

Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 600\text{ V} - 1000\text{ V}$

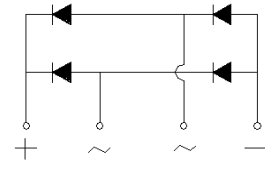
$I_O = 10\text{ A}$

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge overload rating
- High temperature soldering guaranteed: 260°C/ 10 seconds, 0.375 (9.5mm) lead length
- Not ESD Sensitive

Mechanical Data

Case: Molded plastic body over passivated junctions
 Terminals: Plated leads, solderable per MIL-STD-750 Method 2026.
 Mounting position: Any



GBU Package



Maximum ratings at $T_c = 25\text{ °C}$, unless otherwise specified

| Parameter | Symbol | Conditions | GBU10J | GBU10K | GBU10M | Unit |
|---------------------------------|-----------|------------|------------|------------|------------|------|
| Repetitive peak reverse voltage | V_{RRM} | | 600 | 800 | 1000 | V |
| RMS reverse voltage | V_{RMS} | | 420 | 560 | 700 | V |
| DC blocking voltage | V_{DC} | | 600 | 800 | 1000 | V |
| Operating temperature | T_j | | -55 to 150 | -55 to 150 | -55 to 150 | °C |
| Storage temperature | T_{stg} | | -55 to 150 | -55 to 150 | -55 to 150 | °C |

Electrical characteristics at $T_c = 25\text{ °C}$, unless otherwise specified

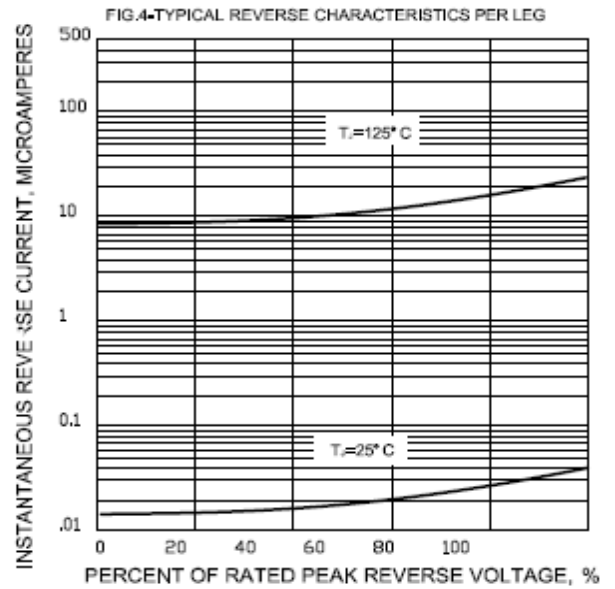
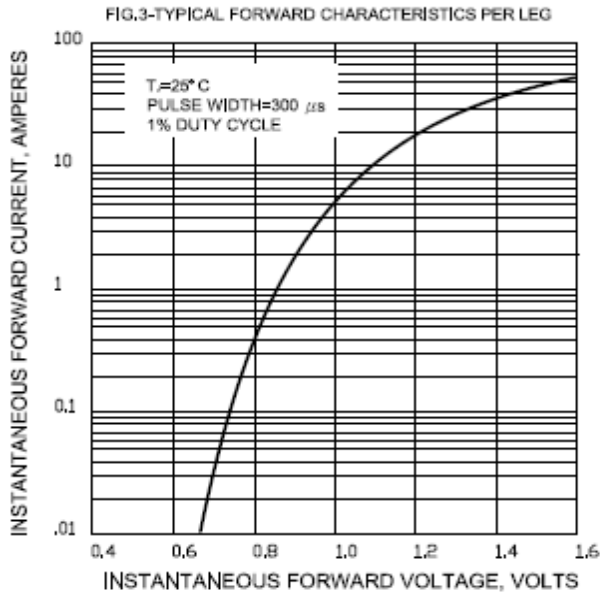
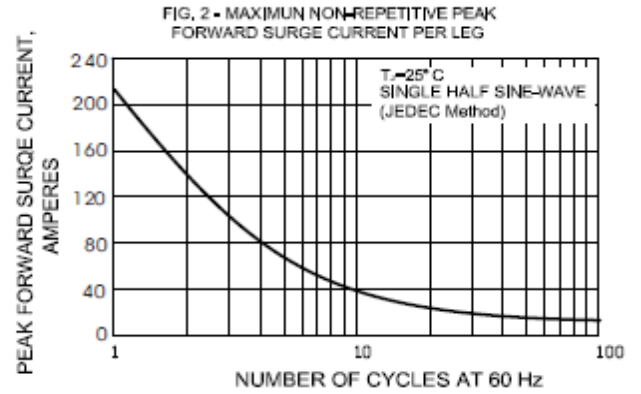
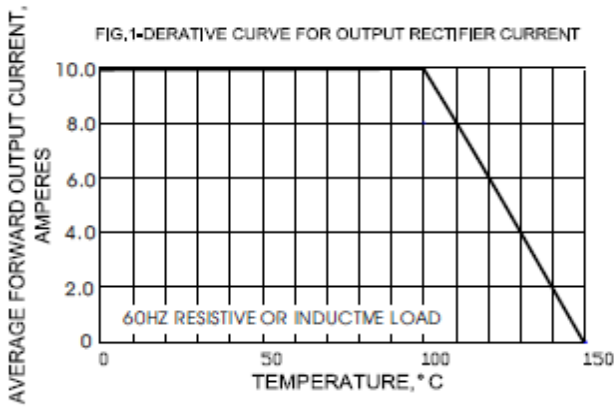
Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load derate current by 20%.

