

Glass Passivated Bridge Rectifiers

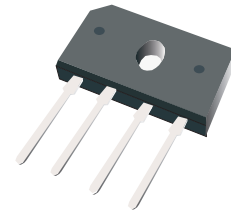


GBU10005-G Thru. GBU1010-G

Reverse Voltage: 50 to 1000V

Forward Current: 10A

RoHS Device

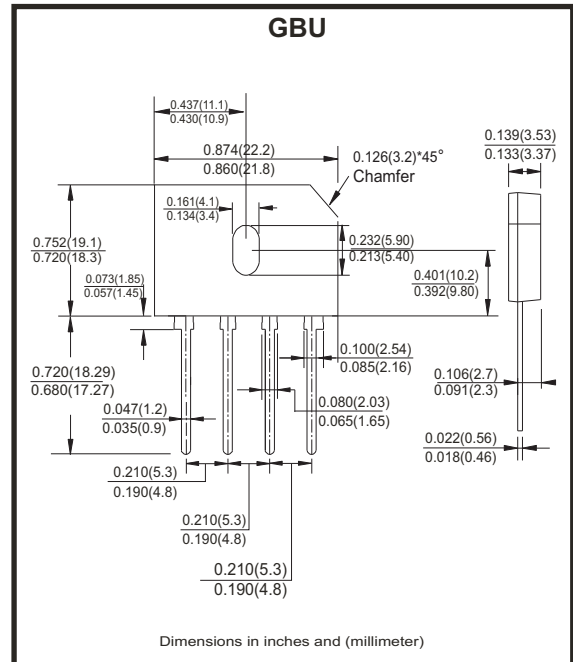


Features

- Surge overload rating - 220 amperes peak.
- Ideal for printed circuit board.

Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic, GBU
- Mounting position: Any
- Weight: 3.91grams(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 reverse peak repetitive voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS bridge input 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 @ $T_c=100^{\circ}C$ (without hestsink)	$I_{(AV)}$					10.0				A
Peak forward surage 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 at rate DC blocking voltage @ $T_J=25^{\circ}C$ @ $T_J=125^{\circ}C$	I_R					10.0				μA
$I^2 T$ rating for fusing (t<8.3ms)	$I^2 t$					200				$A^2 s$
Typical junction capacitance per element (Note 1)	C_J					70				pF
Typical thermal resistance	$R_{\theta JC}$					2.2				$^{\circ}C/W$
Operating temperature range	T_J					-55 to +150				$^{\circ}C$
Storage temperature range	T_{STG}					-55 to +150				$^{\circ}C$

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:A

Fig.1- Derating Curve Output Rectified Current

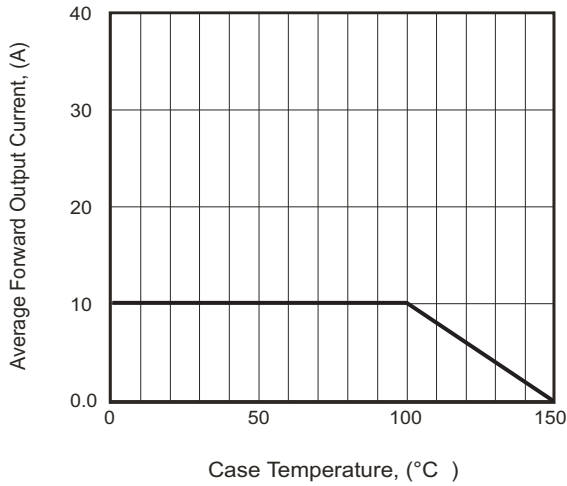


Fig.2- Maximum Forward Surge Current

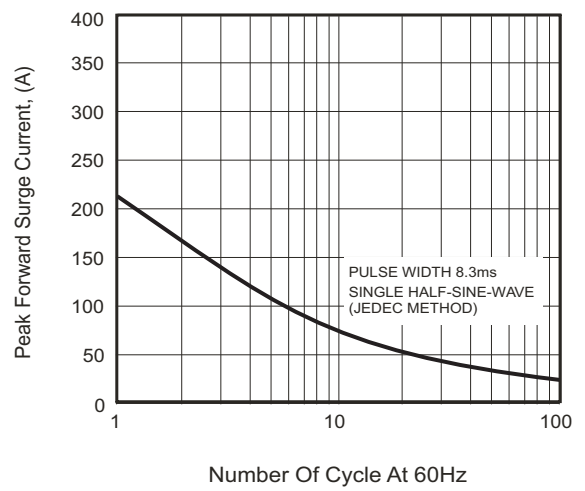


Fig.3- Typical Forward Characteristics

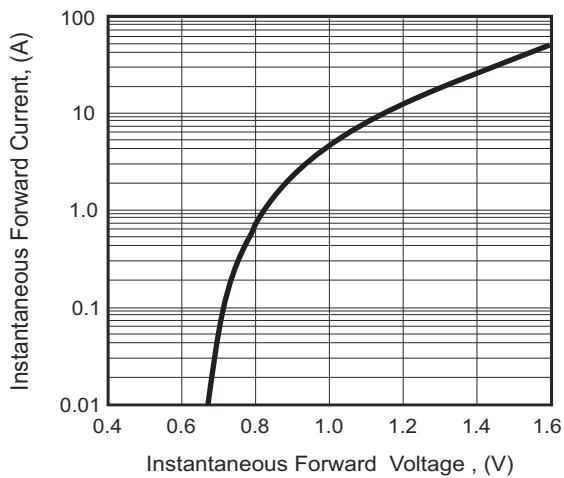
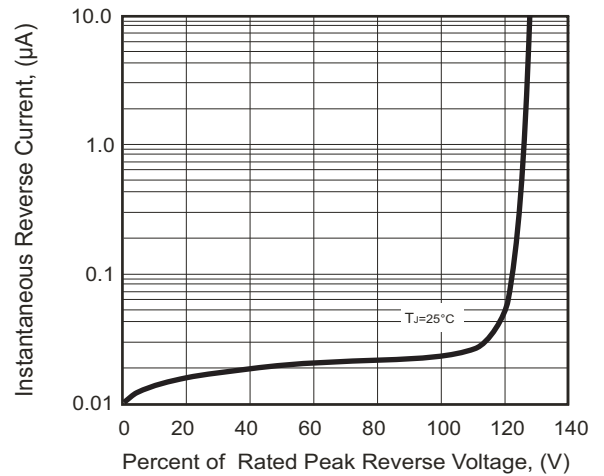
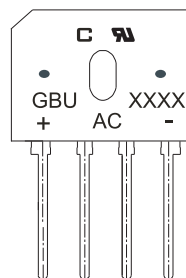


Fig.4- Typical Reverse Characteristics



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
 □ = Compchip Logo

Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	BOX (pcs)
GBU	20	1000