

Glass Passivated Bridge Rectifiers

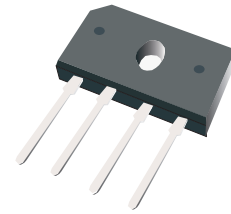


GBU15005-G Thru. GBU1510-G

Reverse Voltage: 50 to 1000V

Forward Current: 15.0A

RoHS Device

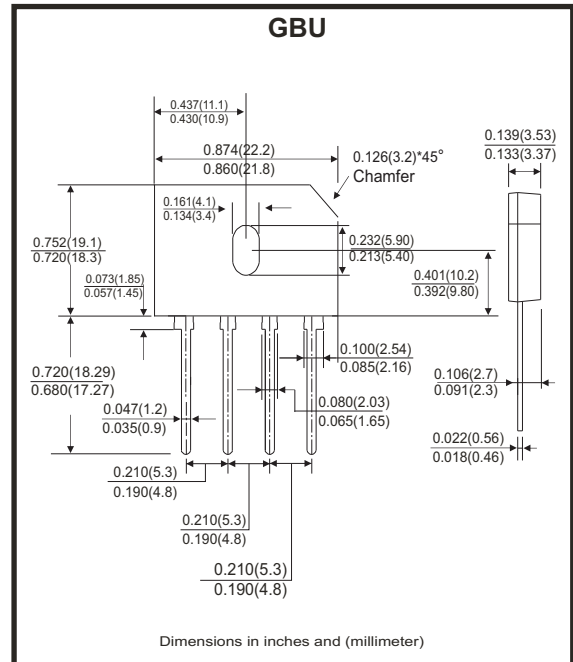


Features

- Surge overload rating - 240 amperes peak.
- Ideal for printed circuit board.

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 @ $T_c=100^\circ\text{C}$ (without hestsink)	$I_{(AV)}$					15.0				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	V_F					1.1				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				μA
$I^2 T$ Rating for Fusing($t<8.3\text{ms}$)	$I^2 t$					200				A^2s
Typical Junction Capacitance Per Element (Note 1)	C_J					70				pF
Typical Thermal Resistance	$R_{\theta JC}$					2.2				$^\circ\text{C}/\text{W}$
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.

Rating and Characteristics Curves (GBU15005-G Thru. GBU1510-G)

Fig.1- Derating Curve Output Rectified Current

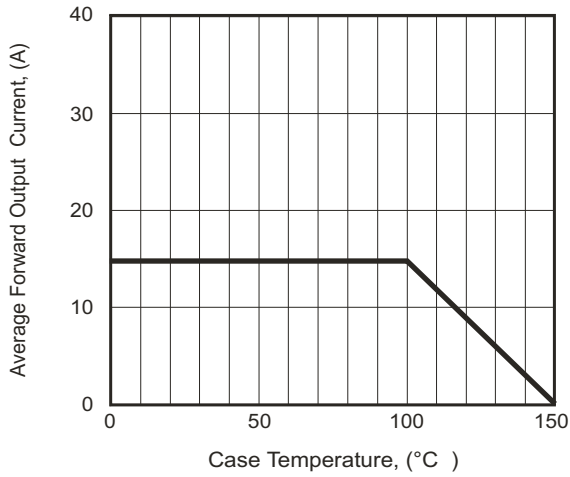


Fig.2- Maximum Forward Surge Current

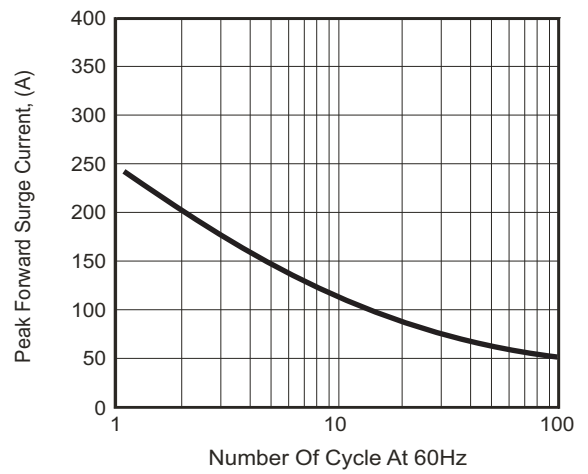


Fig.3- Typical Forward Characteristics

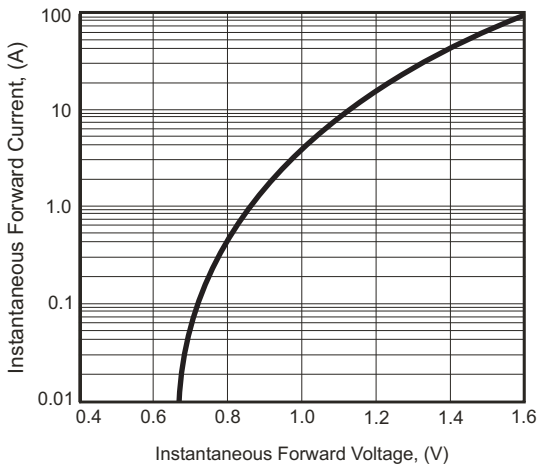
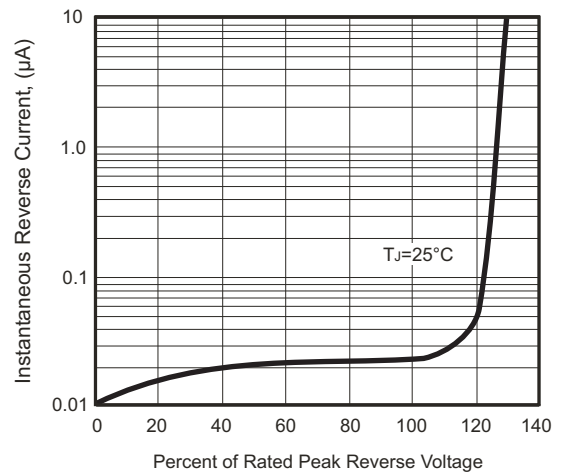
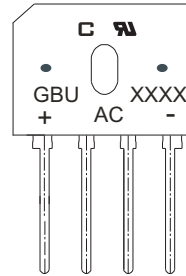


Fig.4- Typical Reverse Characteristics



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