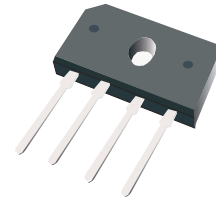


GBU15005-G Thru. GBU1510-G

Reverse Voltage: 50 to 1000V

Forward Current: 15.0A

RoHS Device

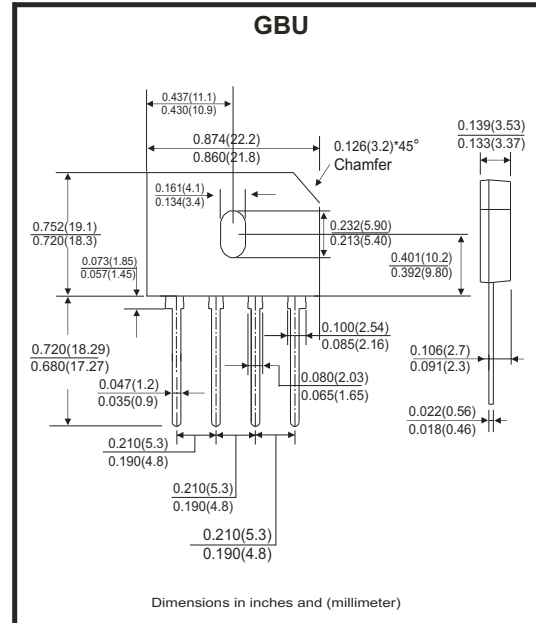


Features

- Surge overload rating - 240 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 15005-G | GBU 1501-G | GBU 1502-G | GBU 1504-G | GBU 1506-G | GBU 1508-G | GBU 1510-G | Unit | |
|---|-----------|-------------|------------|------------|------------|------------|------------|------------|------|------------------|
| Maximum Reverse Peak Repetitive 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 @Tc=100°C (without hestsink) | I_{AV} | 15.0 | | | | | | 3.2 | | A |
| Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load(JEDEC Method) | I_{FSM} | 240 | | | | | | | | A |
| Maximum Forward Voltage at 7.5A | V_F | 1.1 | | | | | | | | V |
| Maximum DC Reverse Current @Tj=25°C At Rate DC Blocking Voltage @Tj=125°C | I_R | 10.0 | | | | | | 500 | | μA |
| I ² T Rating for Fusing(t<8.3ms) | I^2t | 200 | | | | | | | | A ² s |
| Typical Junction Capacitandce Per Element (Note 1) | C_J | 70 | | | | | | | | pF |
| Typical Thermal Resistance | $R_{θJC}$ | 2.2 | | | | | | | | °C/W |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | °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 (GBU15005-G Thru. GBU1510-G)

Fig.1- Derating Curve Output Rectified Current

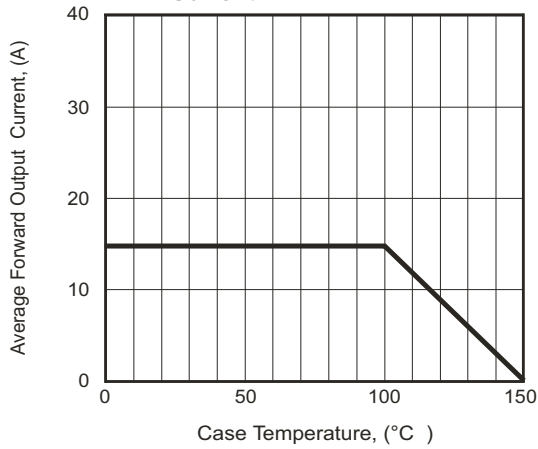


Fig.2- Maximum Forward Surge Current

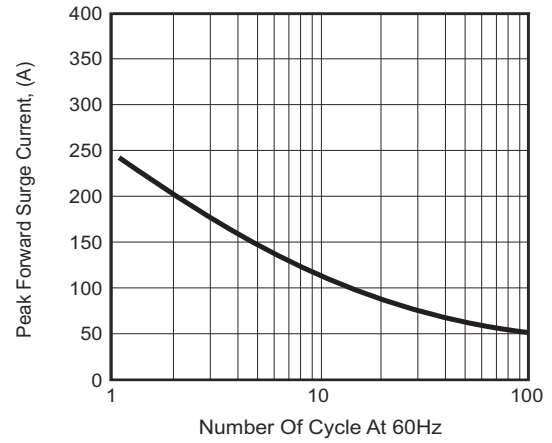


Fig.3- Typical Forward Characteristics

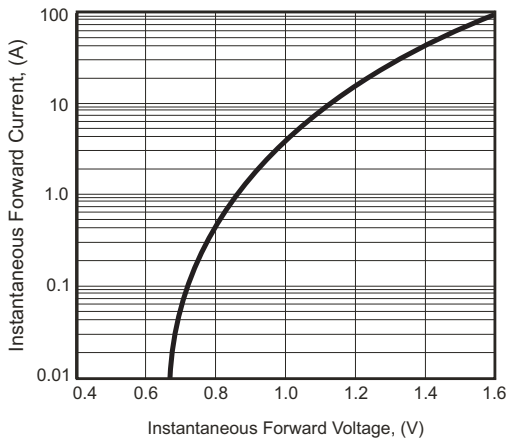
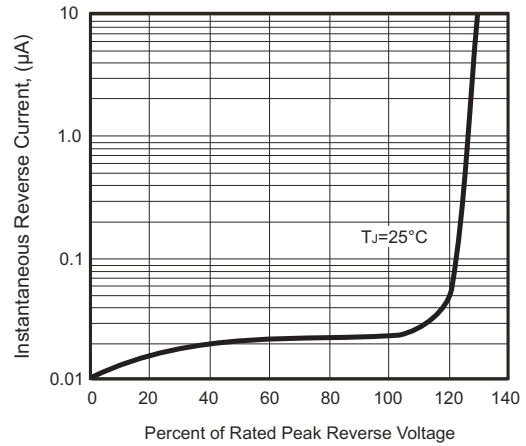
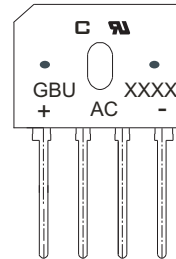


Fig.4- Typical Reverse Characteristics



Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBU15005-G | GBU15005 |
| GBU1501-G | GBU1501 |
| GBU1502-G | GBU1502 |
| GBU1504-G | GBU1504 |
| GBU1506-G | GBU1506 |
| GBU1508-G | GBU408 |
| GBU1510-G | GBU1510 |



XXXX / XXXXX = Product type marking code
☐ = Comchip Logo

Standard Packaging

| Case Type | TUBE PACK | | |
|-----------|--------------|-------------|----------------|
| | TUBE (EA) | BOX (EA) | CARTON (EA) |
| GBU | 20 | 1,000 | 2,000 |