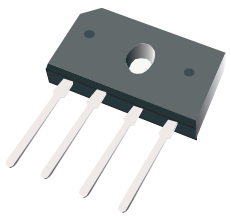
GBU6005-G Thru. GBU610-G

Reverse Voltage: 50 to 1000V
Forward Current: 6.0A
RoHS Device



Features

-Surge overload rating - 175 amperes peak.

-Ideal for printed circuit board.

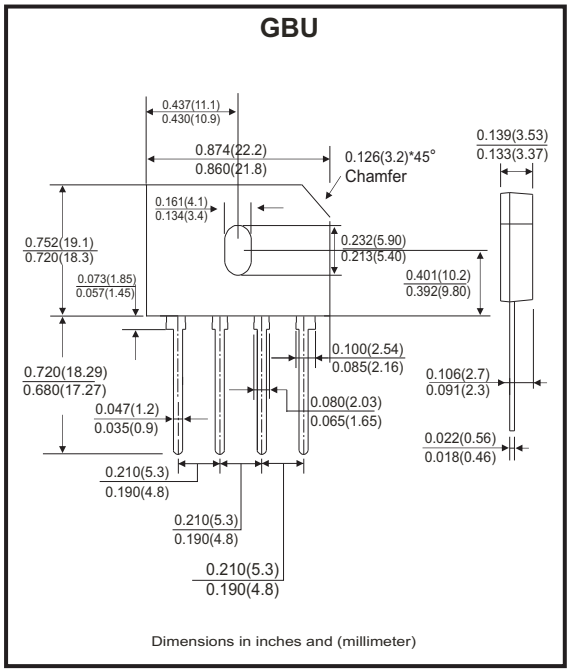
Mechanical Data

-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 6005-G	GBU 601-G	GBU 602-G	GBU 604-G	GBU 606-G	GBU 608-G	GBU 610-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 @Tc=100°C (without hestsink)	$I_{(AV)}$	6.0 2.8							A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load(JEDEC Method)	I_{FSM}	175							A
Maximum Forward Voltage Drop Per Bridge Element at 3.0A Peak	V_F	1.1							V
Maximum Reverse Current @T_J=25°C At Rate DC Blocking Voltage @T_J=125°C	I_R	10.0 500							μA
I^2T Rating for Fusing(t<8.3ms)	I^2t	127							A^2s
Typical Junction Capacitandce Per Element (Note 1)	C_J	50							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 75mm*75mm*1.6mm Cu plate heatsink.

Rating and Characteristics Curves (GBU6005-G Thru. GBU610-G)

