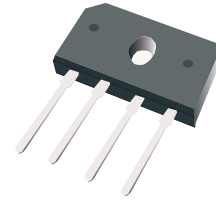


GBU6005-G Thru. GBU610-G

Reverse Voltage: 50 to 1000V

Forward Current: 6.0A

RoHS Device

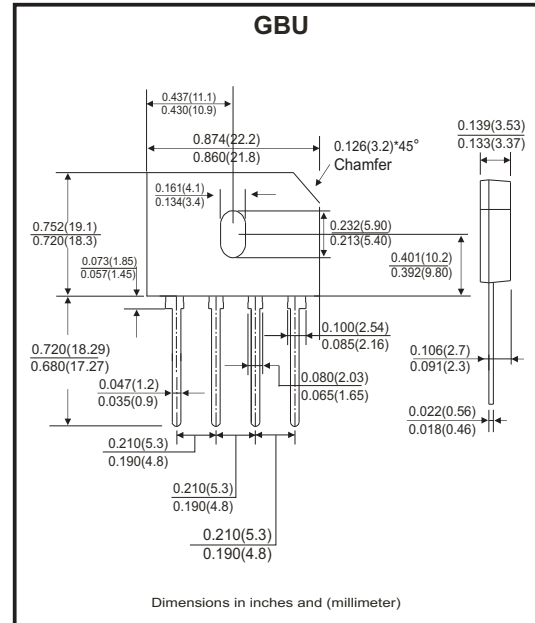


Features

- 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 @ $T_c=100^\circ\text{C}$ (without heatsink)	I_{AV}	6.0						2.8		A
Peak Forward Surge 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 @ $T_J=25^\circ\text{C}$ At Rate DC Blocking Voltage @ $T_J=125^\circ\text{C}$	I_R	10.0						500		μA
$I^2 T$ Rating for Fusing($t < 8.3\text{ms}$)	$I^2 t$	127								A^2s
Typical Junction Capacitance Per Element (Note 1)	C_J	50								pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2								$^\circ\text{C/W}$
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 75mm*75mm*1.6mm Cu plate heatsink.

Fig.1 - Forward Current Derating Curve

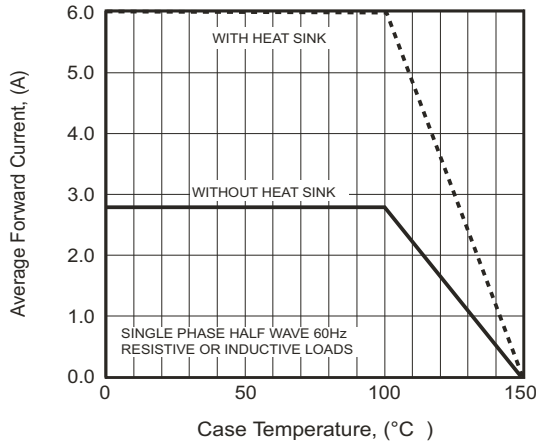


Fig.2 - Typical Forward Characteristics

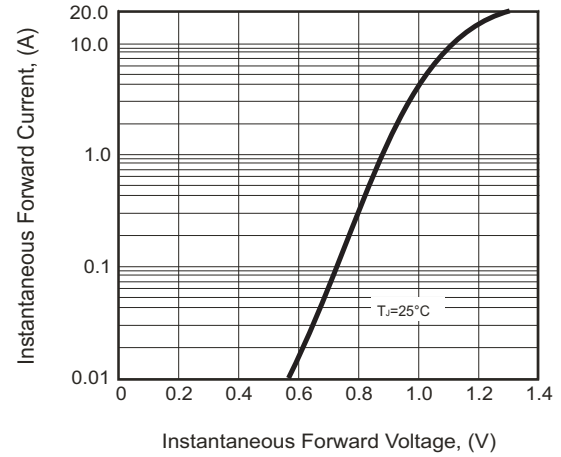


Fig.3 - Maximum NON-Repetitive Surge Current

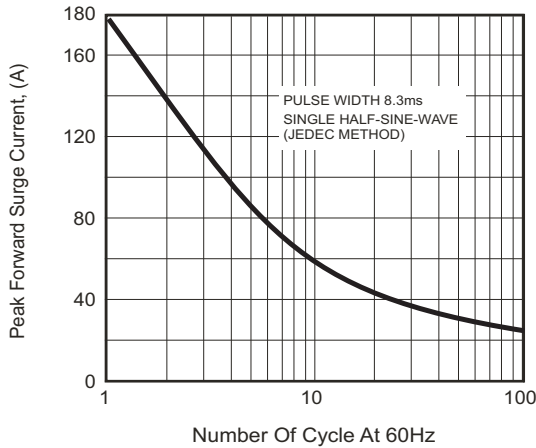


Fig.4 - Typical Junction Capacitance

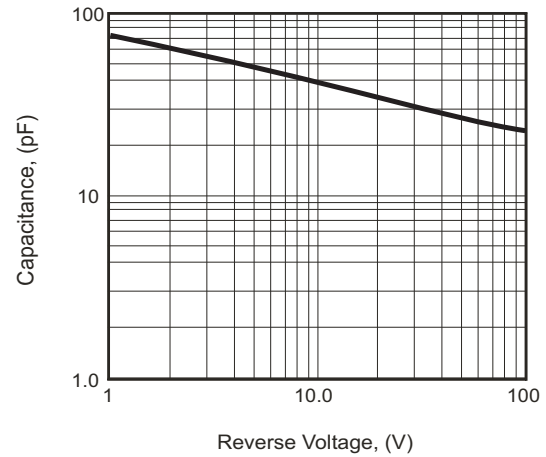
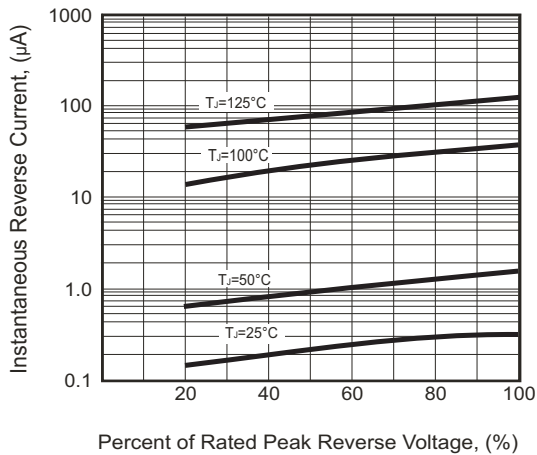
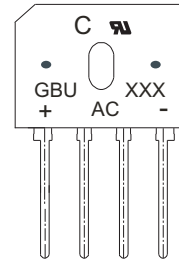


Fig.5 - Typical Reverse Characteristics



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