

Single Phase Glass Passivated Silicon Bridge Rectifier

$$V_{RRM} = 50 \text{ V} - 400 \text{ V}$$

$$I_O = 4 \text{ A}$$

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

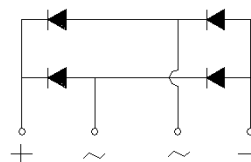
Mechanical Data

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 Tc = 25 °C, unless otherwise specified

| Parameter | Symbol | Conditions | GBU4A | GBU4B | GBU4D | GBU4G | Unit |
|---------------------------------|-----------|------------|------------|------------|------------|------------|------|
| Repetitive peak reverse voltage | V_{RRM} | | 50 | 100 | 200 | 400 | V |
| RMS reverse voltage | V_{RMS} | | 35 | 70 | 140 | 280 | V |
| DC blocking voltage | V_{DC} | | 50 | 100 | 200 | 400 | V |
| Operating temperature | T_j | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | °C |
| Storage temperature | T_{stg} | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | °C |

Electrical characteristics at Tc = 25 °C, unless otherwise specified

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

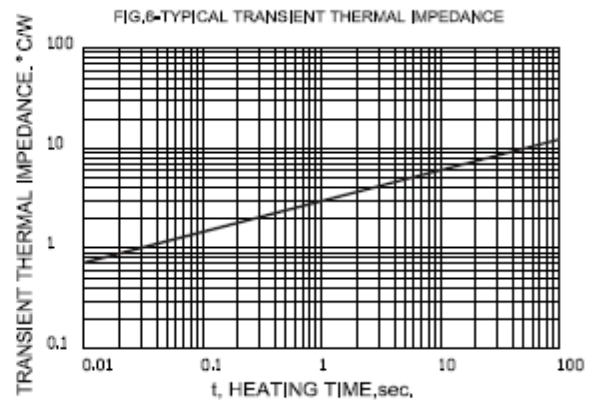
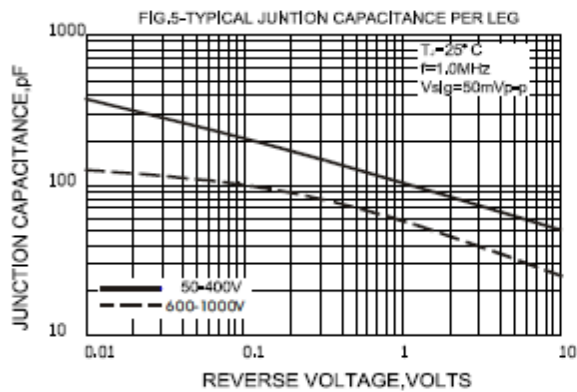
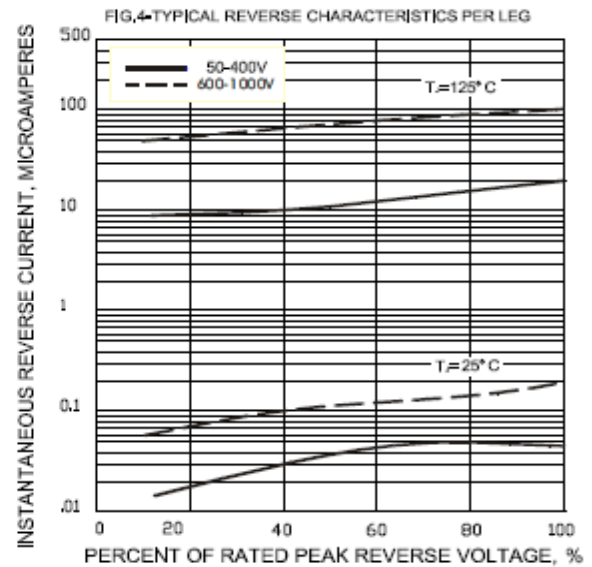
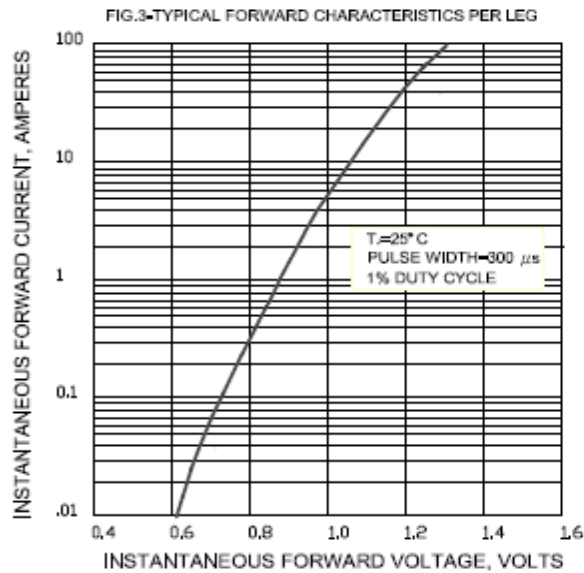
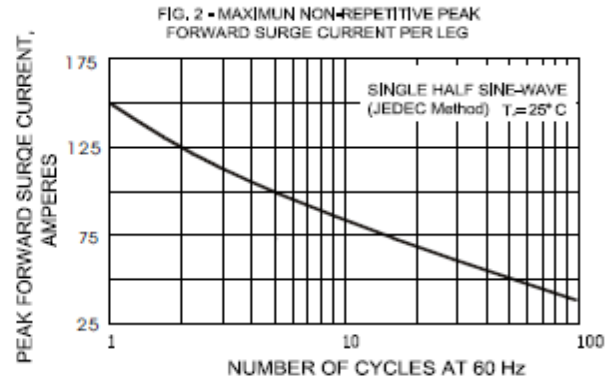
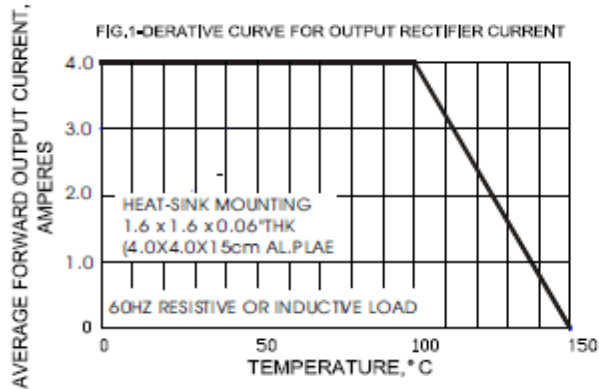
For capacitive load derate current by 20%

