

0.8A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



MBM

Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 30 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

Mechanical Data

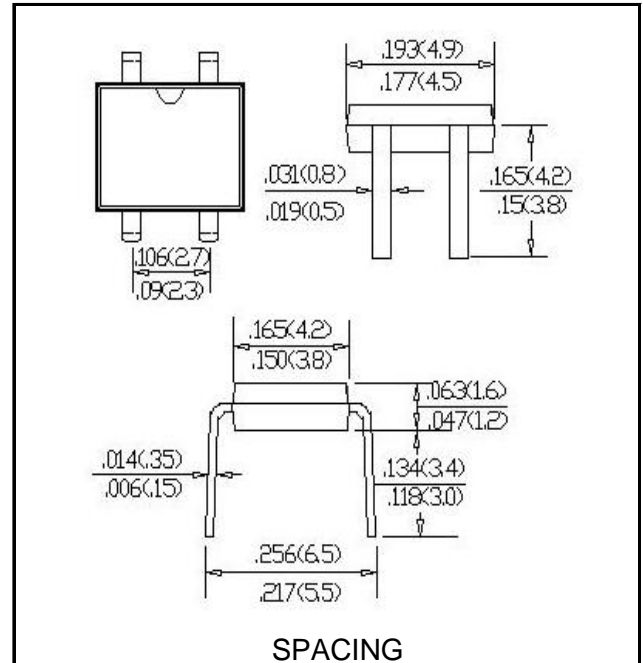
Case:Molded plastic

Terminals:Plate leads solderable per MIL-STD-750, Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.0032ounce,0.094 grams(approx)



Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

| Parameter | Symbol | MB05M | MB1M | MB2M | MB4M | MB6M | MB8M | MB10M | unit |
|---|--------|-----------|------|------|------|------|------|-------|-------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS bridge input voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current @TA=40°C | IF(AV) | 0.8 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method) | IFSM | 30 | | | | | | | A |
| Maximum instantaneous forward voltage drop per leg at 0.8A | VF | 1.1 | | | | | | | V |
| Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C | IR | 5 | | | | | | | μ A |
| Rating for fusing(t<8.3ms) | I²t | 3.7 | | | | | | | A²sec |
| Typical Junction capacitance per element(Note 1) | Cj | 13.0 | | | | | | | p F |
| Typical thermal resistance (Note1) | RθJA | 134 | | | | | | | °C/W |
| Operating temperature range | TJ | -55to+150 | | | | | | | °C |
| Storage temperature range | TSTG | -55to+150 | | | | | | | °C |

Notes: (1). Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

(2). Thermal resistance Junction to ambient mounted on P.C.B with 0.5*0.5"(13*13mm)copper pads.

Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

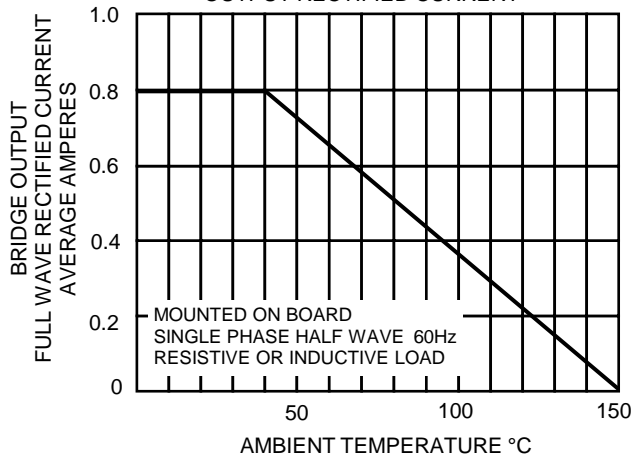


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

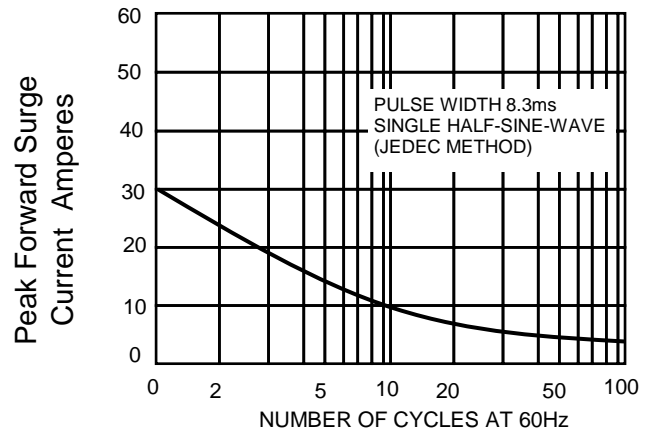


FIG.3-TYPICAL JUNCTION CAPACITANCE

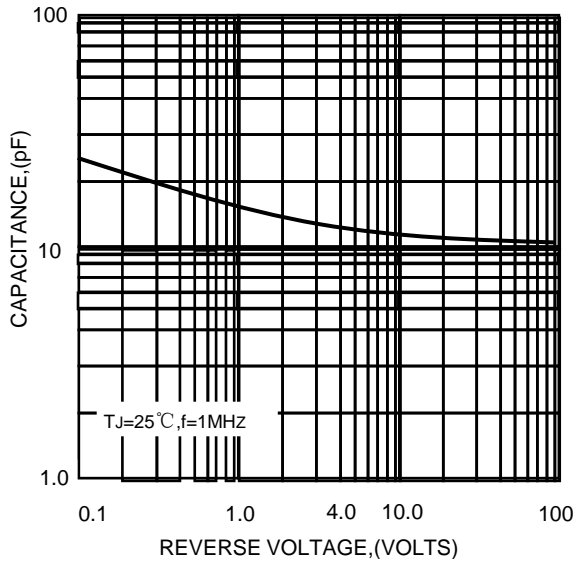


FIG.4-TYPICAL FORWARD CHARACTERISTICS

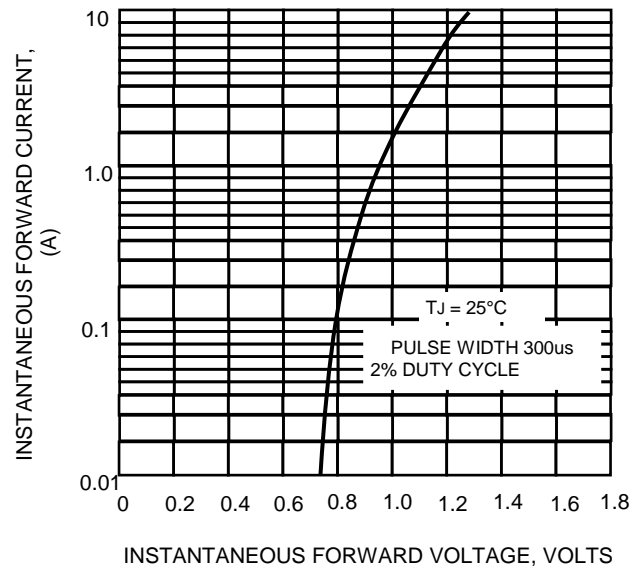
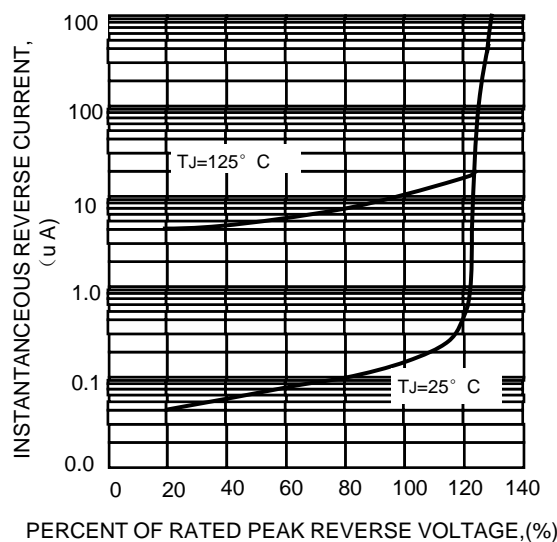


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Ordering Information(Example)

| PREFFREN P/N | UNIT WEIGHT(g) | MINIMUM | INNER BOX | OUTER CARTON | DELIVERY MODE |
|--------------|-------------------|--------------|---------------|---------------|---------------|
| | | PACKAGE(pcs) | QUANTITY(pcs) | QUANTITY(pcs) | |
| MB05M~MB10M | Approximate 0.094 | 100 | 5000 | 20000 | TUBE |