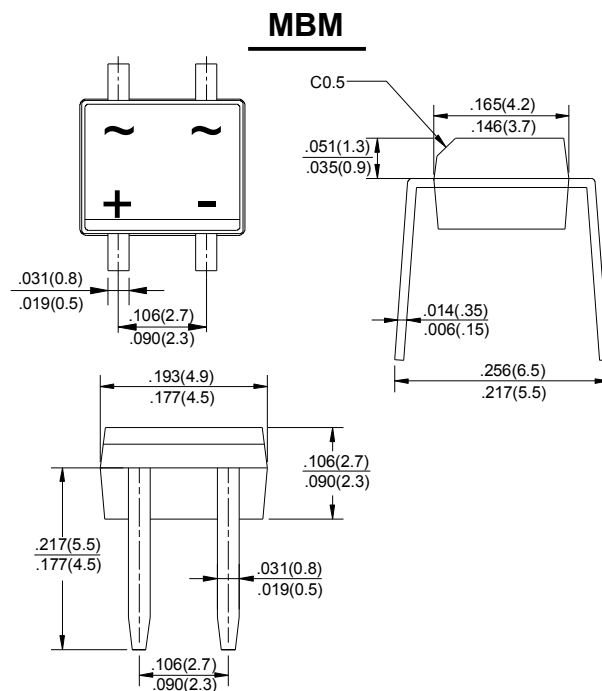


**"-G" : RoHS Device**

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin plated copper

- Polarity: Symbol molded on body
- Weight: 0.0044 ounces, 0.125 grams
- Mounting position : Any



Dimensions in inches and (millimeters)

For capacitive load, derate current by 20%

| CHARACTERISTICS                                                                                        | SYMBOL           | MB05M       | MB1M | MB2M | MB4M | MB6M | MB8M | MB10M | UNIT |
|--------------------------------------------------------------------------------------------------------|------------------|-------------|------|------|------|------|------|-------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                 | V <sub>RRM</sub> | 50          | 100  | 200  | 400  | 600  | 800  | 1000  | V    |
| Maximum RMS Voltage                                                                                    | V <sub>RMS</sub> | 35          | 70   | 140  | 280  | 420  | 560  | 700   | V    |
| Maximum DC Blocking Voltage                                                                            | V <sub>DC</sub>  | 50          | 100  | 200  | 400  | 600  | 800  | 1000  | V    |
| Maximum Average Forward Rectified Current (Note 1) @T <sub>A</sub> =40 °C                              | I(AV)            | 0.8         |      |      |      |      |      |       | A    |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load(JEDEC Method) | I(FSM)           | 30          |      |      |      |      |      |       | A    |
| Peak Forward Voltage at 0.8A DC                                                                        | V <sub>F</sub>   | 1.1         |      |      |      |      |      |       | V    |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C                                                       | I <sub>R</sub>   | 5.0         |      |      |      |      |      |       | µA   |
| at Rated DC Bolcking Voltage @T <sub>J</sub> =125°C                                                    |                  | 500         |      |      |      |      |      |       |      |
| Typical Junction Capacitance Per Element (Note2)                                                       | C <sub>J</sub>   | 15          |      |      |      |      |      |       | pF   |
| Typical Thermal Resistance (Note3)                                                                     | RθJC             | 75          |      |      |      |      |      |       | °C/W |
| Operating Temperature Range                                                                            | T <sub>J</sub>   | -55 to +150 |      |      |      |      |      |       | °C   |
| Storage Temperature Range                                                                              | T <sub>STG</sub> | -55 to +150 |      |      |      |      |      |       | °C   |

