



# GBJ6005 THRU GBJ610

## Single Phase 6.0 AMPS. Silicon Bridge Rectifiers

Voltage Range: 50 to 1000 Volts Current: 6.0 Amperes

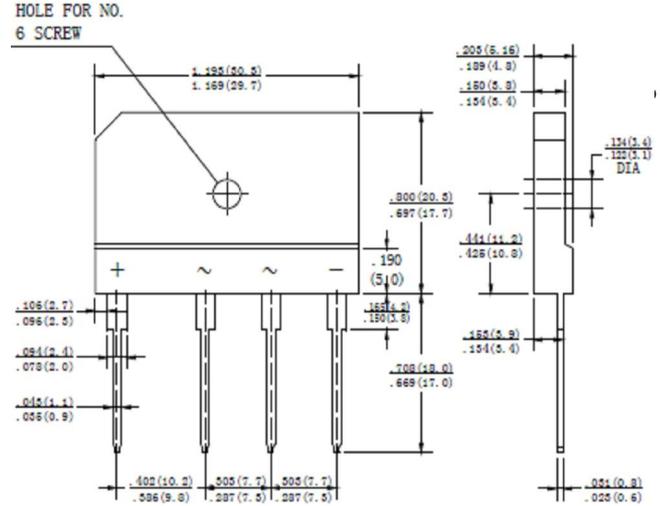
### Features

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed:  
260 °C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension

### Mechanical Data

- Case: Molded plastic
- Lead: solder plated
- Polarity: As marked

### KBJ-6 (GBJ)



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number		GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	UNITS
Maximum Repetitive 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 Rectified Current @ T <sub>c</sub> = 50 °C	I(AV)	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	150							A
Maximum Instantaneous Forward Voltage @ 6.0A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current @ TA=25 °C rated DC blocking voltage per leg TA = 125 °C	I <sub>R</sub>	5.0 500							μ A
Typical Thermal Resistance (Note)	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

**NOTE :** Thermal Resistance from Junction to Case with Device Mounted on 75X75X1.6mm Cu Plate Heatsink

# RATING AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

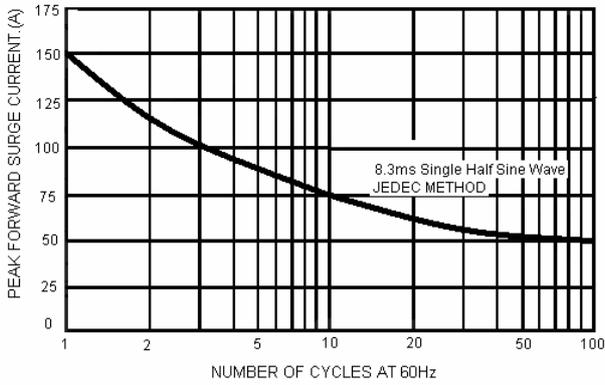


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

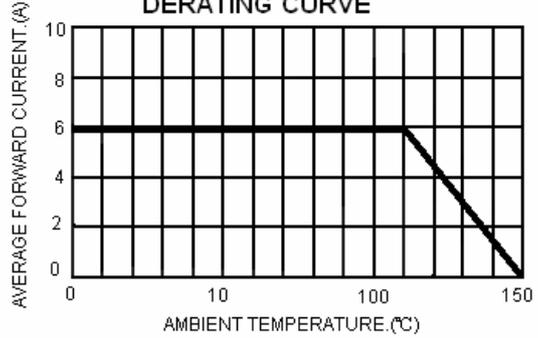


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

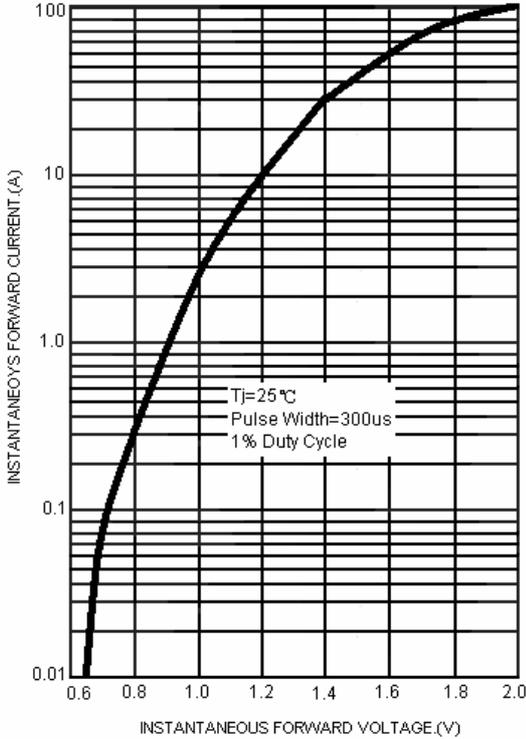


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

