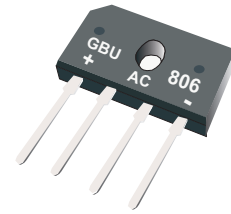


## GBU8005-G Thru. GBU810-G

Reverse Voltage: 50 to 1000V

Forward Current: 8.0A

RoHS Device

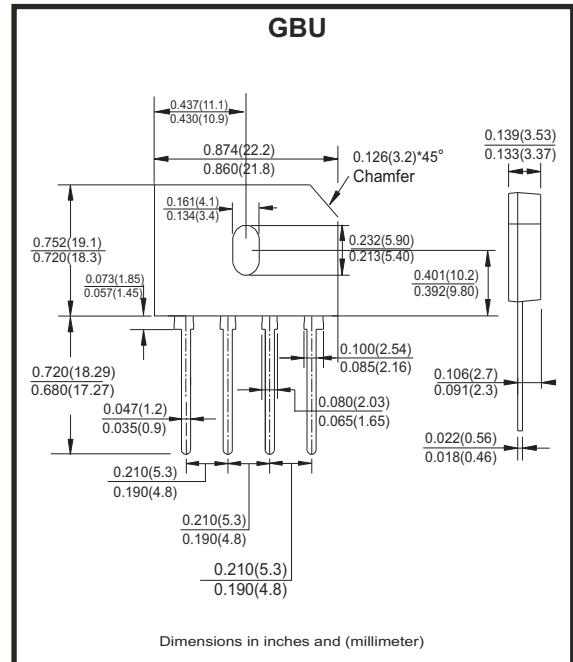


### Features

- Rating to 1000V PRV
- Surge overload rating - 200 amperes peak.
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has underwriters laboratory flammability classification 94V-0

### Mechanical Data

- Polarit:As marked on Body
- Mounting position:Any



### 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 8005-G	GBU 801-G	GBU 802-G	GBU 804-G	GBU 806-G	GBU 808-G	GBU 810-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)	$I_{AV}$					8.0			A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	$I_{FSM}$					200			A
Maximum Forward Voltage Drop Per Bridge Element at 4.0A Peak	$V_F$					1.1			V
Maximum Reverse Current @ $T_J=25^\circ C$ At Rate DC Blocking Voltage @ $T_J=125^\circ C$	$I_R$					10.0			$\mu A$
$I^2 T$ Rating for Fusing( $t<8.3ms$ )	$I^2 t$					166			$^\circ C/W$
Typical Junction Capacitandce Per Element (Note 1)	$C_J$					60			pF
Typical Thermal Resistance	$R_{\theta JA}$					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 75mm\*75mm\*1.6mm Cu plate heatsink.

