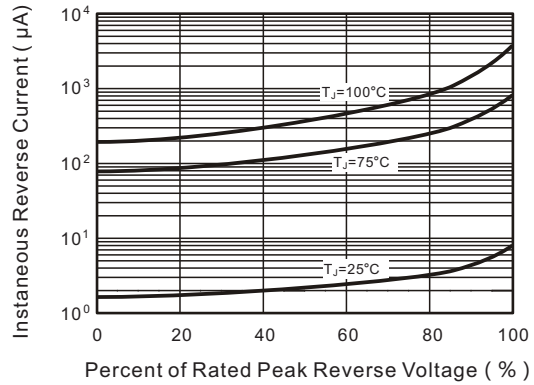


Fig.4 Typical Junction Capacitance

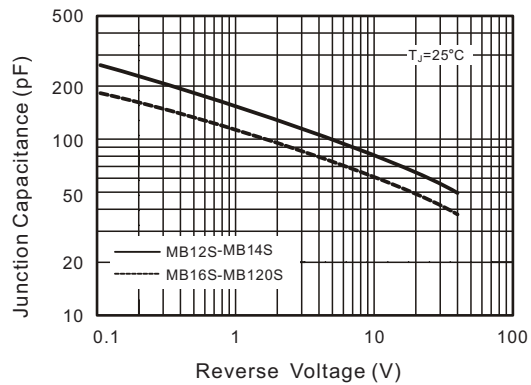


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

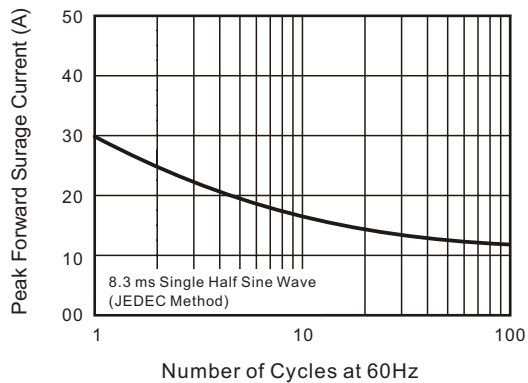


Fig.6- Typical Transient Thermal Impedance

