



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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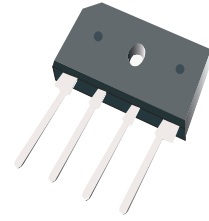


GBU25005-G Thru. GBU2510-G

Reverse Voltage: 50 to 1000V

Forward Current: 25.0A

RoHS Device

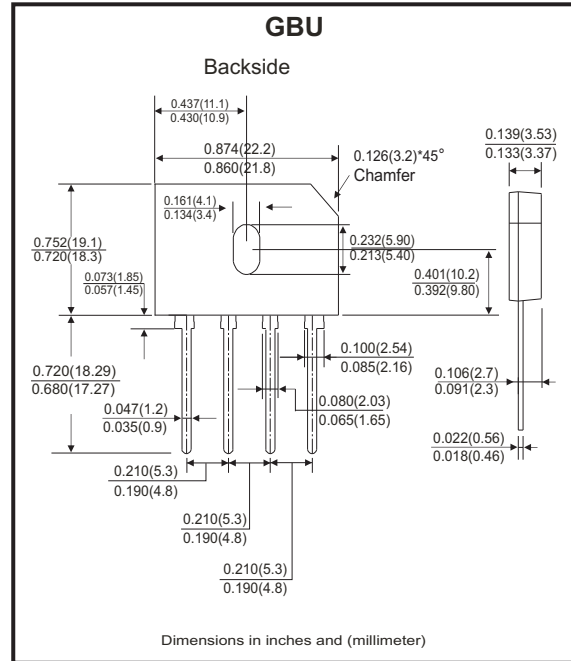


Features

- Surge overload rating -350 amperes peak.
- Ideal for printed circuit board.
- 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 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 heatsink) | $I_{(AV)}$ | 25.0 4.2 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method) | I_{FSM} | 350 | | | | | | | A |
| Maximum Forward Voltage at 12.5A DC | V_F | 1.0 | | | | | | | 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 ($t < 8.3\text{ms}$) | $I^2 t$ | 508 | | | | | | | A^2s |
| Typical Junction Capacitance Per Element (Note 1) | C_j | 70 | | | | | | | pF |
| Typical Thermal Resistance | $R_{\theta JC}$ | 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.

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

REV: D

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

Fig.1 - Derating Curve Output Rectified Current

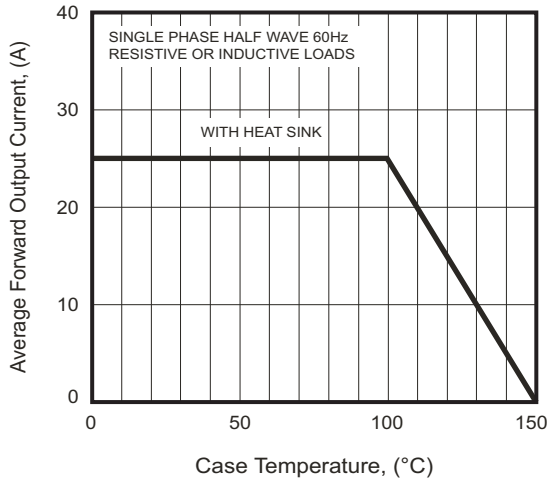


Fig.2 - Max. Forward Surge Current

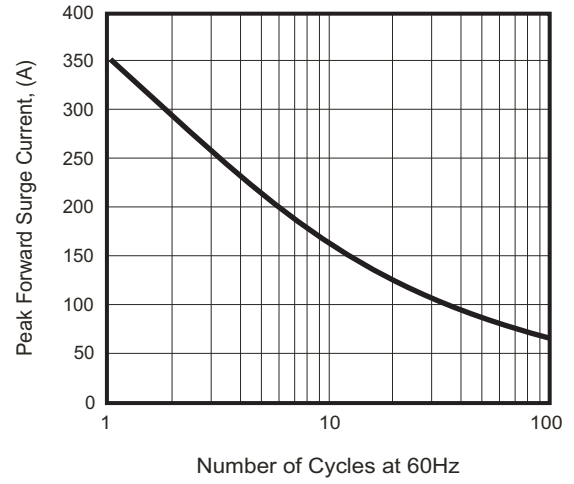


Fig.3 - Typical Forward Characteristics

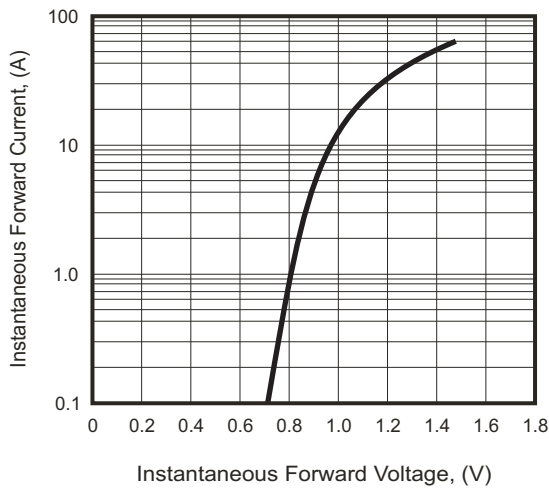
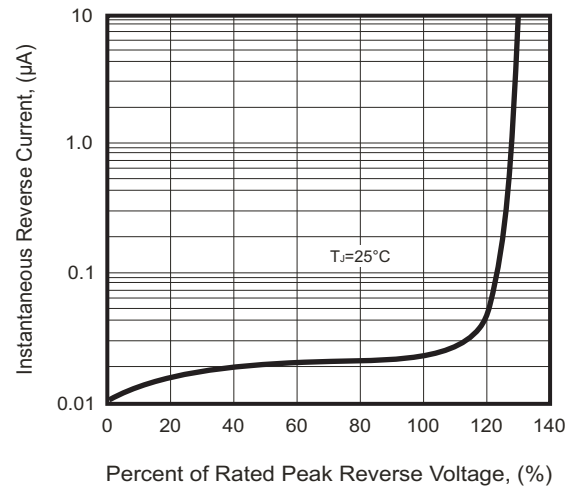
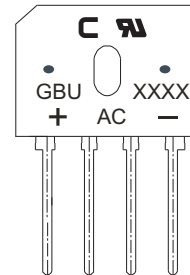


Fig.4 - Typical Reverse Characteristics



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 = Comchip Logo

Standard Packaging

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