Fig.1 - Forward Current Derating Curve

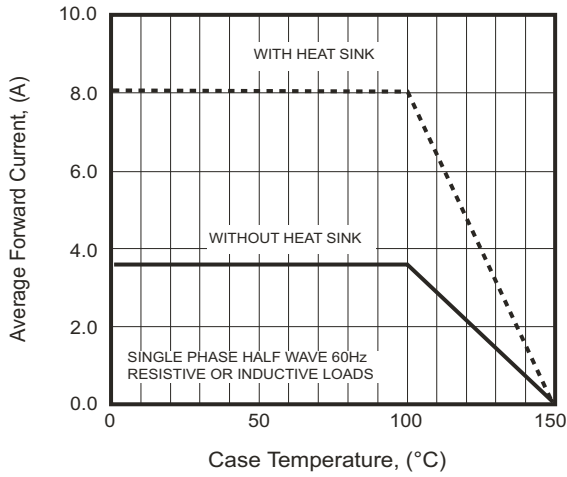


Fig.2 - Maximum NON-Repetitive Surge Current

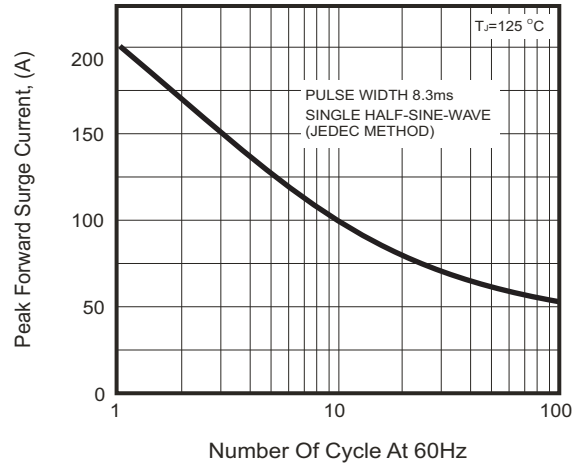


Fig.3 - Typical Junction Capacitance

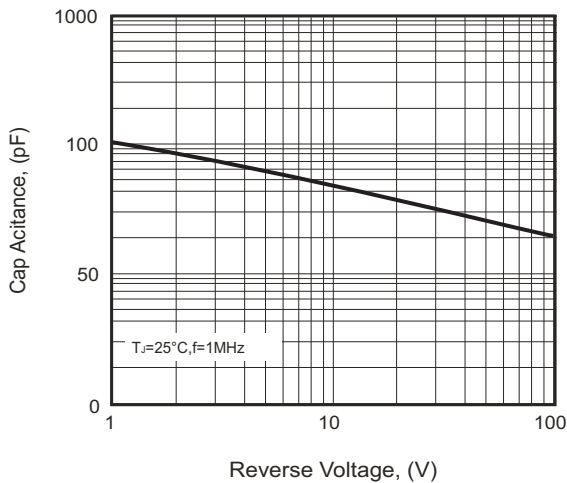


Fig.4 - Typical Forward Characteristics

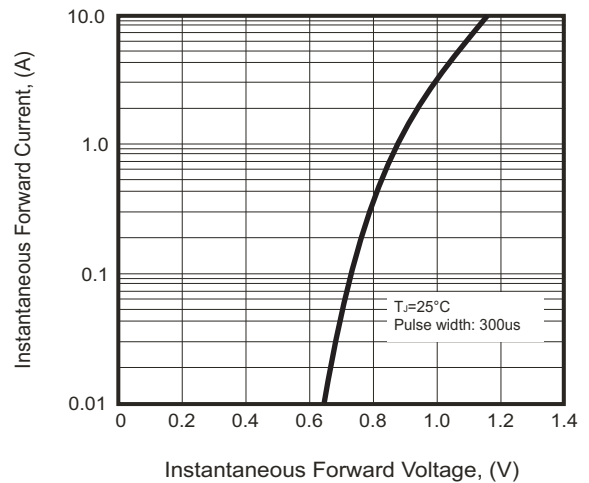
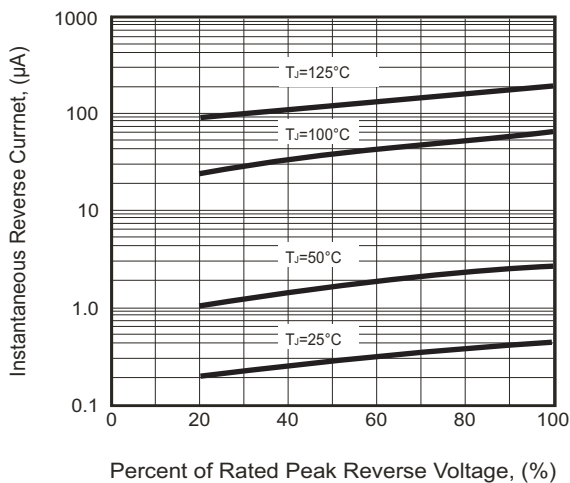
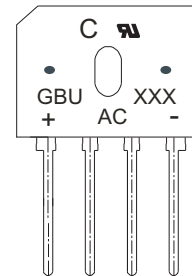


Fig.5 - Typical Reverse Characteristics



## Marking Code

Part Number	Marking code
GBU8005-G	GBU8005
GBU801-G	GBU801
GBU802-G	GBU802
GBU804-G	GBU804
GBU806-G	GBU806
GBU808-G	GBU808
GBU810-G	GBU810



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

## Standard Packaging

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