



GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 0.8 Amperes

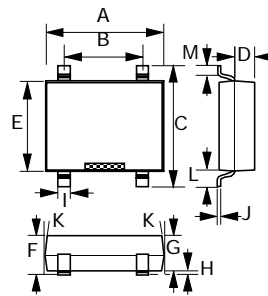
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.0044 ounces, 0.125 grams
- Mounting position : Any

MBS



| MBS | | |
|------|------------|------|
| DIM. | MIN. | MAX. |
| A | 4.50 | 4.90 |
| B | 2.30 | 2.70 |
| C | — | 7.00 |
| D | 0.90 | 1.30 |
| E | 3.80 | 4.20 |
| F | — | 3.00 |
| G | 2.30 | 2.70 |
| H | — | 0.20 |
| I | 0.50 | 0.80 |
| J | 0.15 | 0.35 |
| K | 5° TYPICAL | |
| L | 1.30 | 1.70 |
| M | 0.70 | 1.10 |

All Dimensions in millimeter

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%

| PARAMETER | SYMBOL | MB 1S | MB 2S | MB 3S | MB 4S | MB 6S | MB 8S | MB 10S | UNIT |
|--|------------------|-------------|-------|-------|-------|-------|-------|--------|--------------------|
| Maximum recurrent 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 | 0.8 | | | | | | | A |
| I ² t Rating for fusing (t < 8.3mS) | I ² t | 3.735 | | | | | | | A ² sec |
| Peak forward surge current, single sine-wave superimposed on rated load (JEDEC method) | IFSM | 30 | | | | | | | A |
| Maximum instantaneous Forward Voltage Drop per element at 0.8A DC | VF | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C | IR | 5.0 500 | | | | | | | uA |
| Typical junction capacitance per leg(note1) | CJ | 15 | | | | | | | pF |
| Typical Thermal Resistance Per leg (note2) | RθJA RθJC | 75 20 | | | | | | | °C/W |
| Operating & Storage Temperature Range | Ti&Tstg | -55 to +150 | | | | | | | °C |

note1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

note2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5x0.5" (13x13mm) copper pads.

