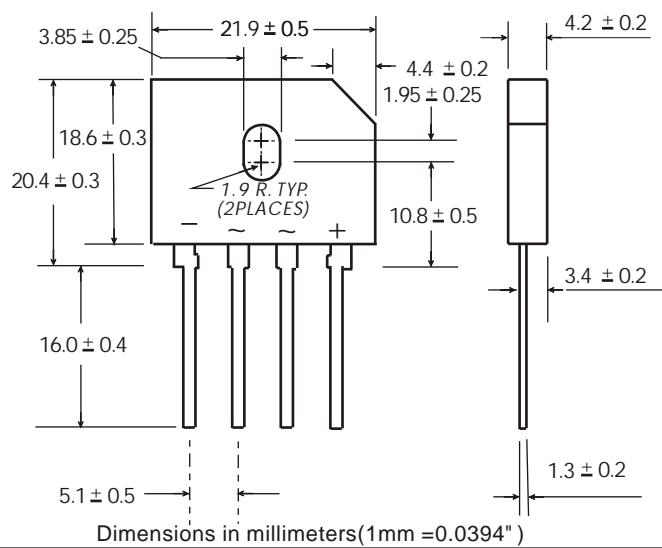


**Machanical Dimensions**
**Descriptions**

**GBU**

**GBU600~612**
**Features**

- Ideal for P.C. Board mounting
- High surge current capability
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265 °C/10 seconds at 5 lbs (2.3kg) tension

**Mechanical Data**

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Mounting Position: Any
- Weight: 3.8 grams (approx)

**Maximum Ratings & Thermal Characteristics**

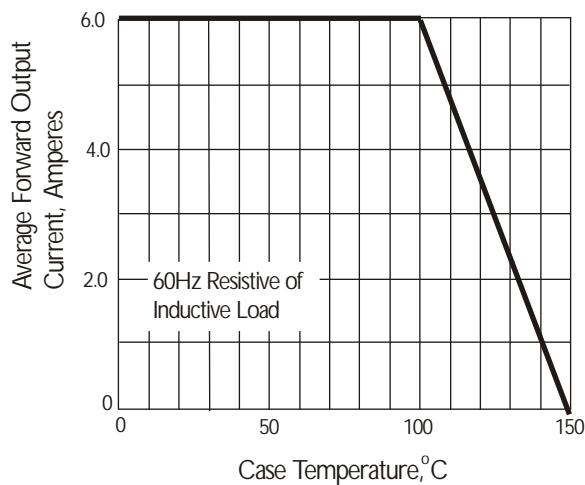
Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
For Capacitive load derate current by 20%.

Parameter	Symbol	GBU 600	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	GBU 612	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	1200	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	840	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	1200	V
Maximum average forward rectified output current at TA=100°C	IF(AV)					6.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDC Method)	IFSM					175				A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t				127					A <sup>2</sup> sec
Typical thermal resistance per element (1)	ReJA				2.2					°C / W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>				-55 to + 150					°C
Max. instantaneous forward voltage drop per leg at 6.0A	VF				1.1					V
Max. DC reverse current at rated Ta=25°C	IR				5.0					uA
Max. DC reverse current at rated Ta=125°C	IR				500					uA

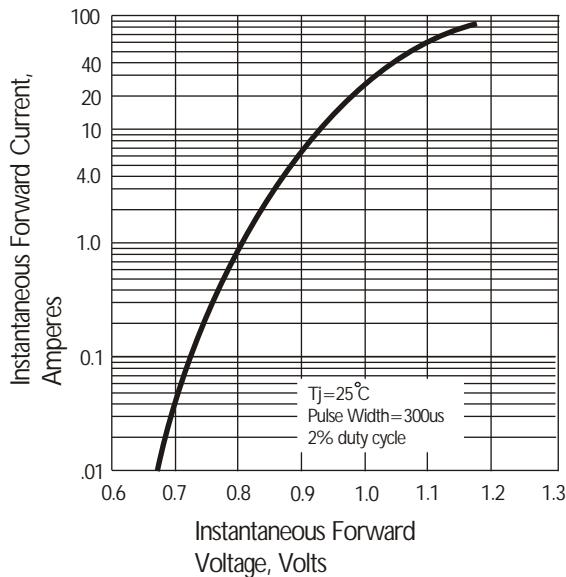
Notes: Thermal resistance from Junction to Ambient on PC board mounting

**Rating and Characteristic Curves** (  $T_A = 25^\circ\text{C}$  Unless otherwise noted )  
**GBU600 thru GBU612**

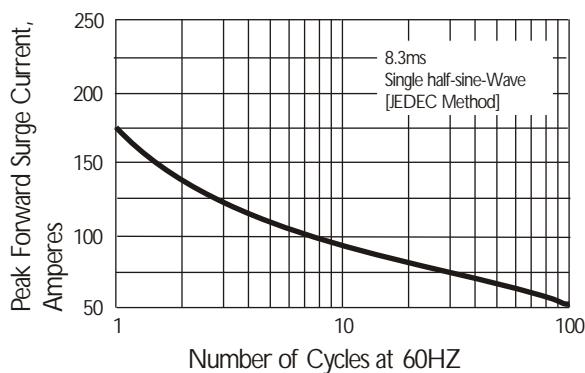
**Fig. 1 Derating Curve for  
Output Rectified Current**



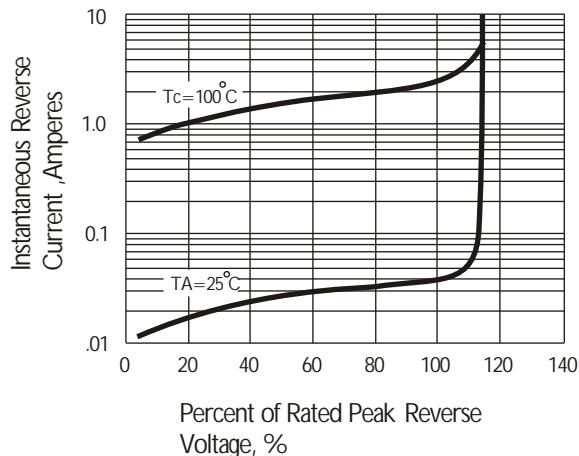
**Fig. 3 Typical Instantaneous  
Forward Characteristics**



**Fig. 2 Maximum Non-repetitive Peak  
Forward Surge Current**



**Fig. 4 Typical Reverse  
Characteristics**



**Fig. 5 Typical Junction Capacitance**