### 3. Thermal resistance junction to case.

## RATINGS AND CHARACTERISTIC CURVES MB05M-G thru MB10M-G

FIG.1-FORWARD CURRENT DERATING CURVE

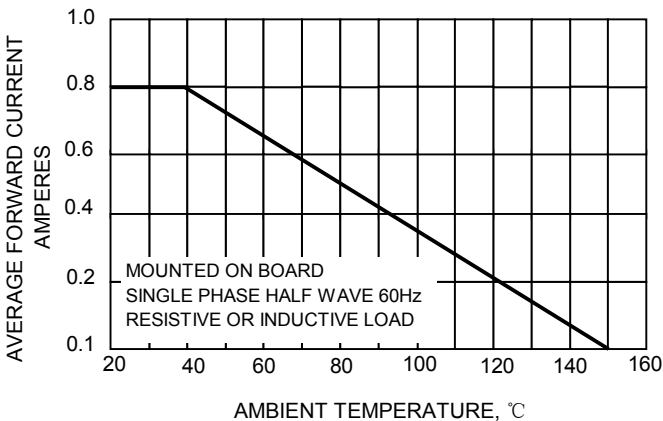


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

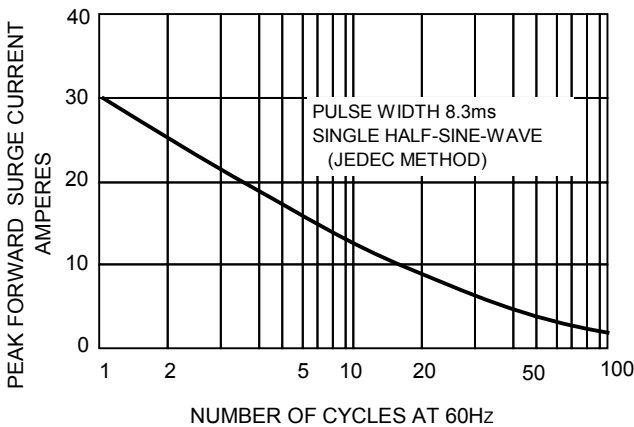


FIG.3-TYPICAL REVERSE CHARACTERISTICS

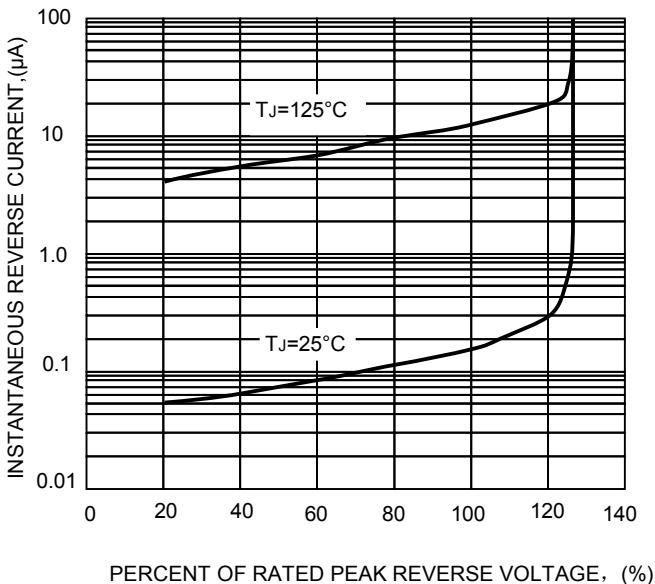


FIG.4-TYPICAL FORWARD CHARACTERISTICS

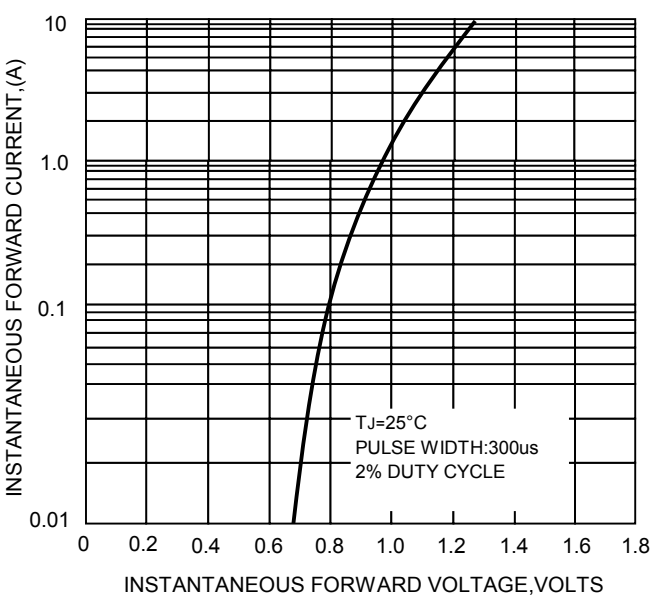
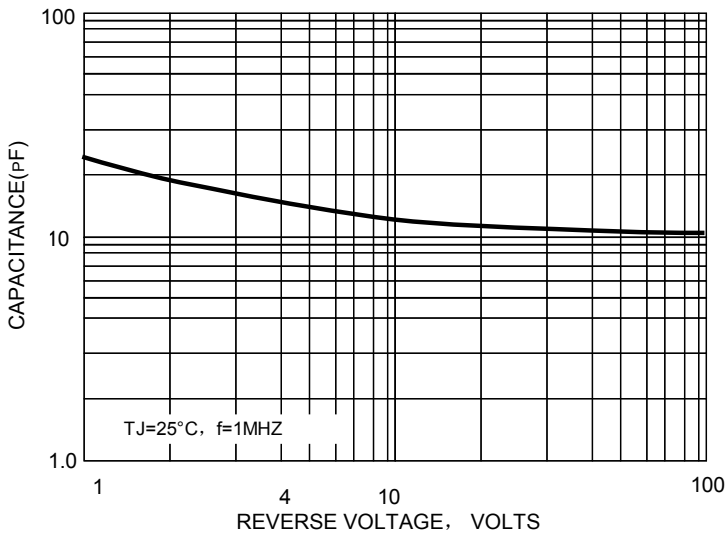


FIG.5-TYPICAL JUNCTION CAPACITANCE



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Comchip Technology:](#)

[MB05M-G](#) [MB10M-G](#) [MB4M-G](#) [MB6M-G](#)