

Single Phase Glass Passivated Silicon Bridge Rectifier

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

$I_O = 4\text{ A}$

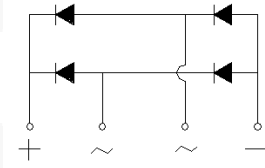
Features

- 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 $T_c = 25\text{ }^\circ\text{C}$, 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 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |

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

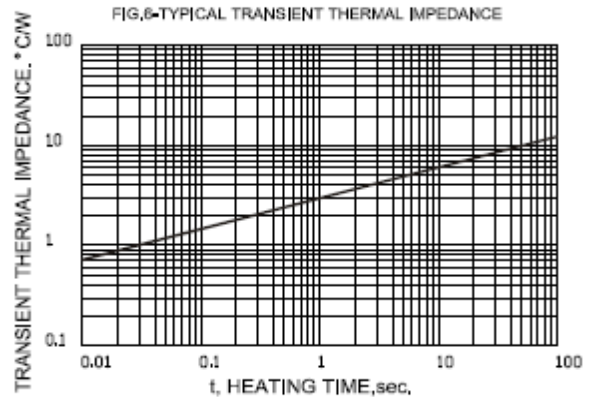
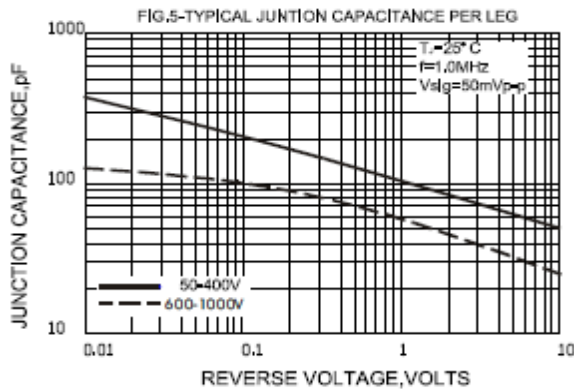
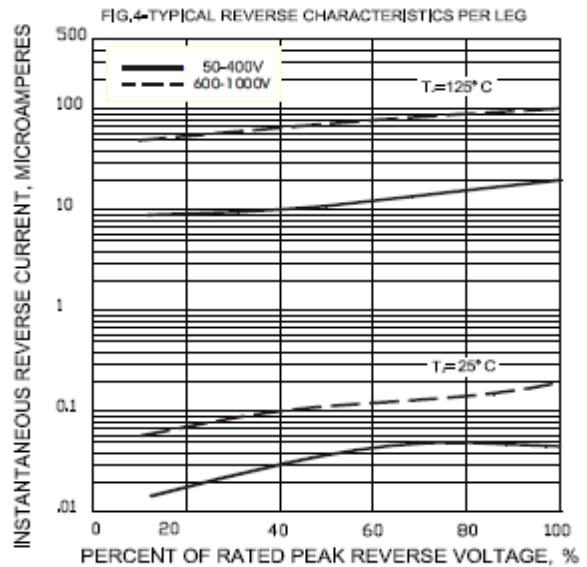
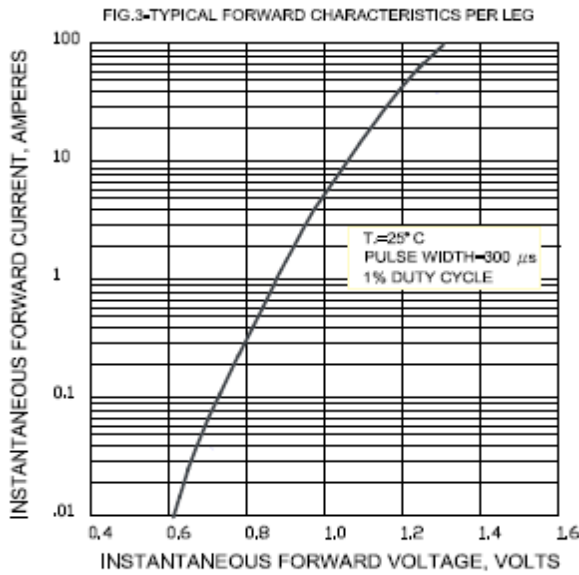
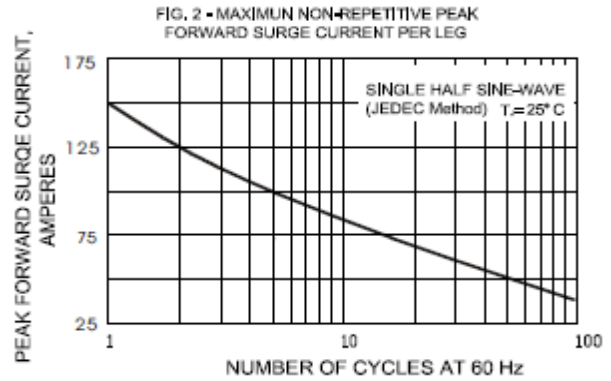
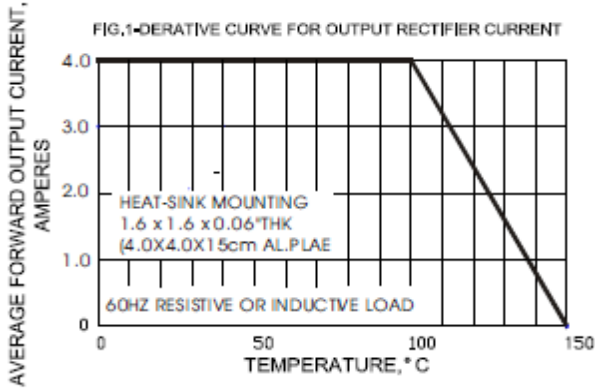
Single phase, half sine wave, 60 Hz, resistive or inductive load
 For capacitive load derate current by 20%

| Parameter | Symbol | Conditions | GBU4A | GBU4B | GBU4D | GBU4G | Unit |
|---|-----------------|-----------------------------------|-------|-------|-------|-------|------------------------|
| Maximum average forward rectified current ^{1,2} | I_O | $T_c = 100\text{ }^\circ\text{C}$ | 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 | $T_a = 25\text{ }^\circ\text{C}$ | 5 | 5 | 5 | 5 | μA |
| | | $T_a = 125\text{ }^\circ\text{C}$ | 500 | 500 | 500 | 500 | |
| Rating for fusing | I^2t | $t < 8.3\text{ ms}$ | 93 | 93 | 93 | 93 | A^2sec |
| 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 | |
| | $R_{\theta JL}$ | | 4.2 | 4.2 | 4.2 | 4.2 | $^\circ\text{C/W}$ |

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

