

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 | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1,000 | V |
| Max. RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | |
| Max. DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1,000 | |
| Max. Average Forward Rectified Current (Note 1) at TA = 40°C | I(AV) | 0.8 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | IFSM | 30 | | | | | | | |
| Max. Instantaneous Forward Voltage at 0.8A DC | VF | 1.1 | | | | | | | V |
| Max. DC Reverse Current at TA = 25°C Rated DC Blocking Voltage at TA = 125°C | IR | 5 500 | | | | | | | µA |
| Typical Junction Capacitance per Element (Note 2) | CJ | 15 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | RθJC | 75 | | | | | | | °C/W |
| Operating Temperature Range | TJ | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | TSTG | | | | | | | | |

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

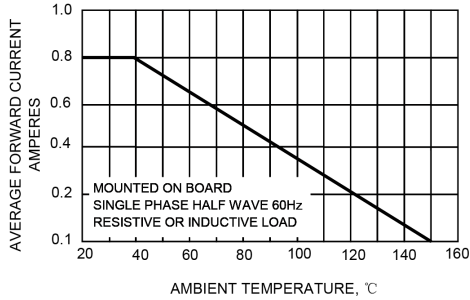


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

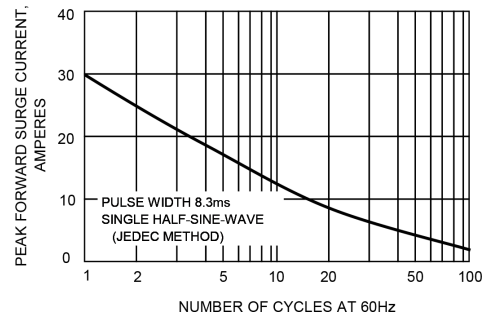


FIG.3-TYPICAL REVERSE CHARACTERISTICS

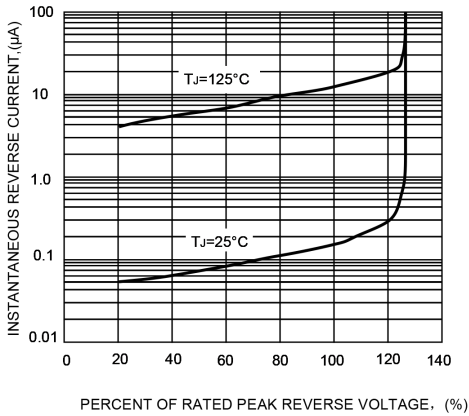


FIG.4-TYPICAL FORWARD CHARACTERISTICS

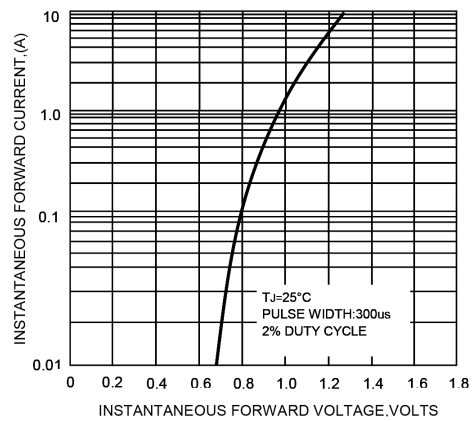
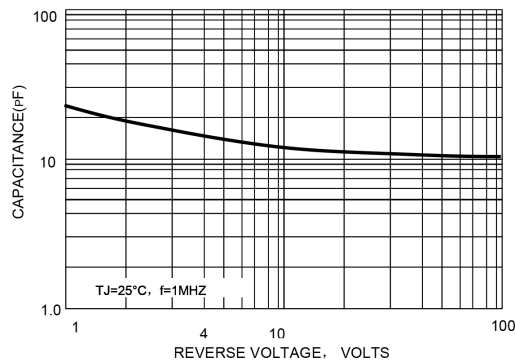


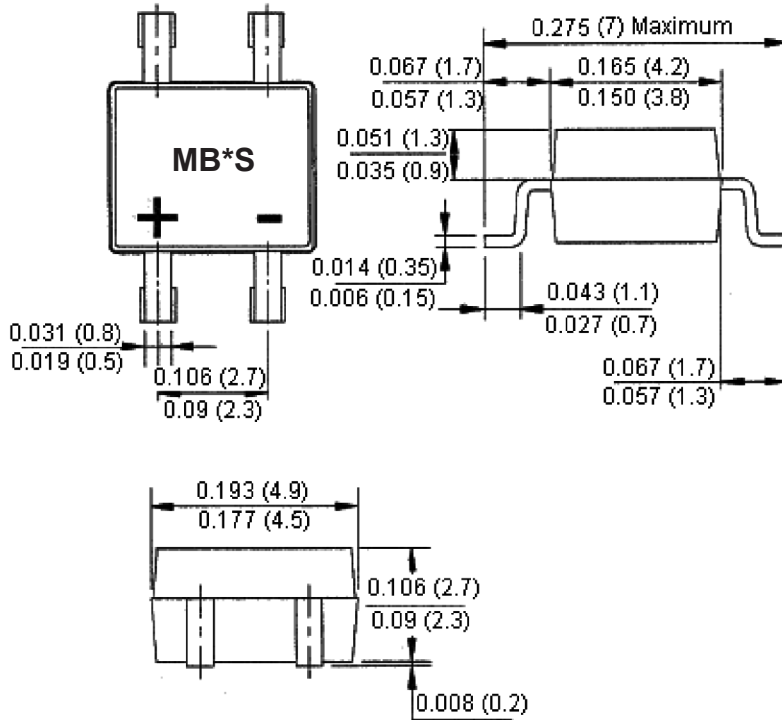
FIG.5-TYPICAL JUNCTION CAPACITANCE



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Diagram



MB*S= Specific Device Code

* = 05/1/2/4/6/8/10

Part Number Table

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

Dimensions : Inches (Millimetres)

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