Fig.1 - Forward Current Derating Curve

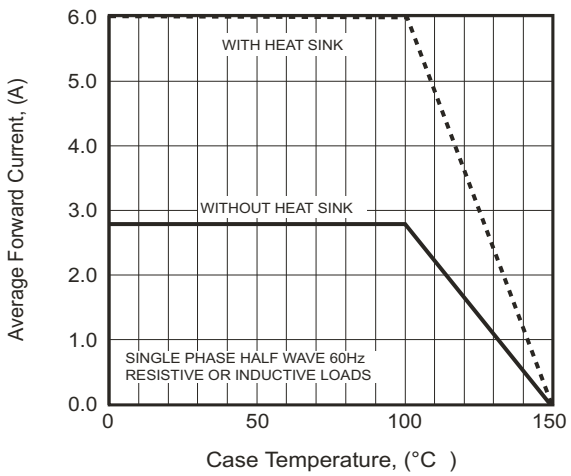


Fig.2 - Typical Forward Characteristics

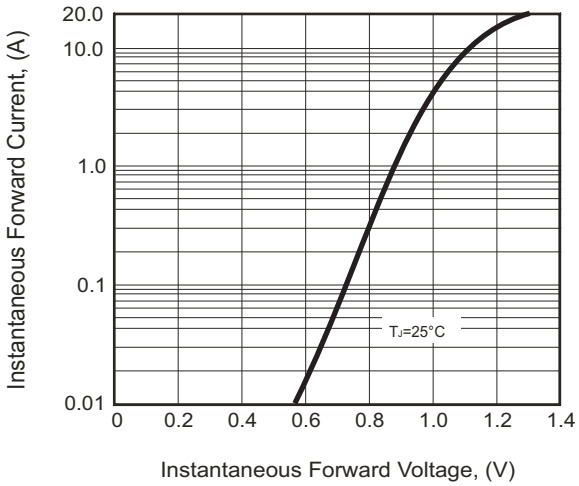


Fig.3 - Maximum NON-Repetitive Surge Current

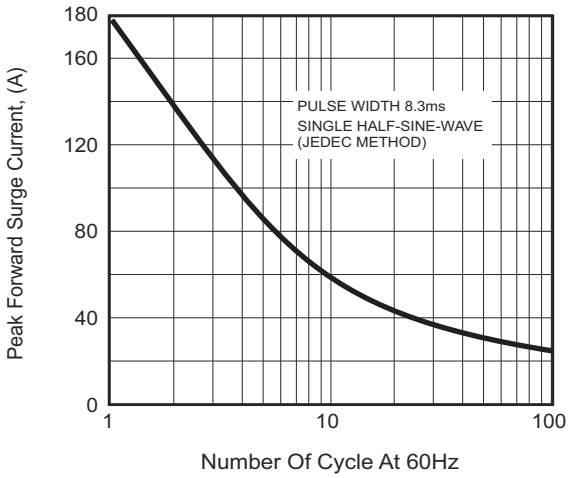


Fig.4 - Typical Junction Capacitance

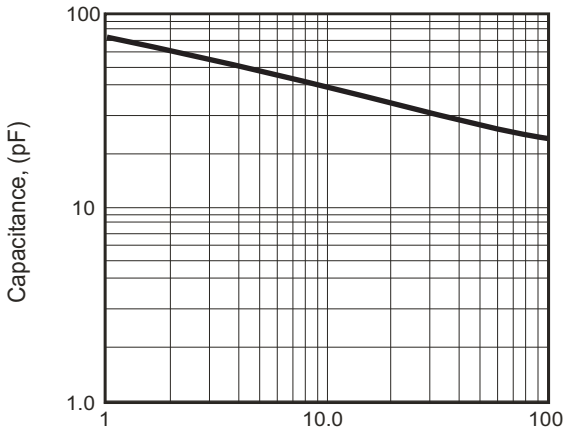
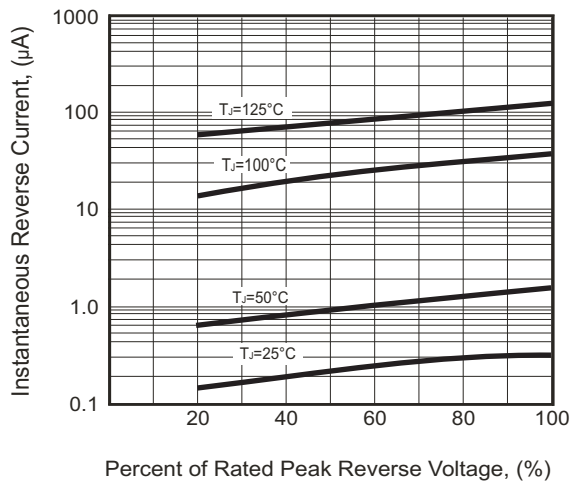
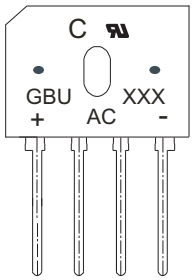


Fig.5 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
GBU6005-G	GBU6005
GBU601-G	GBU601
GBU602-G	GBU602
GBU604-G	GBU604
GBU606-G	GBU606
GBU608-G	GBU608
GBU610-G	GBU610



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

Standard Packaging

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