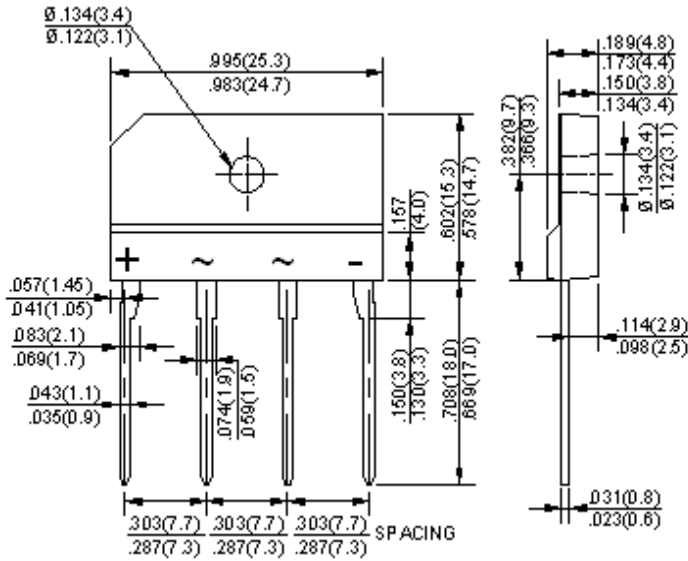


# GBJ6005 thru GBJ610

## GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts

FORWARD CURRENT - 6.0Amperes



Dimensions in inches and (milimeters)

**Package: 4GBJ**

## 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 U/L flammability classification 94V-0
- Weight: 0.151ounces , 4.27grams

## 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%

CHARACTERISTICS	SYMBOL	GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T <sub>c</sub> =100°C (without heatsink)	I <sub>(AV)</sub>	6.0 2.8							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	175							A
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @ T <sub>J</sub> =25°C at Rated DC Blocking Voltage @ T <sub>J</sub> =125°C	I <sub>R</sub>	10.0 500							uA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	120							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	55							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	1.8							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°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.

## GLASS PASSIVATED BRIDGE RECTIFIERS RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

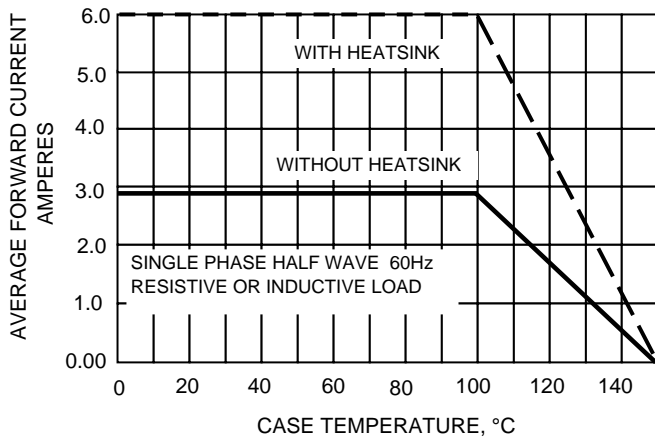


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

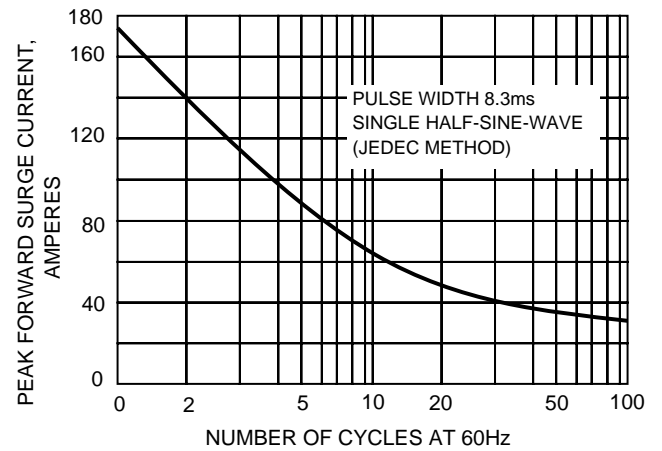


FIG.3-TYPICAL JUNCTION CAPACITANCE

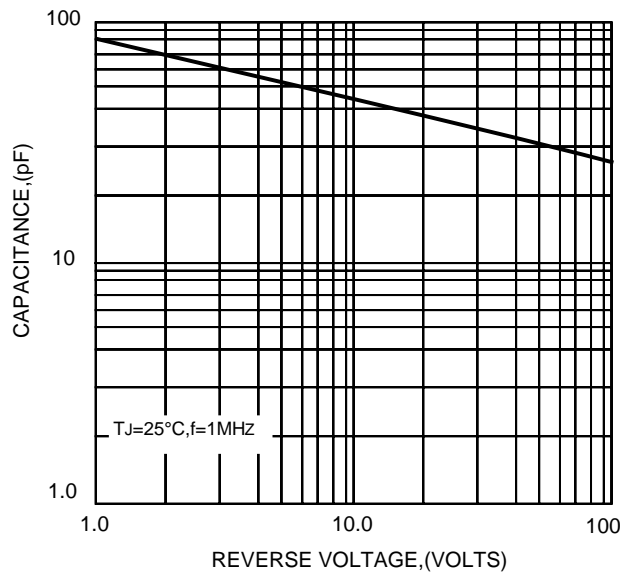


FIG.4-TYPICAL FORWARD CHARACTERISTICS

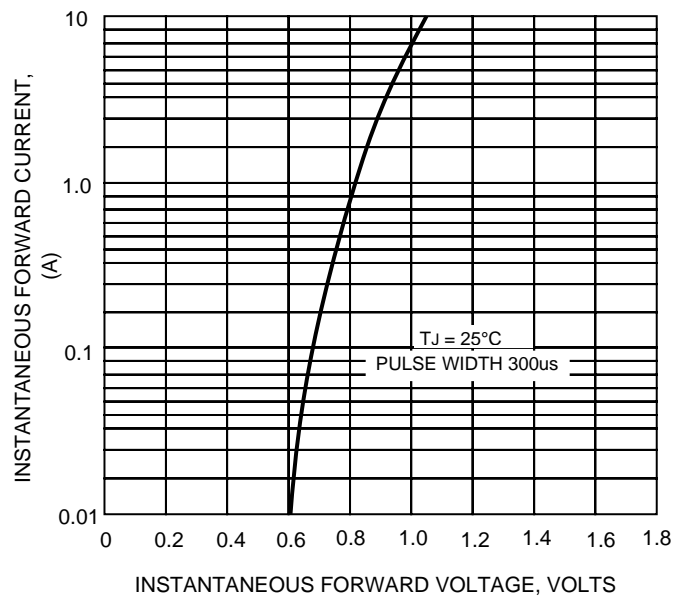


FIG.5-TYPICAL REVERSE CHARACTERISTICS

