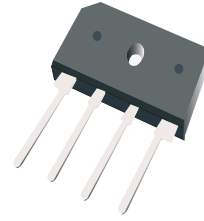


GBU6005-G Thru. GBU610-G

Reverse Voltage: 50 to 1000V

Forward Current: 6.0A

RoHS Device

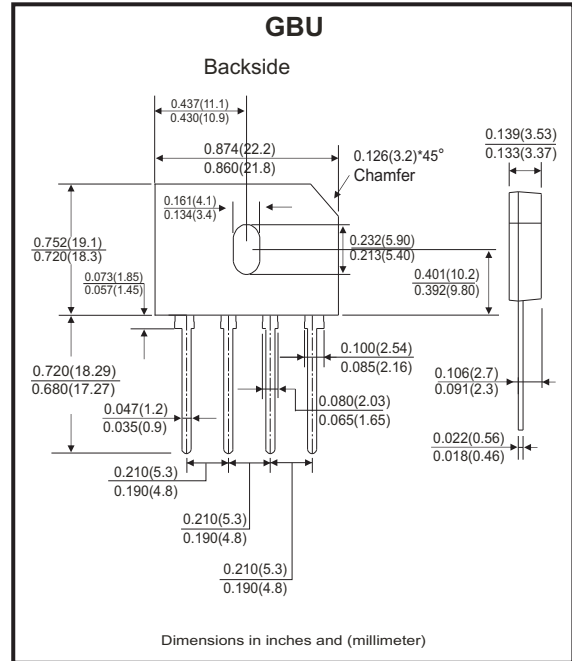


Features

- Surge overload rating -175 amperes peak.
- Ideal for printed circuit board.
- UL recognized file # E349301

Mechanical Data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: Molded plastic, GBU
- Mounting position: Any.
- Weight: 3.91 grams (approx.).



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 6005-G | GBU 601-G | GBU 602-G | GBU 604-G | GBU 606-G | GBU 608-G | GBU 610-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 @Tc=100°C (without heatsink) | I_{AV} | | | | | 6.0 | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method) | I_{FSM} | | | | | 175 | | | | A |
| Maximum Forward Voltage at 3.0A DC | V_F | | | | | 1.0 | | | | V |
| Maximum DC Reverse Current @Tj=25°C At Rate DC Blocking Voltage @Tj=125°C | I_R | | | | | 10.0 | | | | μA |
| $I^2 T$ Rating for Fusing(t<8.3ms) | $I^2 t$ | | | | | 127 | | | | A ² s |
| Typical Junction Capacitance Per Element (Note 1) | C_J | | | | | 50 | | | | pF |
| Typical Thermal Resistance | $R_{\theta JC}$ | | | | | 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 75mm*75mm*1.6mm Cu plate heatsink.

Company reserves the right to improve product design , functions and reliability without notice.

REV: D

Rating and Characteristics Curves (GBU6005-G Thru. GBU610-G)

