

# Surface Mount Glass Passivated Bridge Rectifier

**multicomp** PRO

**RoHS  
Compliant**



## Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Lead tin plated copper

## Specifications

Reverse Voltage : 200 to 600 Volts  
Forward Current : 0.8 Amperes

## Mechanical Data

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

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| Characteristics  | Symbol            | MB05S       | MB1S | MB2S | MB4S | MB6S | MB8S | MB10S | Unit |
|--|-------------------|-------------|------|------|------|------|------|-------|------|
| Max. Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>  | 50          | 100  | 200  | 400  | 600  | 800  | 1,000 | V    |
| Max. RMS Voltage   | V <sub>RMS</sub>  | 35          | 70   | 140  | 280  | 420  | 560  | 700   |      |
| Max. DC Blocking Voltage   | V <sub>DC</sub>   | 50          | 100  | 200  | 400  | 600  | 800  | 1,000 |      |
| Max. Average Forward Rectified Current (Note 1) at T <sub>A</sub> = 40°C                                   | I <sub>(AV)</sub> | 0.8         |      |      |      |      |      |       | A    |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load<br>(JEDEC Method) | I <sub>FSM</sub>  | 30          |      |      |      |      |      |       |      |
| Max. Instantaneous Forward Voltage at<br>0.8A DC   | V <sub>F</sub>    | 1.1         |      |      |      |      |      |       | V    |
| Max. DC Reverse Current at T <sub>A</sub> = 25°C<br>Rated DC Blocking Voltage at T <sub>A</sub> = 125°C    | I <sub>R</sub>    | 5<br>500    |      |      |      |      |      |       | μA   |
| Typical Junction Capacitance per Element<br>(Note 2)   | C <sub>J</sub>    | 15          |      |      |      |      |      |       | pF   |
| Typical Thermal Resistance (Note 3)  | R <sub>θJC</sub>  | 75          |      |      |      |      |      |       | °C/W |
| Operating Temperature Range  | T <sub>J</sub>    | -55 to +150 |      |      |      |      |      |       | °C   |
| Storage Temperature Range  | T <sub>STG</sub>  |             |      |      |      |      |      |       |      |

### Notes:

1. Mounted on P.C. board.
2. Measured at 1.0MHz and applied reverse voltage of 4V DC.
3. Thermal resistance junction to case

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## Ratings and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

