# **GBU6005 THRU GBU610**

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

## FEATURES

- ◆Rating to 1000V PRV
- ◆Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic

Technique

◆The plastic material has UL flammability

classification 94V-0

◆Electrically isolated base-1500 Volts

### Mechanical Data

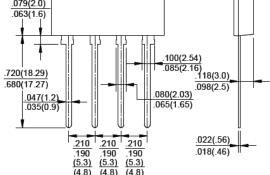
◆Polarity : As marked on Body

◆Weight: 0.15 ounces, 4.0 grams

◆Mounting position : Any

#### .136(3.45) .132(3.35) .874(22.2) 3.2\*3.2 CHAMFER .860(21.8) <u>.</u>154(3.9 .146(3.7) .752(19.1) .720(18.3) .232(5.9) .224(5.7) .079(2.0) .063(1.6)

**GBU** 



**Dimensions in inches and (millimeters)** 

## 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	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{\text{RRM}}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{\text{RMS}}$	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 Note 2) Rectified Current, @ Tc=100°C(without heatsink)	I(AV)	6.0 2.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	175							A
Maximum Forward Voltage at 3.0A DC	$V_{\mathrm{F}}$	1.0							V
Maximum DC Reverse Current @ $T_J = 25^{\circ}C$ at Rated DC blocking voltage @ $T_J = 125^{\circ}C$	$ m I_R$	5.0 500							μА
I <sup>2</sup> t Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	127							$A^2S$
Typical Junction Capacitance per element (Note 1)	C <sub>J</sub>	45							pF
Typical Thermal Resistance (Note 2)	Rөjc	2.2							°C/W
Operating Temperature Range	$T_{\mathrm{J}}$	-55 to +150							$^{\circ}$
Storage Temperature Range	Tstg	-55 to +150							$^{\circ}$

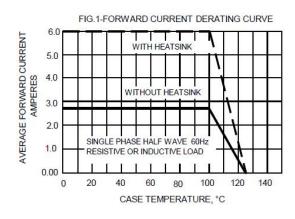
Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

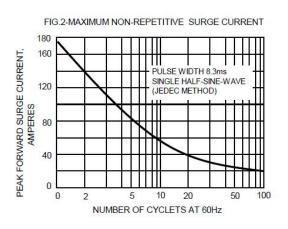
2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

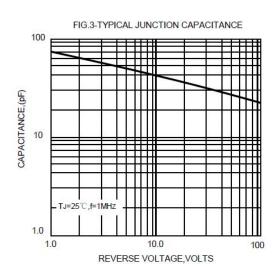
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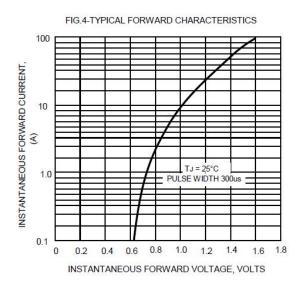
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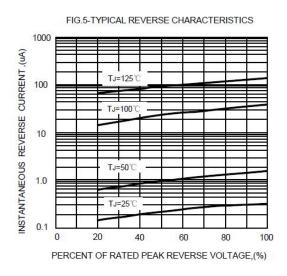
## RATING AND CHARACTERISTIC CURVES GBU6005 THRU GBU610











Note: Specifications are subject to change without notice. For more detail and update, please visit our website.