Fig.1 - Forward Current Derating Curve

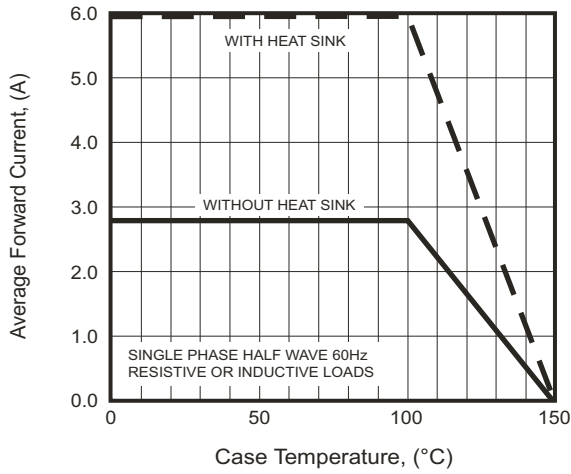


Fig.2 - Typical Forward Characteristics

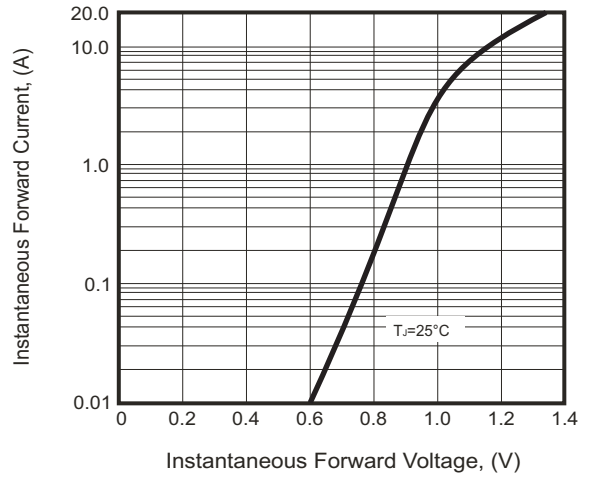


Fig.3 - Maximum Non-Repetitive Surge Current

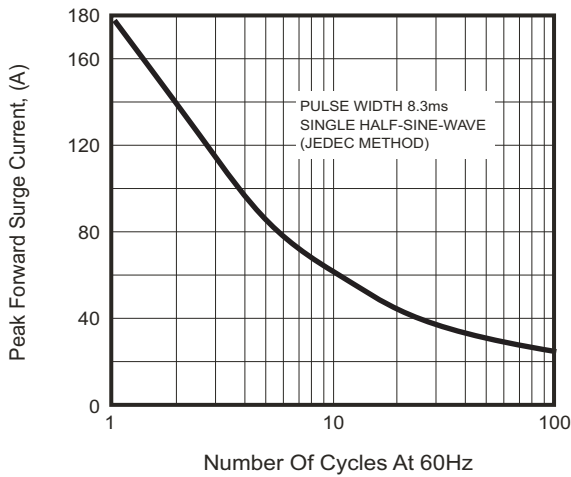


Fig.4 - Typical Junction Capacitance

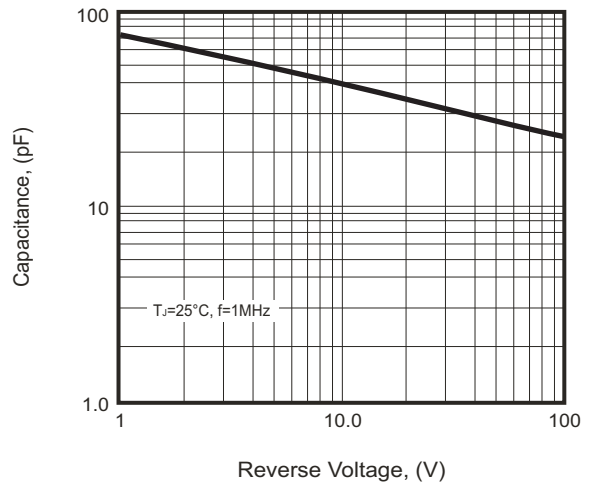
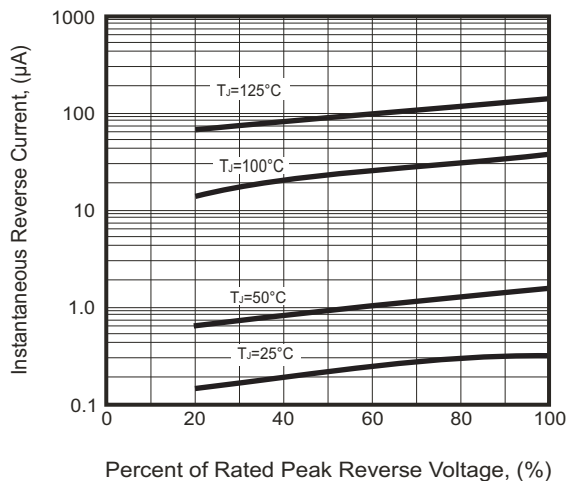


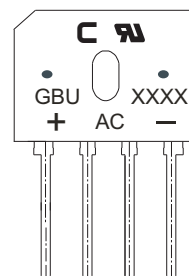
Fig.5 - Typical Reverse Characteristics



Company reserves the right to improve product design, functions and reliability without notice.

Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBU6005-G | GBU6005 |
| GBU601-G | GBU601 |
| GBU602-G | GBU602 |
| GBU604-G | GBU604 |
| GBU606-G | GBU606 |
| GBU608-G | GBU608 |
| GBU610-G | GBU610 |



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

Standard Packaging

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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bridge Rectifiers](#) category:

Click to view products by [Comchip](#) manufacturer:

Other Similar products are found below :

[MB252](#) [MB356G](#) [MB358G](#) [MP358-BP](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15J-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU4D-BP](#) [GBU6B-E3/45](#)
[GSIB680-E3/45](#) [DB101-BP](#) [DF01](#) [DF10SA-E345](#) [BU1508-E3/45](#) [KBPC50-10S](#) [RS405GL-BP](#) [G5SBA60-E3/51](#) [GBJ1502-BP](#) [GBU10J-BP](#)
[GBU4J-BP](#) [GBU6M](#) [GBU8D-BP](#) [GBU8J-BP](#) [GSIB1520-E3/45](#) [TB102M](#) [MB1510](#) [MB6M-G](#) [MB86](#) [TL401G](#) [MDA920A2](#) [TU602](#) [TU810](#)
[MP501W-BP](#) [MP502-BP](#) [BR1005-BP](#) [BR101-BP](#) [BR84DTP204](#) [BU1010A-E3/51](#) [BU2006-E3/45](#) [BU2008-E3/51](#) [KBPC25-02](#) [VS-](#)
[60MT120KPBF](#) [DB105-BP](#) [DF1510S](#) [VS-40MT160PAPBF](#) [GBU4G-BP](#) [GBJ2506-BP](#) [GBU6B-E3/51](#)