# Bridge Rectifier


RoHS Compliant

## Features:

- Ideal for printed circuit board
- Reliable low cost construction utilizing moulded plastic technique
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at 5lbs., (2.3 kg) tension
- Small size, simple installation
- Pure tin plated terminal, Lead free
  Leads solderable per MIL-STD-202 Method 208.

## Maximum Ratings and Electrical Characteristics

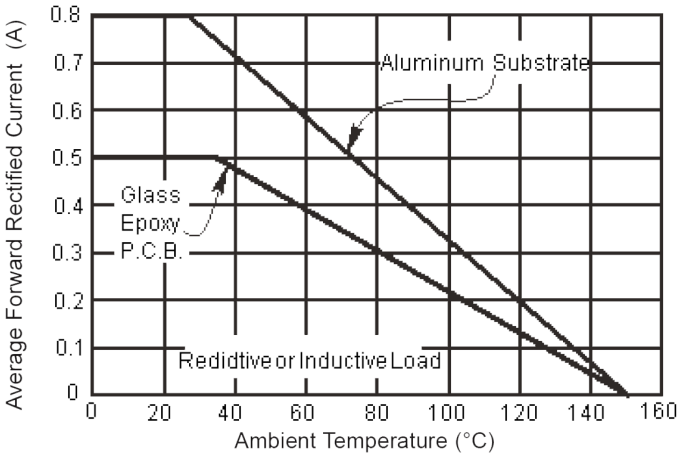
Rating at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

| Type Number | Symbol | RMB2S | RMB4S | RMB6S | Units |
|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 200 | 400 | 600 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 140 | 280 | 420 | |
| Maximum DC Blocking Voltage | $V_{DC}$ | 200 | 400 | 600 | |
| Maximum Average Forward Rectified Current<br>On glass-epoxy PCB<br>On aluminum substrate | $I_{(AV)}$ | 0.5<br>0.8 | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$ | 30 | | | |
| Maximum Instantaneous Forward Voltage at 0.4A | $V_F$ | 1 | | | V |
| Maximum DC Reverse Current at TA = 25°C<br>at Rated DC Blocking Voltage at TA = 125°C | I | 5<br>100 | | | µA |
| Maximum Reverse Recovery Time at (Note) | $T_{rr}$ | 150 | | | nS |
| Typical Junction Capacitance Per Leg | $C_j$ | 13 | | | pF |
| Typical Thermal Resistance Per Leg | $R_{\theta ja}$ | 85 | | | °C/W |
| Operating Temperature Range | $T_j$ | -55 to +150 | | | °C |
| Storage Temperature Range | $T_{STG}$ | | | | |

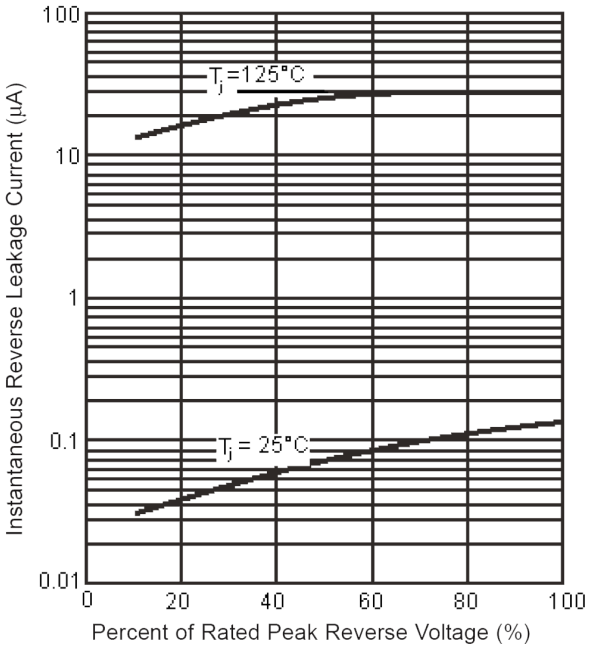
Note: Reverse Recovery Test Conditions: $I_F$ = 0.5A, $I_R$ = 1.0A, $I_{RR}$ = 0.25A.

## Ratings and Characteristic Curves (GBL01, GBL02, GBL04, GBL06, GBL08 and GBL10)

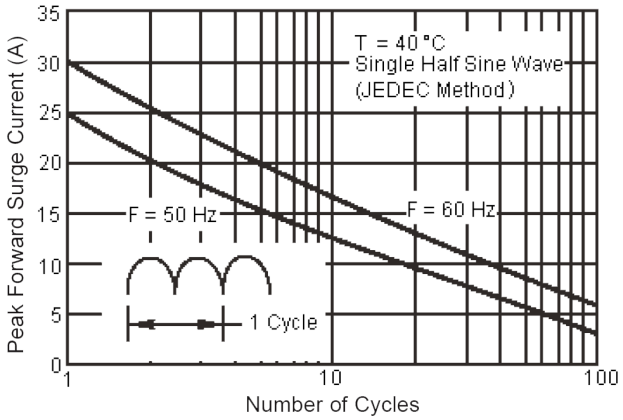
Derating Curve for Output Rectified Current



