

GBU8005-GBU810

Single-Phase 8.0A Glass Passivated Bridge Rectifier

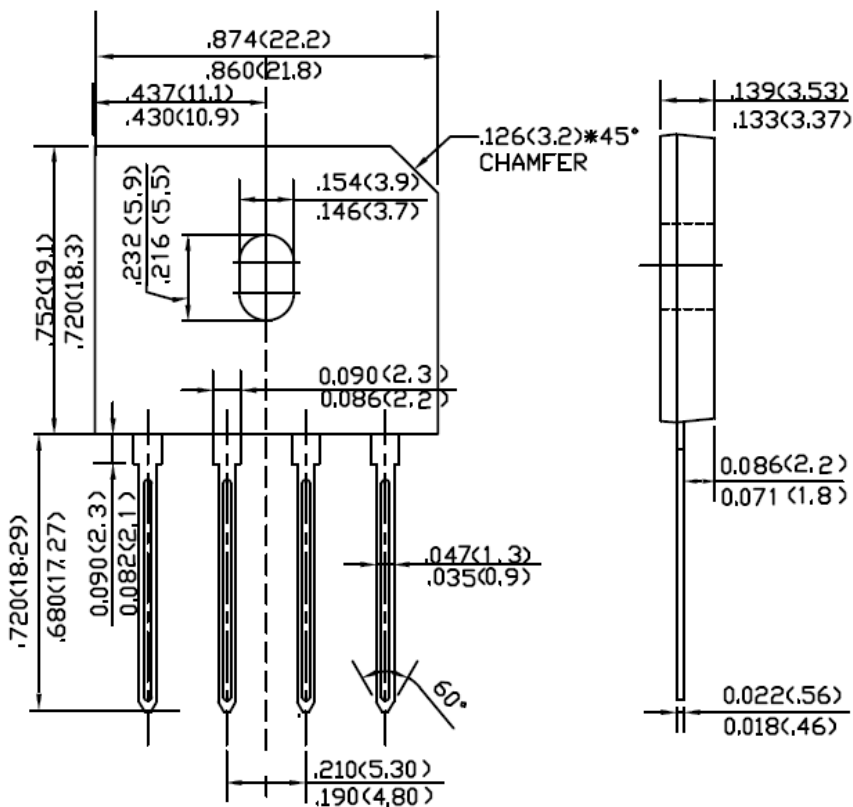
Features:

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data:

- Case: GBU, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version

Mechanical Dimensions: In Inches/mm



GBU

MARKING, MOLDING RESIN

Marking for Type Number, 1st row SSG YYWWL, 2nd row Type Number
 Where YY is the manufacture year
 WW is the manufacture week code
 L is the wafer's Lot Number

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%

Maximum Ratings:

| Type Number | Symbol | GBU 8005 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | Unit |
|---|------------------------------------|----------|---------|---------|---------|---------|---------|---------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 580 | 700 | V |
| Average forward rectified output current (Note 1) @ $T_A = 55^\circ\text{C}$ | I_O | 8.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150 | | | | | | | A |