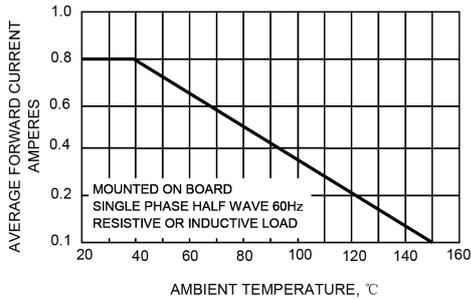


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

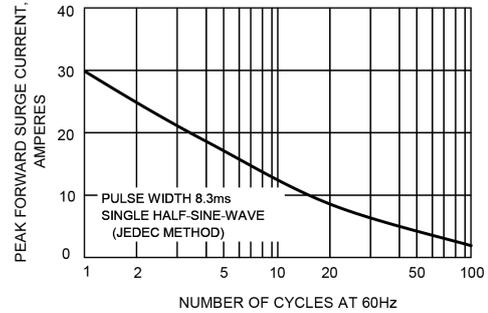


FIG.3-TYPICAL REVERSE CHARACTERISTICS

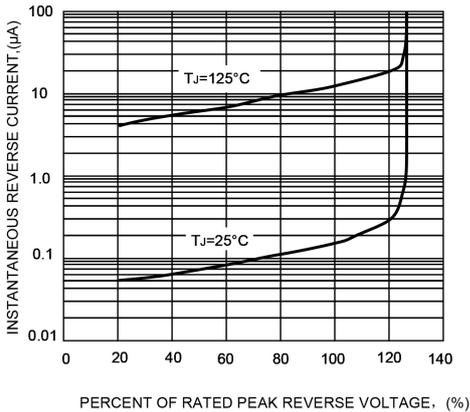


FIG.4-TYPICAL FORWARD CHARACTERISTICS

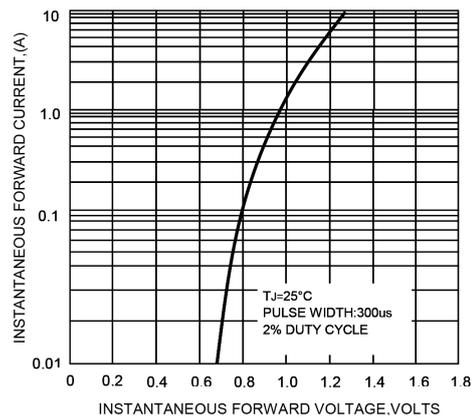
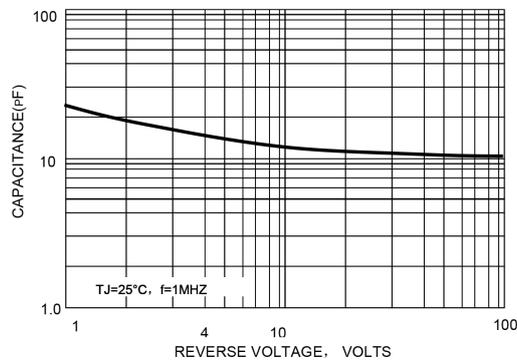


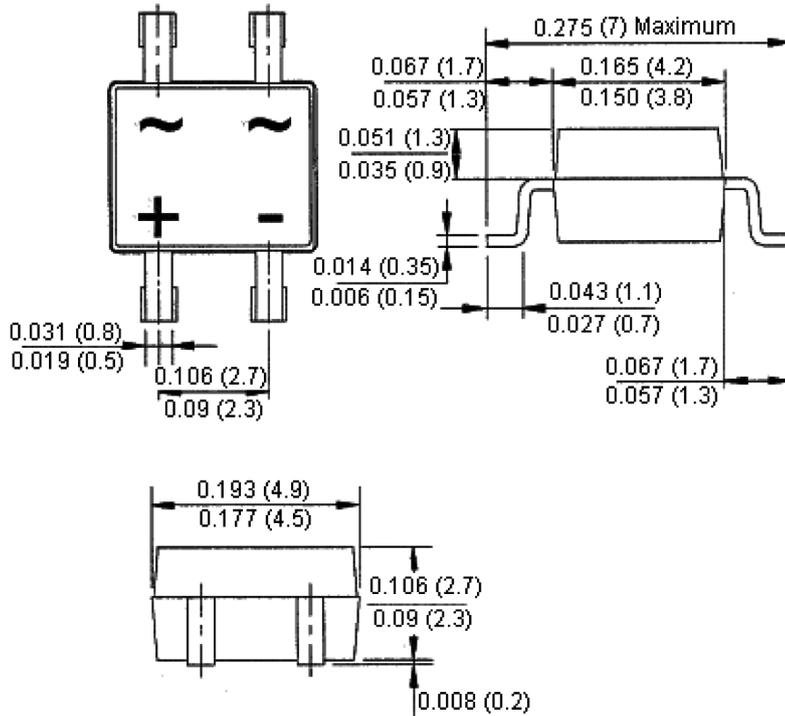
FIG.5-TYPICAL JUNCTION CAPACITANCE



# Surface Mount Glass Passivated Bridge Rectifier



## Diagram



Dimensions : Inches (Millimetres)

## Part Number Table

| Description                                      | Part Number |
|--|-------------|
| Surface Mount Glass Passivated Bridge Rectifiers | MB05S       |
|  | MB1S        |
|  | MB10S       |
|  | MB2S        |
|  | MB4S        |
|  | MB6S        |
|  | MB8S        |

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