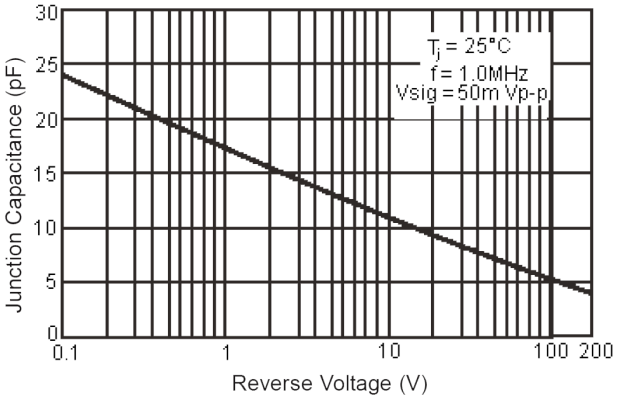

Typical Reverse Leakage Characteristics Per Leg



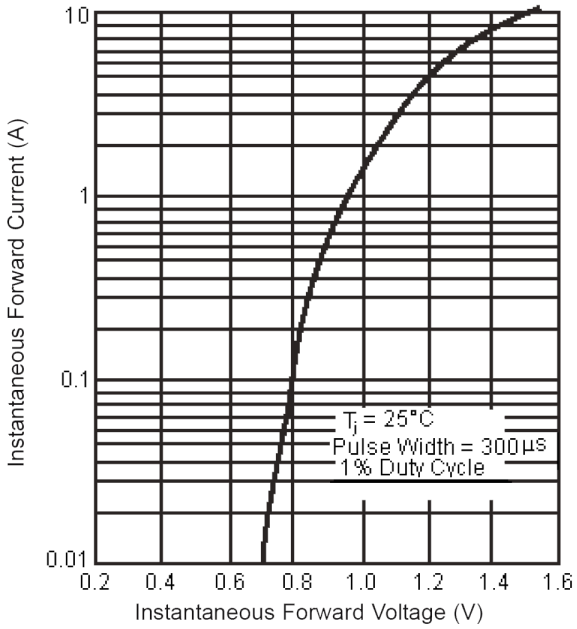

Maximum Non-Repetitive Peak Forward Surge Current Per Leg



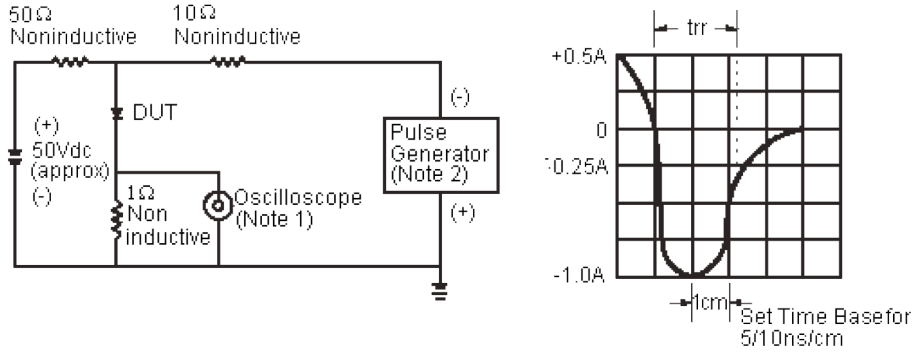

Typical Junction Capacitance Per Leg



Typical Instantaneous Forward Characteristics Per Leg



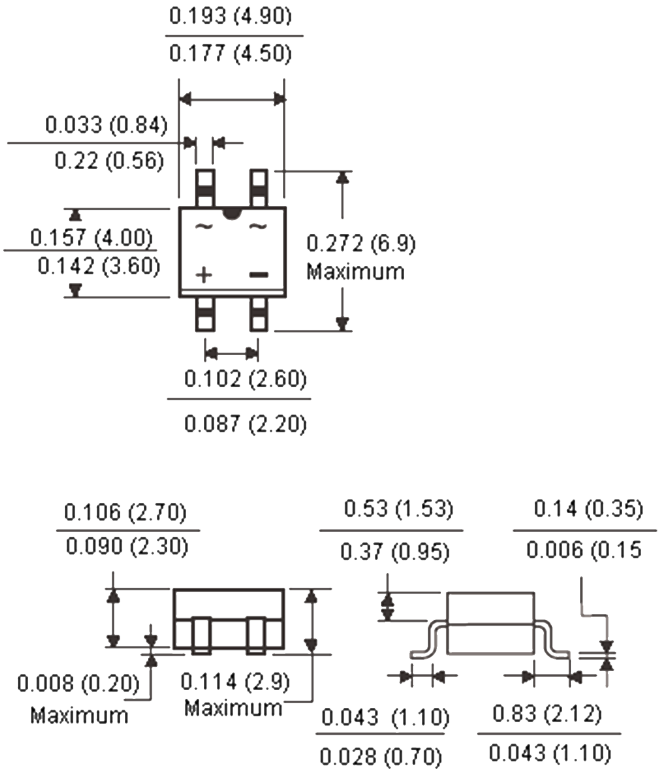

Reverse Recovery Time Characteristic and Test Circuit Diagram




Notes: 1. Rise Time = 7ns maximum Input Impedance = 1MΩ 22pf
2. Rise Time = 10ns maximum Sourse Impedance = 50Ω

# Bridge Rectifier

**MBS**




Dimensions : Inches (Millimetres)

## Part Number Table

| Description | Part Number |
|---|---|
| Bridge Rectifier, 0.5A, 200V | RMB2S |
| Bridge Rectifier, 0.5A, 400V | RMB4S |
| Bridge Rectifier, 0.5A, 600V | RMB6S |