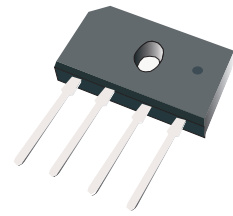


GBU25005-G Thru. GBU2510-G

Reverse Voltage: 50 to 1000V

Forward Current: 25.0A

RoHS Device

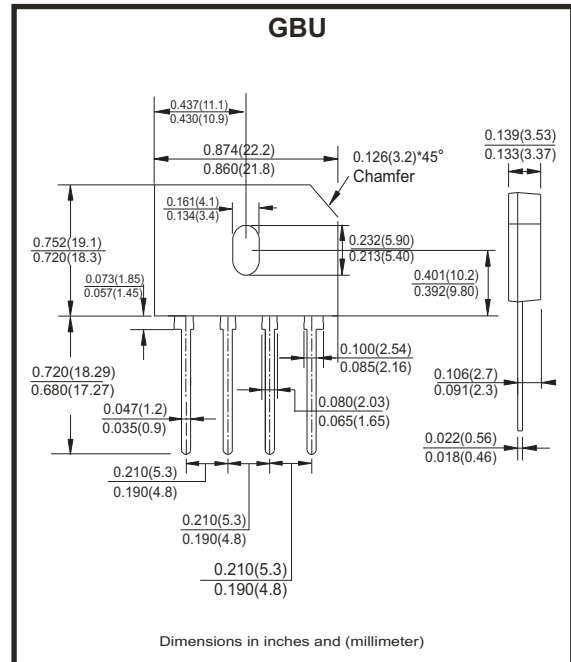


Features

- Surge overload rating - 350 amperes peak.
- Ideal for printed circuit board

Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic, GBU
- Mounting position: Any
- Weight: 3.91grams



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%

| Parameter | Symbol | GBU 25005-G | GBU 2501-G | GBU 2502-G | GBU 2504-G | GBU 2506-G | GBU 2508-G | GBU 2510-G | Unit |
|--|-----------------|-------------|------------|------------|------------|------------|------------|------------|----------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward (With heatsink Note2) Rectified Current @ $T_c=100^\circ\text{C}$ (without hestsink) | I_{AV} | 25.0 4.2 | | | | | | | A |
| Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load | I_{FSM} | 350 | | | | | | | A |
| Maximum Forward Voltage at 12.5A | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rate DC Blocking Voltage @ $T_J=125^\circ\text{C}$ | I_R | 10.0 500 | | | | | | | μA |
| $I^2 T$ Rating for Fusing($t<8.3\text{ms}$) | $I^2 t$ | 200 | | | | | | | A^2s |
| Typical Junction Capacitandce Per Element (Note 1) | C_J | 70 | | | | | | | pF |
| Typical Thermal Resistance | $R_{\theta JA}$ | 2.2 | | | | | | | $^\circ\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 100mm*100mm*1.6mm Cu plate heatsink.

Glass Passivated Bridge Rectifiers

Rating and Characteristics Curves (GBU25005-G Thru. GBU2510-G)