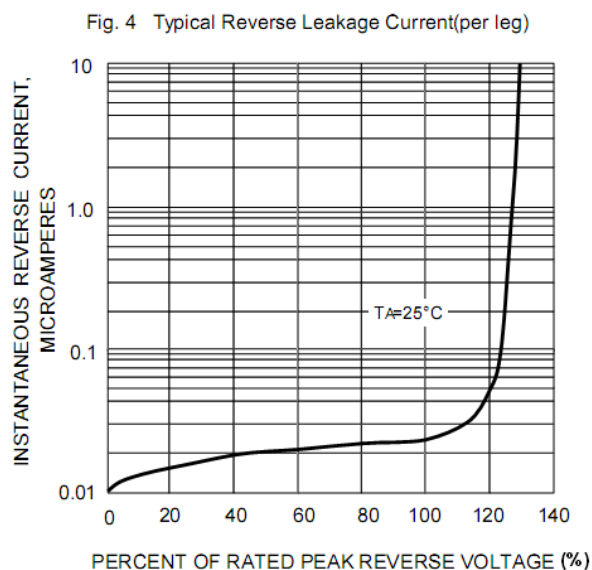
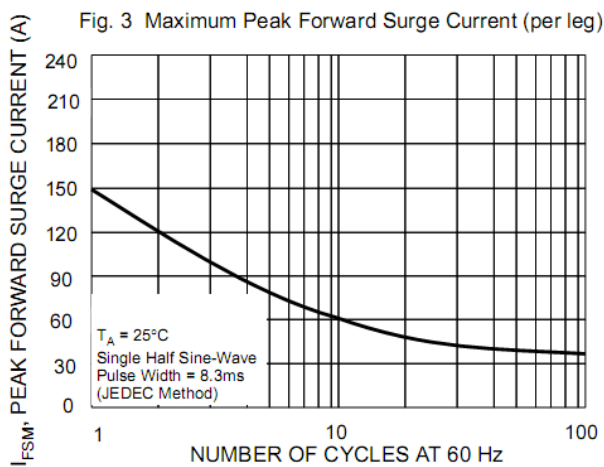
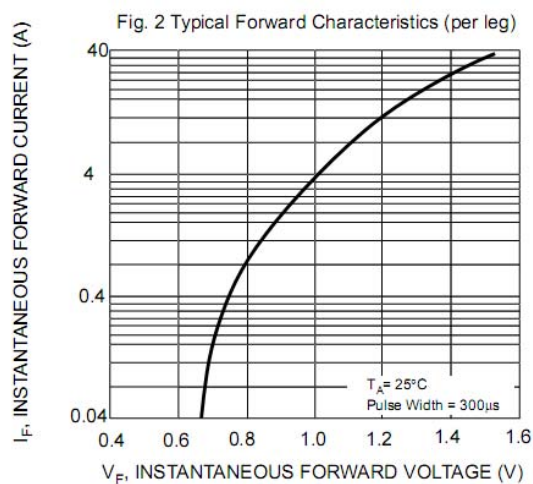
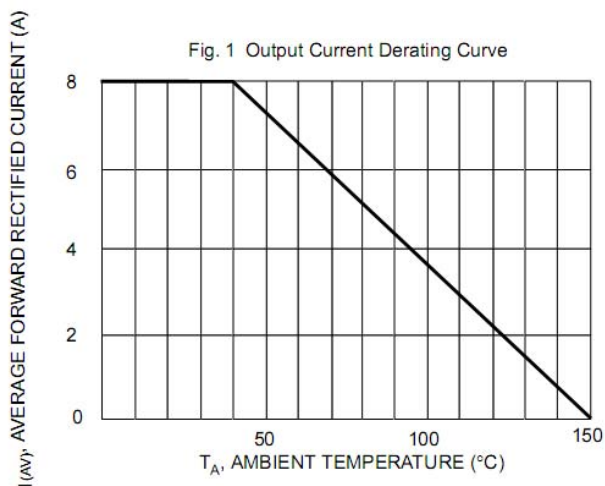
Electrical Characteristics:

| Type Number | Symbol | GBU 8005 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | Unit | |
|---|----------|------------|---------|---------|---------|---------|---------|---------|------|---------------|
| Forward Voltage (per element) @ $I_F = 4\text{A}$ @ $I_F = 8\text{A}$ | V_F | 1.0 1.1 | | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$ | I_{RM} | 5.0 500 | | | | | | | | μA |
| Typical Junction Capacitance(per leg) (Note 2) | C_J | 75 | | | | | | | | pF |

Thermal-Mechanical Specifications:

| Type Number | Symbol | GBU 8005 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | Unit | |
|---|------------------------------------|-------------|---------|---------|---------|---------|---------|---------|------------------|--------------------|
| Typical Thermal Resistance (per leg) | $R_{\theta JA}$ $R_{\theta JL}$ | 21 2.2 | | | | | | | | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ | |
| Case Style | | GBU | | | | | | | | |

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.





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