

**Kingtronics**®**GBJ1001 THRU  
GBJ1010****SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS****REVERSE VOLTAGE 100 to 1000 Volts      FORWARD CURRENT 10 Ampere****FEATURES**

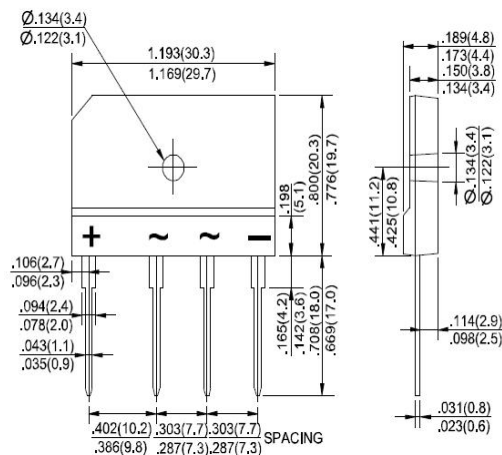
- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- Electrically isolated base-1500 Volts

**MECHANICAL DATA**

- Polarity: Symbols molded on body
- Weight: 0.26 ounces, 7.0 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%



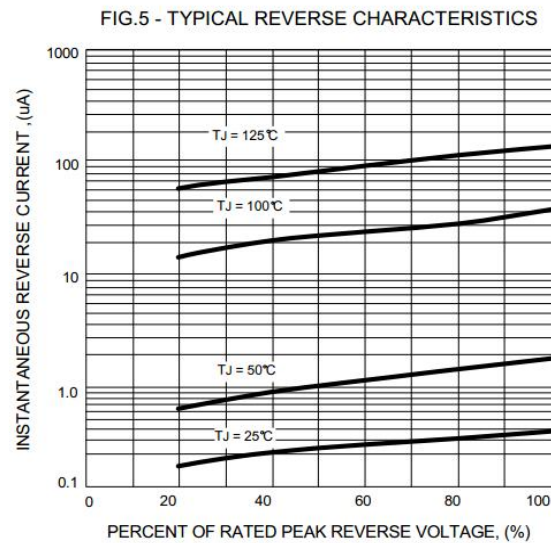
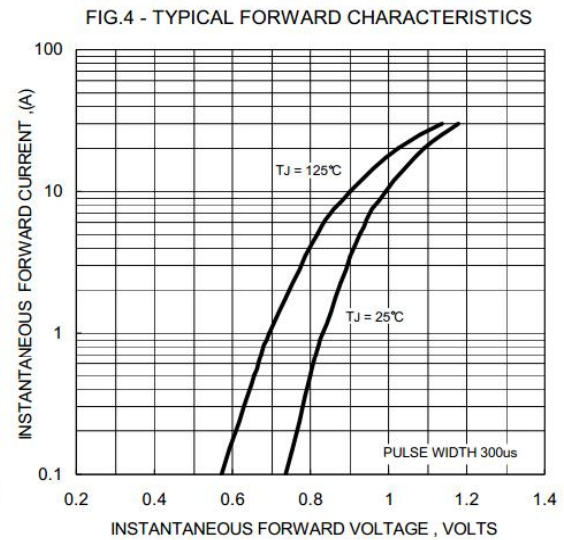
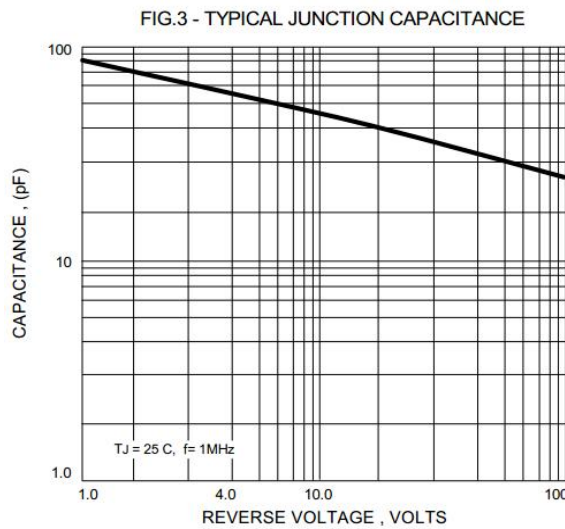
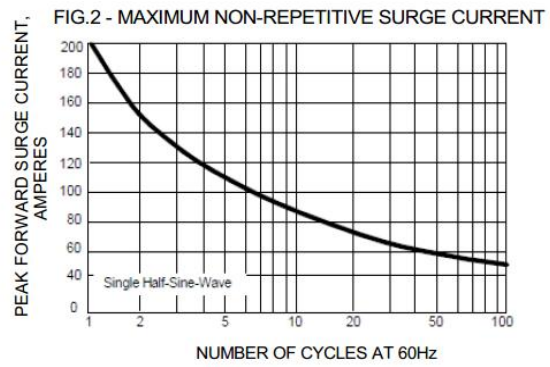
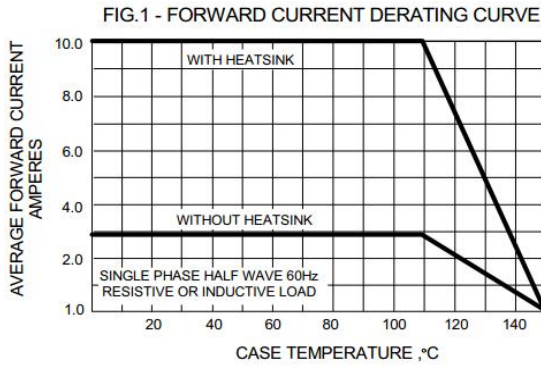
PARAMETER	SYMBOL	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ $T_C=110^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	10.0 3.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	$I_{FSM}$	200						A
Maximum forward Voltage at 5.0A DC	$V_F$	1.0						V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at Rated DC Blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$	5.0 500						$\mu\text{A}$
$I^2t$ Rating for fusing( $t<8.3\text{ms}$ )	$I^2t$	166						$\text{A}^2\text{S}$
Typical Junction Capacitance per element(Note 1)	$C_J$	55						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4						$^\circ\text{C}/\text{W}$
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 150mm x 150mm x 1.6mm Cu Plate Heatsink.

**Kingtronics**® International Company

## RATINGS AND CHARACTERISTIC CURVES



Note: Specifications are subject to change without notice.