



# GBU6005 THRU GBU610

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

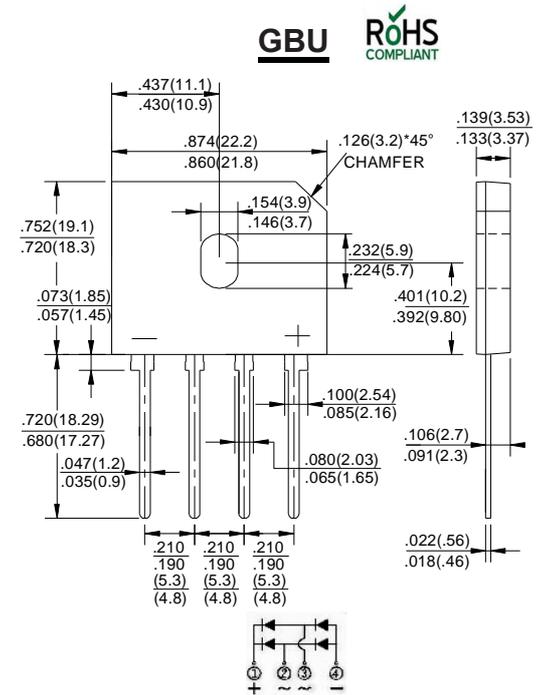
## GLASS PASSIVATED BRIDGE RECTIFIERS

### Features

- ◆ Surge overload rating -175 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L lammability classification 94V-0

### Mechanical Data

**Case** : JEDEC GBU Molded plastic body  
**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity** : Polarity symbol marking on body  
**Mounting Position** : Any  
**Weight** : 0.00XX ounce, 0.0XX grams



### Maximum Ratings And Electrical Characteristics

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD GBU6005	MDD GBU601	MDD GBU602	MDD GBU604	MDD GBU606	MDD GBU608	MDD GBU610	UNITS
Marking Code									
Maximum repetitive peak reverse 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 NOTE 2) Rectified current @ $T_c=100^\circ\text{C}$ (without heatsink)	$I_{AV}$					6.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$					175			A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$					127			$\text{A}^2\text{s}$
Maximum forward voltage at 3.0A DC	$V_F$					1.1			V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$					10			$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$					50			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$					2.2			$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$					-55 to +150			$^\circ\text{C}$
storage temperature range	$T_{STG}$					-55 to +150			$^\circ\text{C}$

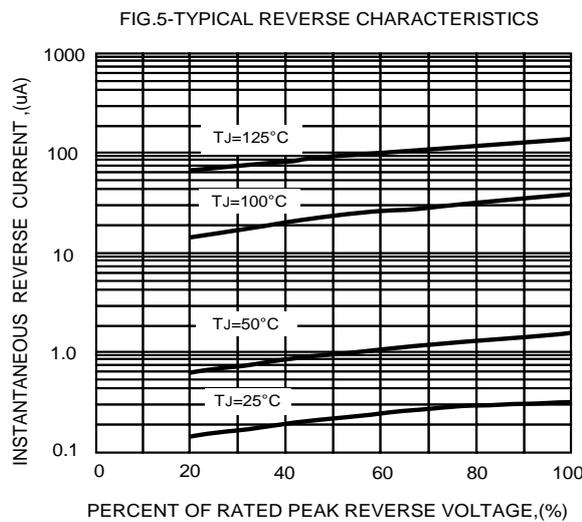
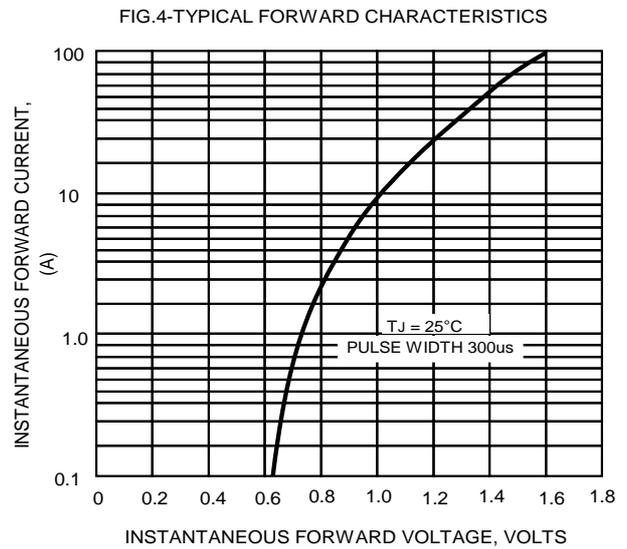
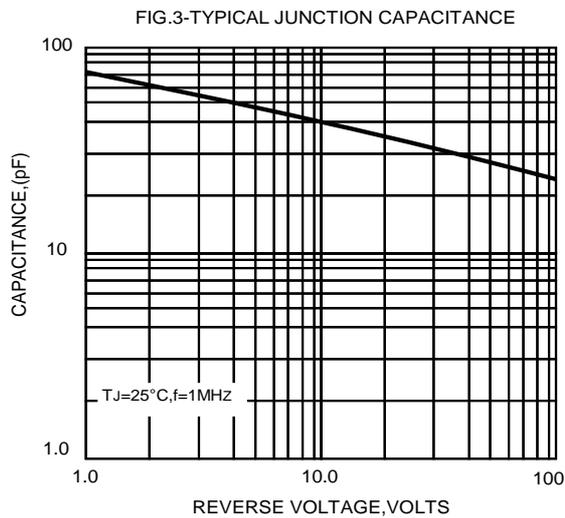
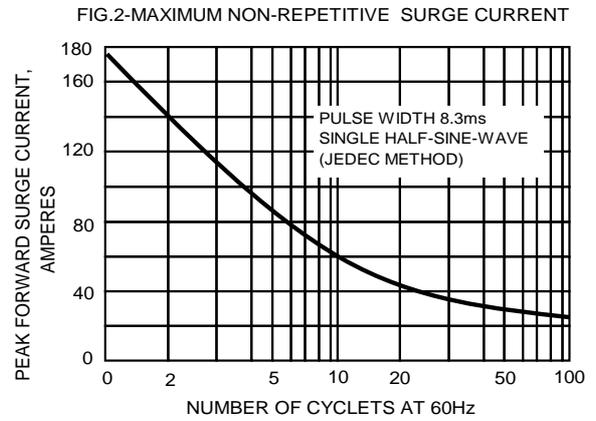
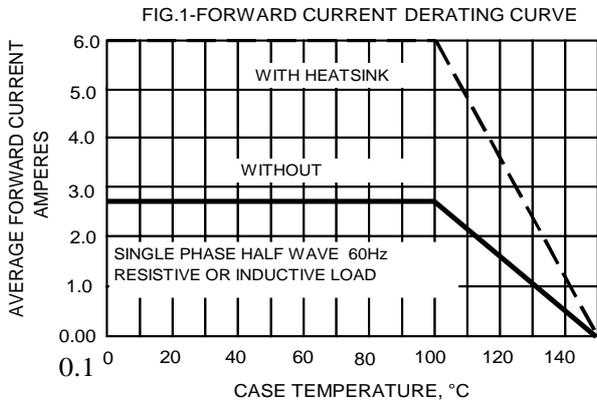
NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
 2. Device mounted on 75mm\*75mm\*1.6mm cu plate heatsink.  
 3. The typical data above is for reference only.



# GBU6005 THRU GBU610

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

## Ratings And Characteristic Curves



The curve above is for reference only.