

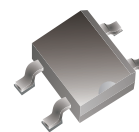
MMB1G-HF Thru. MMB10G-HF

Reverse Voltage: 100 to 1000 Volts

Forward Current: 0.5 Amp

RoHS Device

Halogen Free

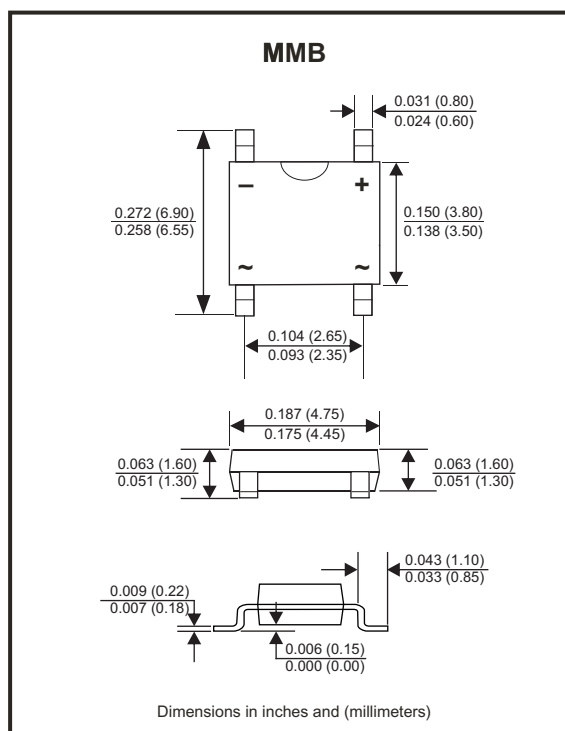


Features

- Glass passivated chip junctions.
- High surge overload rating: 30A peak.
- Saves space on printed circuit boards.
- High temperature soldering guaranteed:
260°C/10 seconds at 5 lbs. (2.3kg) tension
- UL recognized file # E464656 Range: MMB6G thru. MMB10G

Mechanical data

- Case: Molded plastic body over passivated junctions.
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026.
- Polarity: Polarity symbols marked on body.



Maximum Rating And Electrical Characteristics

Rating at TA=25°C, unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Parameter | Symbol | MMB 1G-HF | MMB 2G-HF | MMB 4G-HF | MMB 6G-HF | MMB 8G-HF | MMB 10G-HF | Unit |
|---|-----------------------------------|--|-----------|-----------|-----------|-----------|------------|------------------|
| Maximum Peak Repetitive Reverse Voltage | V _{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Reverse Voltage | V _{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Output Current @TA=25°C | I _{F(AV)} | 0.5 ¹⁾ 0.8 ²⁾ | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave, Superimposed On Rated Load | I _{FSM} | 30 | | | | | | A |
| Maximum Instantaneous Forward Voltage @0.8A | V _F | 1.1 | | | | | | V |
| Maximum Reverse Current @Rated DC Blocking Voltage | @TA=25°C | 5.0 | | | | | | µA |
| | @TA=100°C | 0.5 | | | | | | mA |
| Typical Thermal Resistance per leg | R _{θJA} | 85 | | | | | | °C/W |
| | R _{θJL} | 20 | | | | | | |
| Current squared time t<8.3ms, TA=25°C | I ² t | 3.74 | | | | | | A ² s |
| Typical junction capacitance per leg | C _J | 13 | | | | | | pF |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | °C |

Note: 1. On glass-epoxy P.C.B.
2. On alumina substrate.

Company reserves the right to improve product design , functions and reliability without notice.

REV: A

Rating and Characteristic Curves (MMB1G-HF Thru. MMB10G-HF)

