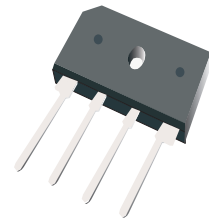


## GBU25005-G Thru. GBU2510-G

Reverse Voltage: 50 to 1000V

Forward Current: 25.0A

RoHS Device

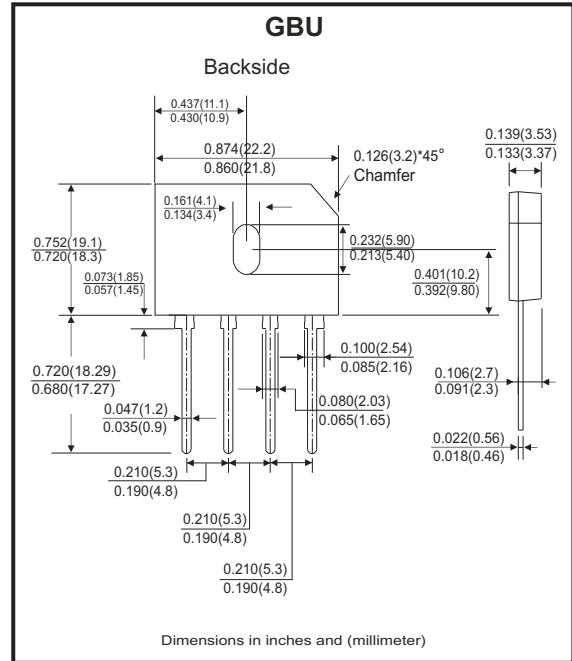


### Features

- 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	$\mu\text{A}$
$I^2 T$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	508								$\text{A}^2\text{s}$
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

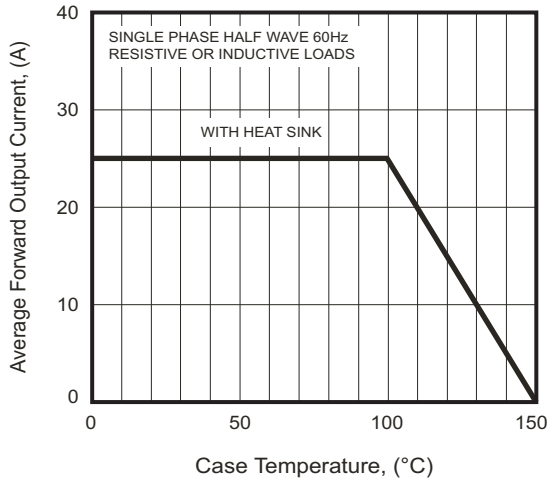


Fig.2 - Max. Forward Surge Current

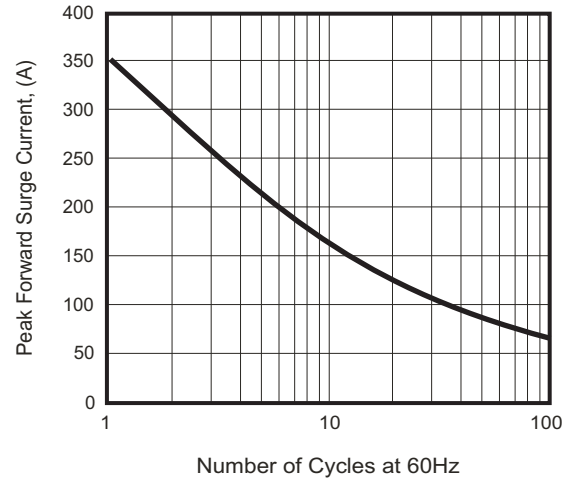


Fig.3 - Typical Forward Characteristics

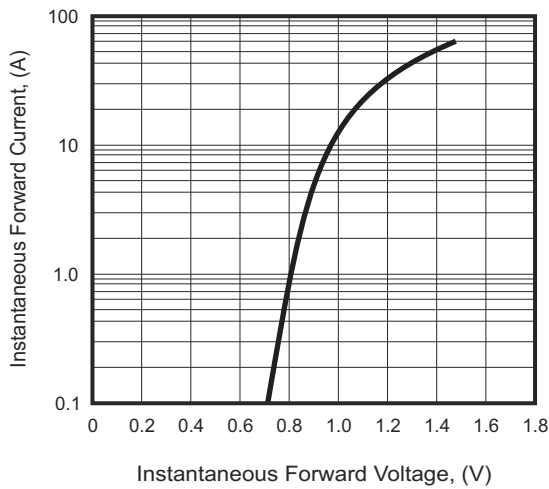
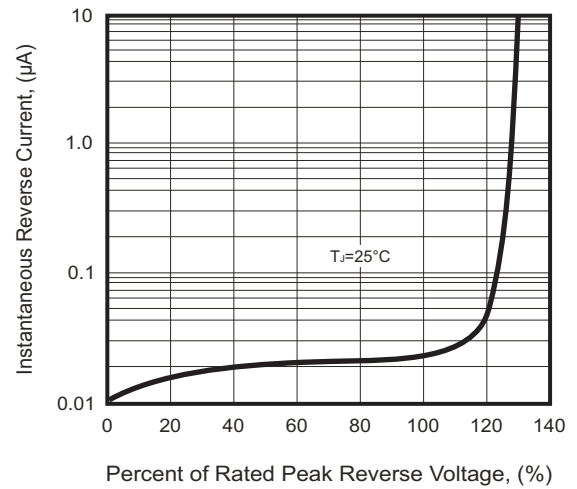
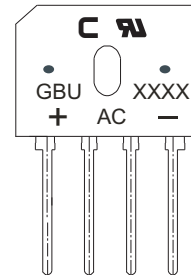


Fig.4 - Typical Reverse Characteristics



## 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** = Compchip Logo

## Standard Packaging

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