| Parameter | Symbol | Conditions | GBU10J | GBU10K | GBU10M | Unit |
|---|-----------------|---|----------|----------|----------|---------------|
| Maximum average forward rectified current ^{1,2} | I_O | $T_c = 100\text{ °C}$ | 10.0 | 10.0 | 10.0 | A |
| Peak forward surge current | I_{FSM} | $t_p = 8.3\text{ ms}$, half sine | 220 | 220 | 220 | A |
| Maximum instantaneous forward voltage drop per leg | V_F | $I_F = 10\text{ A}$ | 1.1 | 1.1 | 1.1 | V |
| Maximum DC reverse current at rated DC blocking voltage per leg | I_R | $T_a = 25\text{ °C}$ $T_a = 125\text{ °C}$ | 5 500 | 5 500 | 5 500 | μA |
| Typical junction capacitance per leg ³ | C_j | | 70 | 70 | 70 | pF |
| Typical thermal resistance per leg ^{1,2} | $R_{\theta JC}$ | | 2.2 | 2.2 | 2.2 | °C/W |

¹ - Device mounted on 100 mm x 100 mm x 1.6 mm Cu plate heatsink

² - Recommended mounted position is to bolt down device on a heatsink with silicon thermal compound for maximum heat transfer using #6 screw.

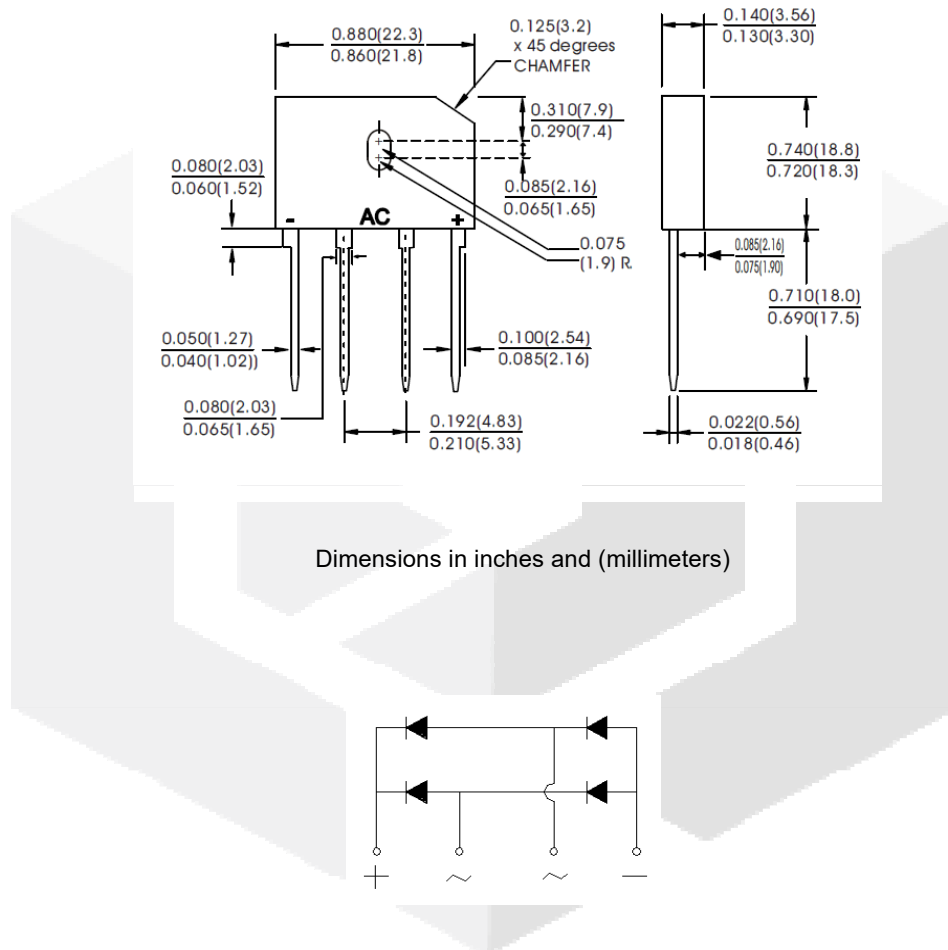
³ - Measured at 1.0 MHz and applied reverse bias of 4.0 V



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

GBU



Dimensions in inches and (millimeters)

Mouser Electronics

Authorized Distributor

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