Fig.1 - Derating Curve For Output Rectified Current

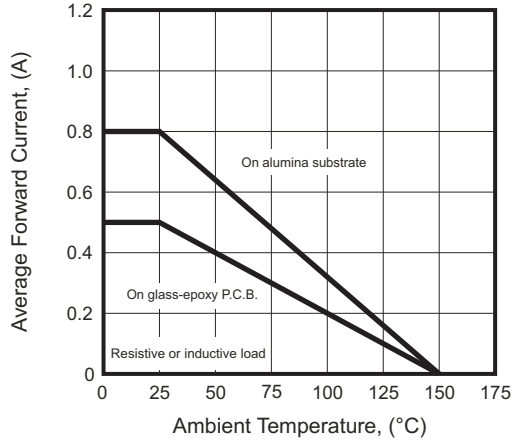


Fig.2 - Maximum Non-repetitive Peak Forward Surge Current Per Leg

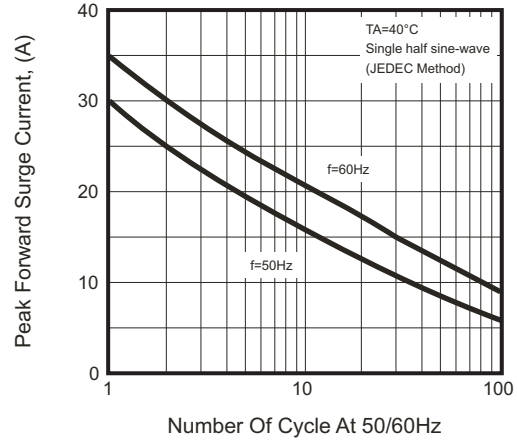


Fig.3 - Typical Forward Voltage Characteristics Per Leg

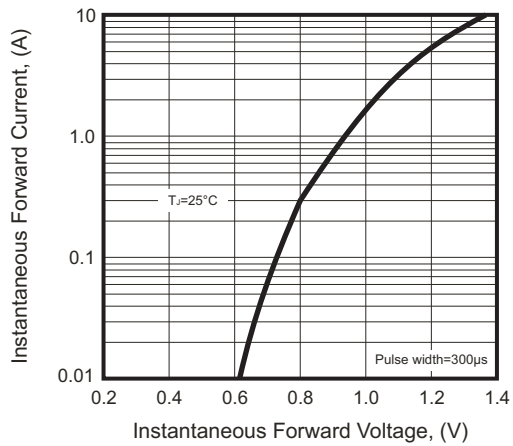


Fig.4 - Typical Reverse Characteristics

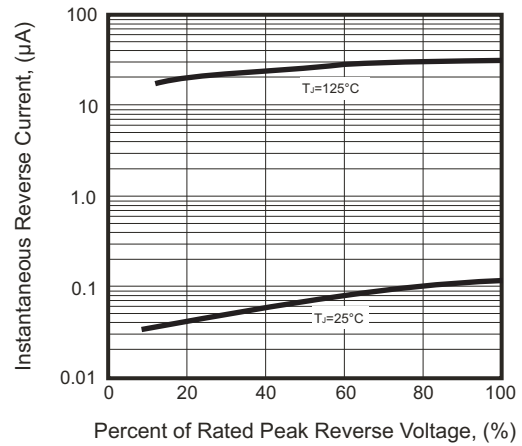
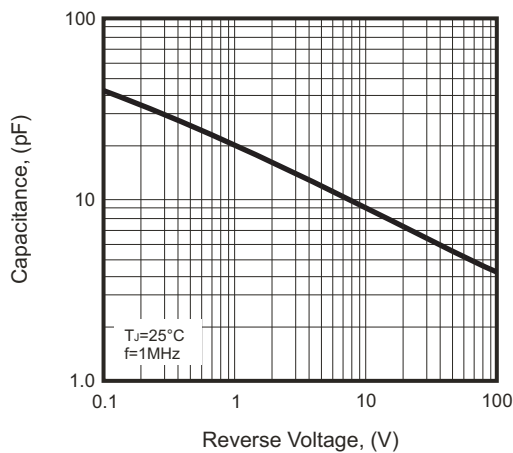
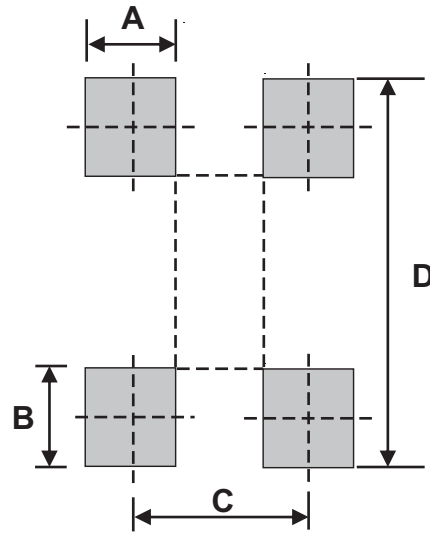


Fig.5 - Typical Junction Capacitance Per Element



Suggested PAD Layout

| SIZE | MMB | |
|------|------|--------|
| | (mm) | (inch) |
| A | 0.70 | 0.028 |
| B | 1.00 | 0.039 |
| C | 2.60 | 0.102 |
| D | 7.01 | 0.276 |



Standard Packaging

| Case Type | REEL PACK | |
|-----------|-----------------|---------------------|
| | REEL (pcs) | Reel Size (inch) |
| MMB | 5,000 | 13 |