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VOLTAGE RANGE: 200 --- 1000 V

CURRENT: 0.5 A

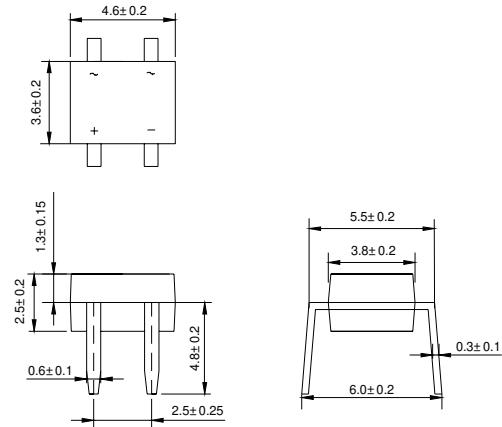
Features

- ✧ This series is UL recognized under Component Index, file number E239431
- ✧ Glass passivated chip junctions
- ✧ Plastic material has U/L flammability classification 94V-O
- ✧ High surge overload rating: 35A peak
- ✧ Saves space on printed circuit boards
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension

Mechanical Data

- ✧ Case: Molded plastic body over passivated junctions
- ✧ Polarity: Polarity symbols marked on body
- Dimensions in inches and (millimeters)
- ✧ Mounting Position: Any
- ✧ Weight: 0.0078 ounce, 0.22 gram

MBM



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | | MB2M | MB4M | MB6M | MB8M | MB10M | UNITS |
|--|--------------------------------------|--|------|------|------|-------|--------------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward output current @ $T_A=25^\circ\text{C}$ | $I_{F(AV)}$ | 0.5 ⁽¹⁾ 0.8 ⁽²⁾ | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load | I_{FSM} | 35 | | | | | A |
| Maximum instantaneous forward voltage @ 0.4 A | V_F | 1.0 | | | | | V |
| Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$ | I_R | 5.0 100 | | | | | μA |
| Typical junction capacitance per leg (NOTE 3) | C_J | 13 | | | | | pF |
| Typical thermal resistance per leg (NOTE 1) | $R_{\square JA}$ $R_{\square JL}$ | 85 20 | | | | | $^\circ\text{C/W}$ |
| Operating junction temperature range | T_J | - 55 ---- + 150 | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | - 55 ---- + 150 | | | | | $^\circ\text{C}$ |

NOTES: (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads

(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

Ratings AND Characteristic Curves

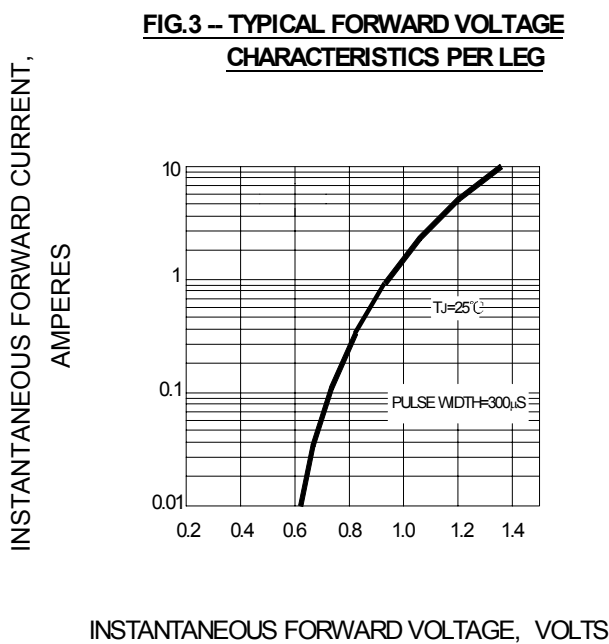
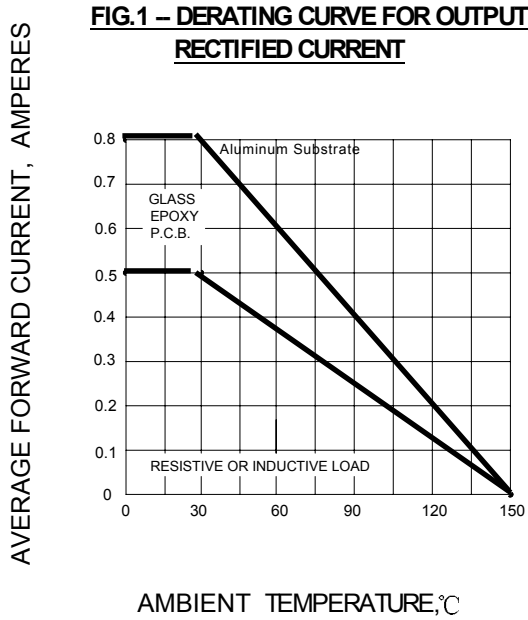


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

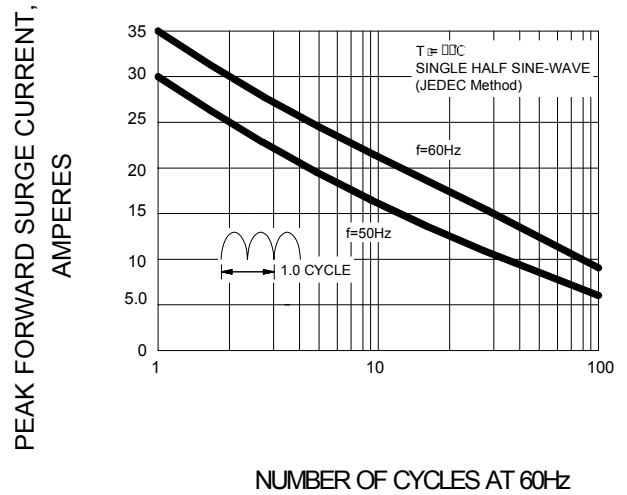


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

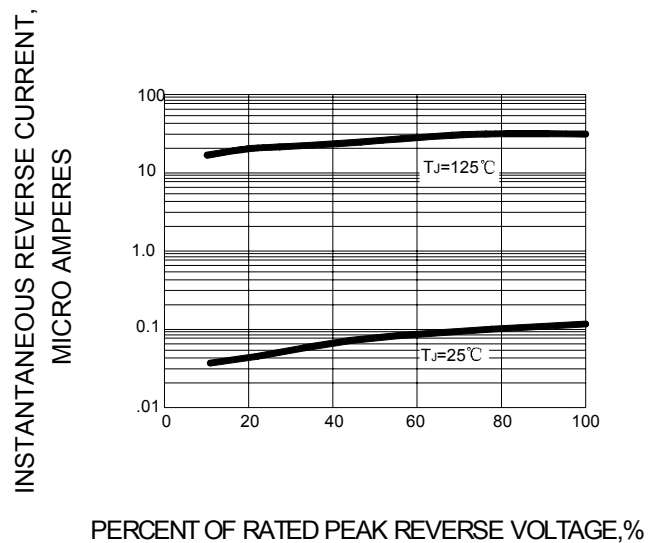


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER ELEMENT

