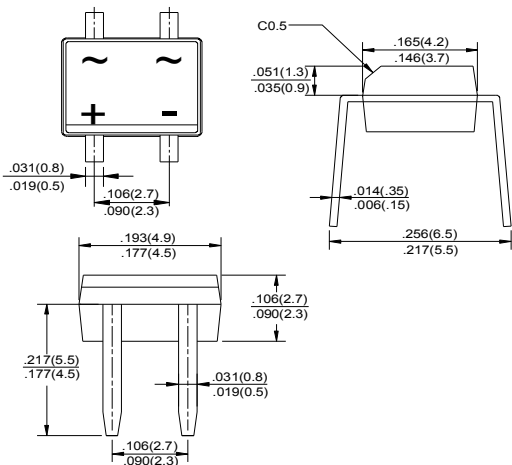




MB2M THRU MB10M

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS
Voltage Range - 200 to 1000 Volts Current - 0.5/0.8 Ampere

MBM



FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any
Weight: 0.0044 ounce, 0.125 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| MDD Catalog Number | SYMBOLS | MDD MB2M | MDD MB4M | MDD MB6M | MDD MB8M | MDD MB10M | UNITS |
|---|-----------------|-------------|----------|----------|----------|-----------|--------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current at $T_c=30^\circ C$ On glass-epoxy P.C.B. On aluminum substrate | $I_{F(AV)}$ | 0.5 0.8 | | | | | Amps |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | | | | | Amps |
| Maximum instantaneous forward voltage drop per leg at 0.4A | V_F | 1.0 | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$ | I_R | 5.0 500 | | | | | μA μA |
| Typical junction capacitance per leg (Note3) | C_J | 15 | | | | | pF |
| Typical thermal resistance per leg | $R_{\theta JA}$ | 75 | | | | | °C/W |
| Operating temperature range | T_J | -55 to +150 | | | | | °C |
| storage temperature range | T_{STG} | -55 to +150 | | | | | °C |

NOTES: 1. On glass epoxy P.C.B. mounted on 0.05x0.05" (1.3x1.3mm) pads
 2. On aluminum substrate P.C.B. with on area of 0.8"x0.8" (20x20mm) mounted on 0.05x0.05" (1.3x1.3mm) solder pad
 3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.



RATINGS AND CHARACTERISTIC CURVES MB2M THRU MB10M

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR

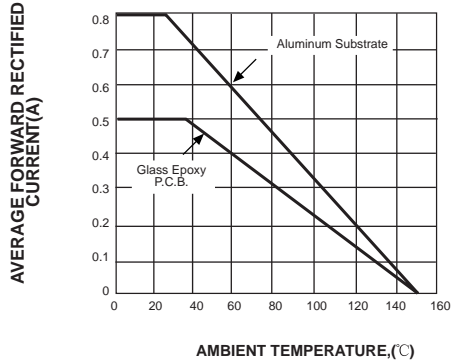


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

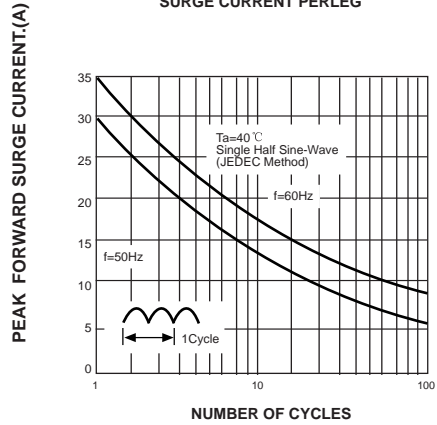


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

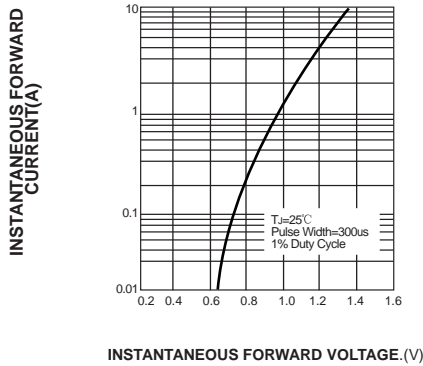


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

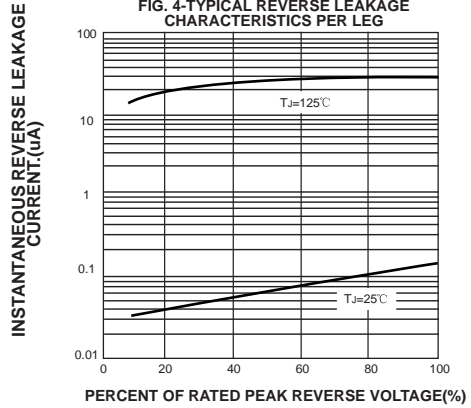


FIG. 5-TYPICAL JUNCTION CAPACITANCE PER LEG

