

# Kingtronics®

# 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

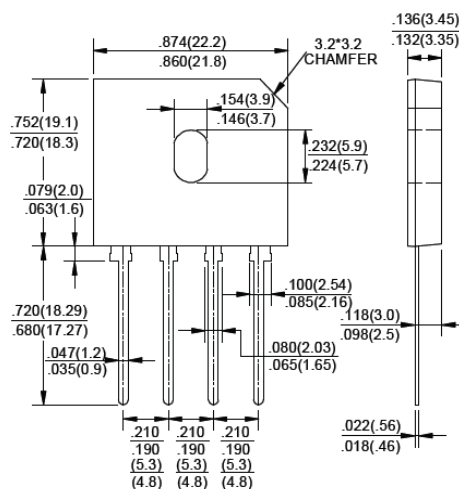
## MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.15 ounces, 4.0 grams
- Mounting position : Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified , Dimensions in inches and (millimeters)  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load derate current by 20%

## GBU



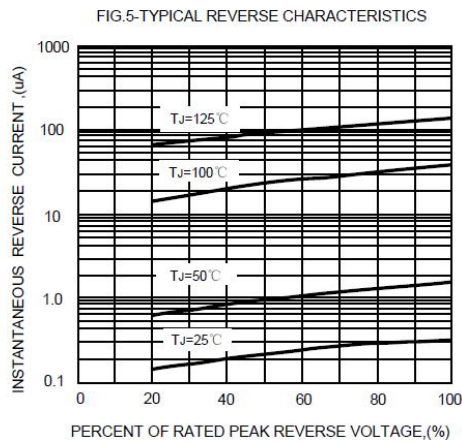
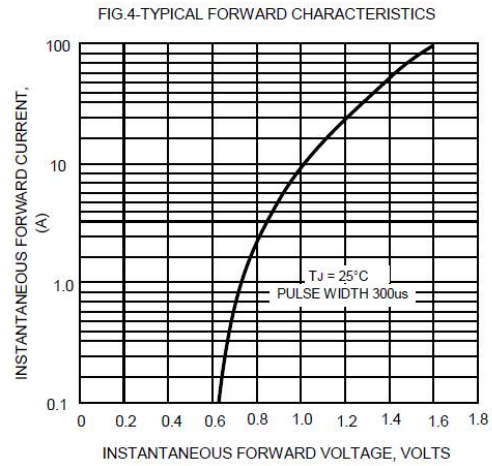
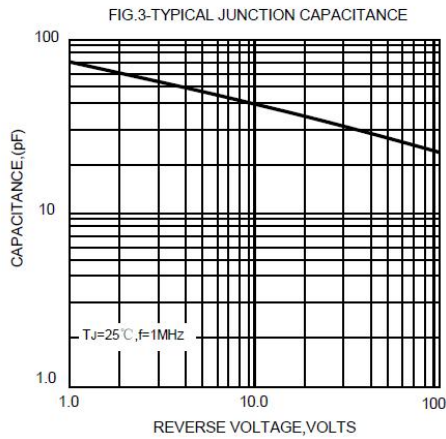
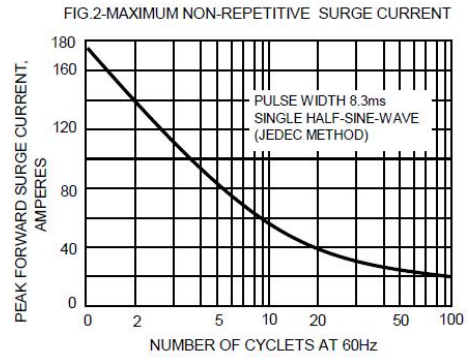
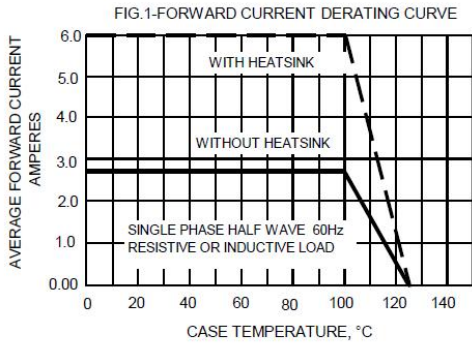
PARAMETER	SYMBOL	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward (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	$I_{FSM}$					175			A
Maximum Forward Voltage at 3.0A DC	$V_F$					1.0			V
Maximum DC Reverse Current @ $T_J = 25^\circ\text{C}$ at Rated DC blocking voltage @ $T_J = 125^\circ\text{C}$	$I_R$					5.0			$\mu\text{A}$
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$					127			$\text{A}^2\text{S}$
Typical Junction Capacitance per element (Note 1)	$C_J$					45			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$					2.2			$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$					-55 to +150			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$					-55 to +150			$^\circ\text{C}$

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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## RATINGS AND CHARACTERISTIC CURVES



Note: Specifications are subject to change without notice.

**Kingtronics® International Company**

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