Fig.1 - Derating Curve Output Rectified Current

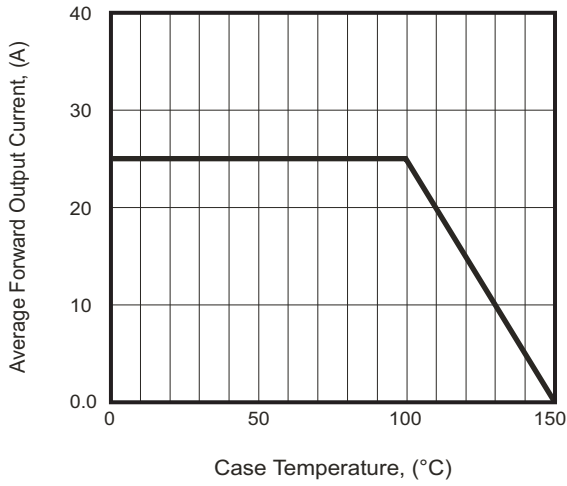


Fig.2 - Typical Forward Characteristics

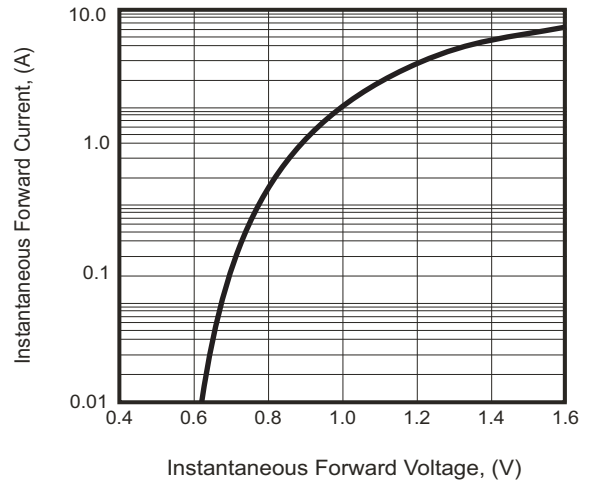


Fig.3 - Maximum Forward Surge Current

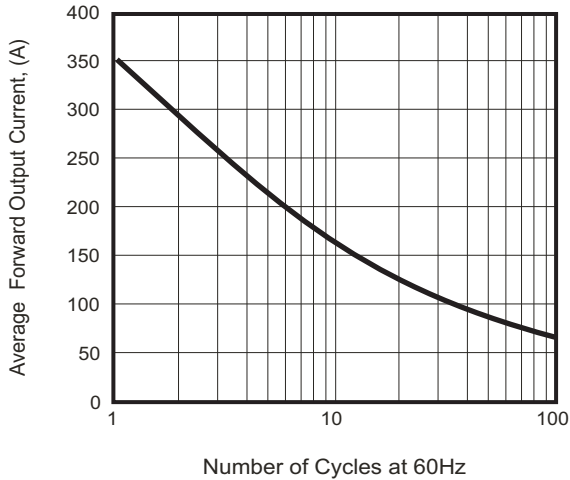
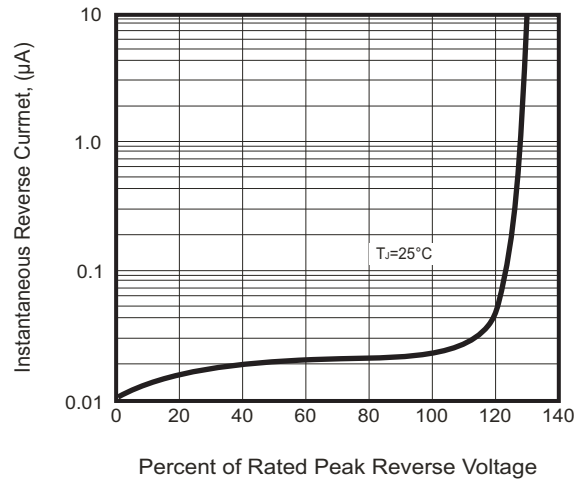
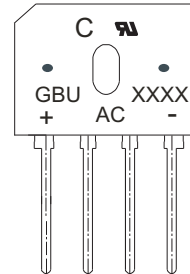


Fig.4 - Typical Reverse Characteristics



Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBU25005-G | GBU25005 |
| GBU2501-G | GBU2501 |
| GBU2502-G | GBU2502 |
| GBU2504-G | GBU2504 |
| GBU2506-G | GBU2506 |
| GBU2508-G | GBU2508 |
| GBU2510-G | GBU2510 |



XXXX / XXXXX = Product type marking code
 C = Compchip Logo

Standard Packaging

| Case Type | TUBE PACK | |
|-----------|-----------------|----------------|
| | TUBE (pcs) | BOX (pcs) |
| GBU | 20 | 1,000 |