| Parameter | Symbol | Conditions | GBU4A | GBU4B | GBU4D | GBU4G | Unit |
|---|-----------------|-----------------------------------|-------|-------|-------|-------|--------------------|
| Maximum average forward rectified current ^{1,2} | I_O | $T_c = 100 \text{ °C}$ | 4.0 | 4.0 | 4.0 | 4.0 | A |
| Peak forward surge current | I_{FSM} | $t_p = 8.3 \text{ ms, half sine}$ | 150 | 150 | 150 | 150 | A |
| Maximum instantaneous forward voltage drop per leg | V_F | $I_F = 4 \text{ A}$ | 1.1 | 1.1 | 1.1 | 1.1 | V |
| Maximum DC reverse current at rated DC blocking voltage per leg | I_R | $T_a = 25 \text{ °C}$ | 5 | 5 | 5 | 5 | μA |
| | | $T_a = 125 \text{ °C}$ | 500 | 500 | 500 | 500 | |
| Rating for fusing | I^2t | $t < 8.3 \text{ ms}$ | 93 | 93 | 93 | 93 | A ² sec |
| Typical junction capacitance per leg ³ | C_j | | 100 | 100 | 100 | 100 | pF |
| Typical thermal resistance per leg ^{1,2} | $R_{\theta JA}$ | | 22 | 22 | 22 | 22 | °C/W |
| | $R_{\theta JL}$ | | 4.2 | 4.2 | 4.2 | 4.2 | |

¹ - Device mounted on 40 mm x 40 mm x 1.5 mm Al 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.

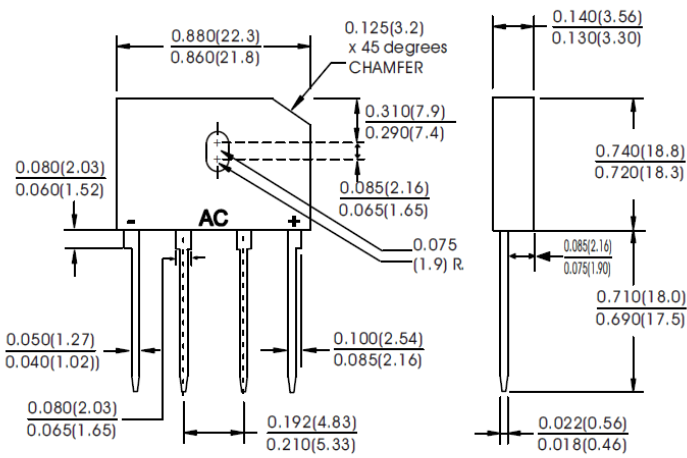
³ - Measured at 1.0 MHz and applied reverse bias of 4.0 V



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

GBU



Dimensions in inches and (millimeters)

