



**THE DATASHEET OF
GBU10005-G**

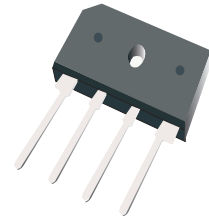


GBU10005-G Thru. GBU1010-G

Reverse Voltage: 50 to 1000V

Forward Current: 10A

RoHS Device

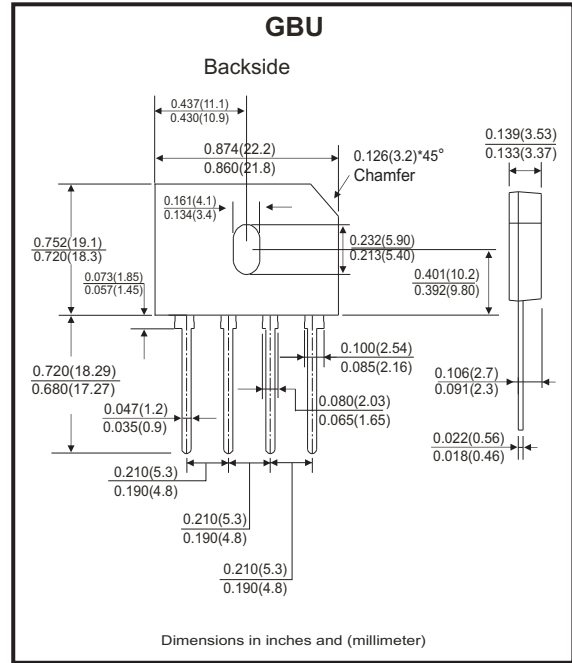


Features

- Surge overload rating -220 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 10005-G	GBU 1001-G	GBU 1002-G	GBU 1004-G	GBU 1006-G	GBU 1008-G	GBU 1010-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)	$I_{(AV)}$					10.0				A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}					220				A
Maximum Forward Voltage at 5.0A 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				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.

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

REV: C

Rating and Characteristics Curves (GBU10005-G Thru. GBU1010-G)

Fig.1 - Derating Curve Output Rectified Current

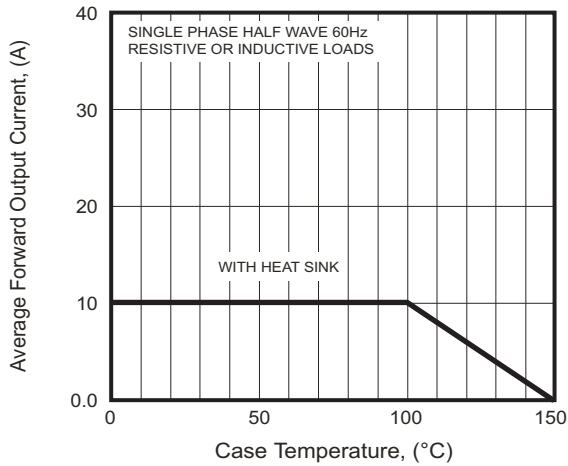


Fig.2 - Maximum Forward Surge Current

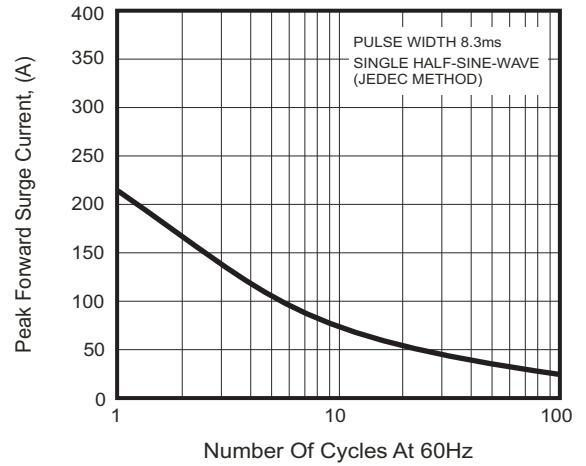


Fig.3 - Typical Forward Characteristics

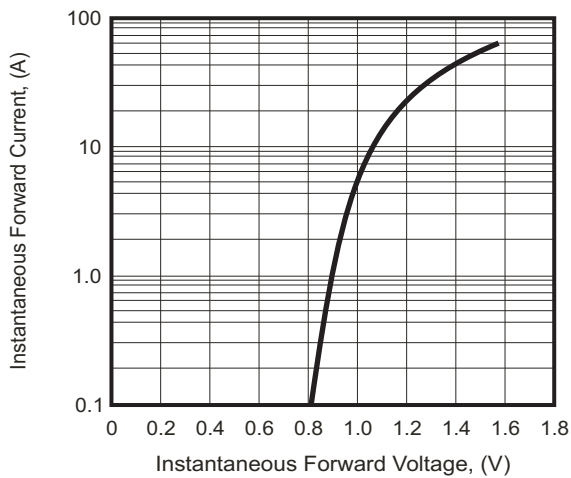
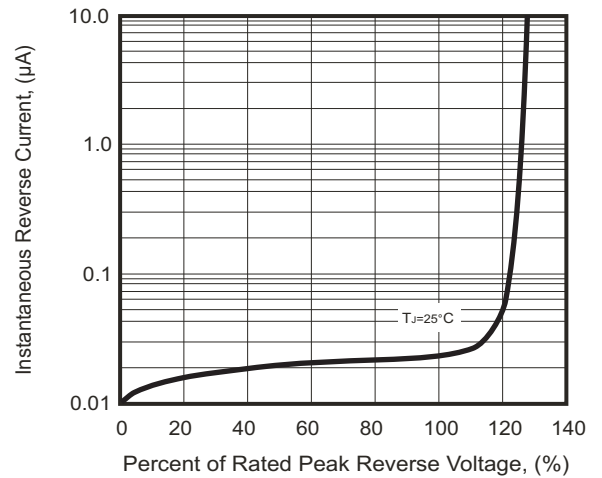
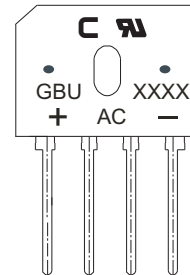


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
GBU10005-G	GBU10005
GBU1001-G	GBU1001
GBU1002-G	GBU1002
GBU1004-G	GBU1004
GBU1006-G	GBU1006
GBU1008-G	GBU1008
GBU1010-G	GBU1010





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

Standard Packaging

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

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