

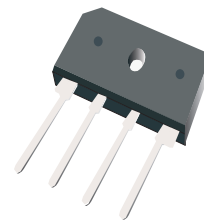
# Glass Passivated Bridge Rectifiers

## GBU15005-G Thru. GBU1510-G


Reverse Voltage: 50 to 1000V

Forward Current: 15.0A

RoHS Device

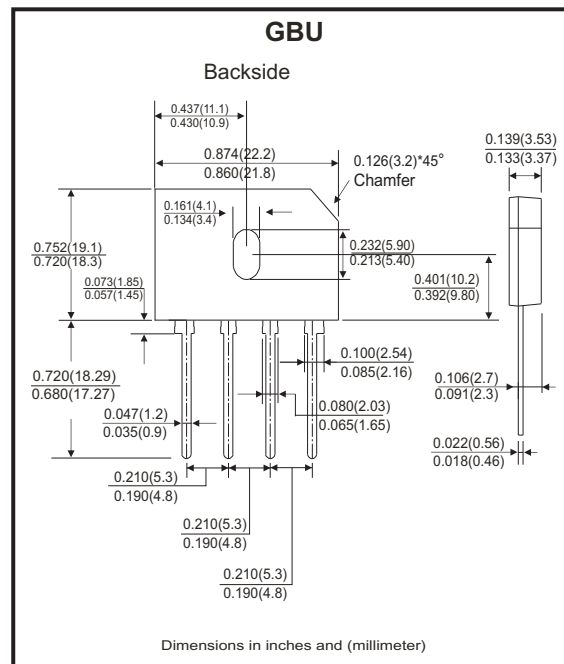


### Features

- Surge overload rating -240 amperes peak.
- Ideal for printed circuit board.
- 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 15005-G	GBU 1501-G	GBU 1502-G	GBU 1504-G	GBU 1506-G	GBU 1508-G	GBU 1510-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)	$I_{AV}$	15.0 3.2							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	$I_{FSM}$	240							A
Maximum Forward Voltage at 7.5A DC	$V_F$	1.0							V
Maximum DC Reverse Current @Tj=25°C At Rate DC Blocking Voltage @Tj=125°C	$I_R$	10.0 500							$\mu A$
I <sup>2</sup> T Rating for Fusing(t<8.3ms)	$I^2t$	239							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note 1)	$C_J$	70							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 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 (GBU15005-G Thru. GBU1510-G)

Fig.1 - Derating Curve Output Rectified Current

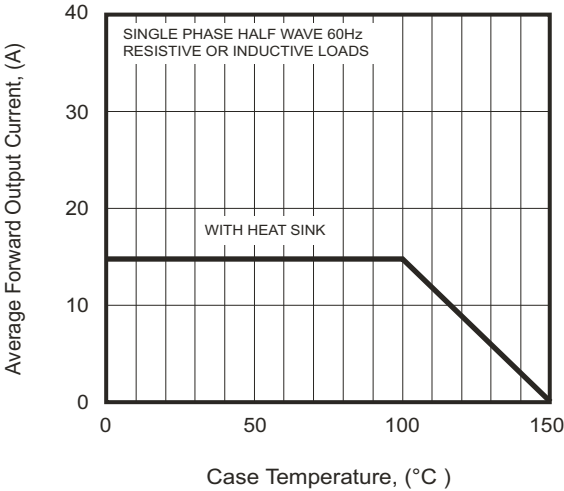


Fig.2 - Max. Forward Surge Current

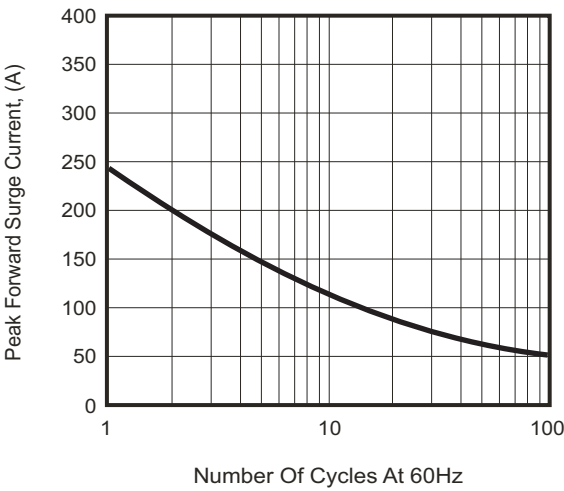


Fig.3 - Typical Forward Characteristics

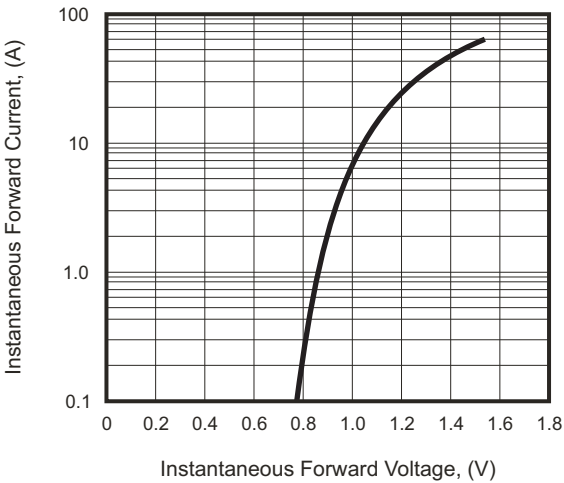
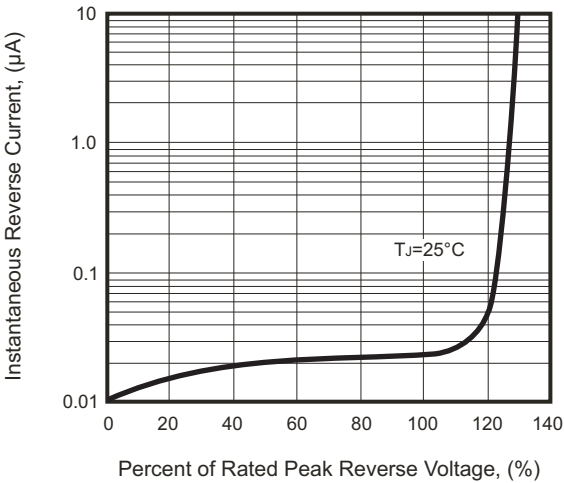
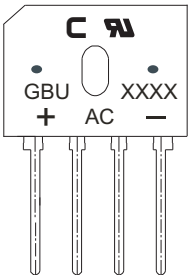


Fig.4 - Typical Reverse Characteristics



## Marking Code

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



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

## Standard Packaging

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