



# GBJ1005 THRU GBJ1010

## Single Phase 10 AMPS. Silicon Bridge Rectifiers

Voltage Range: 50 to 1000 Volts Current: 10 Amperes

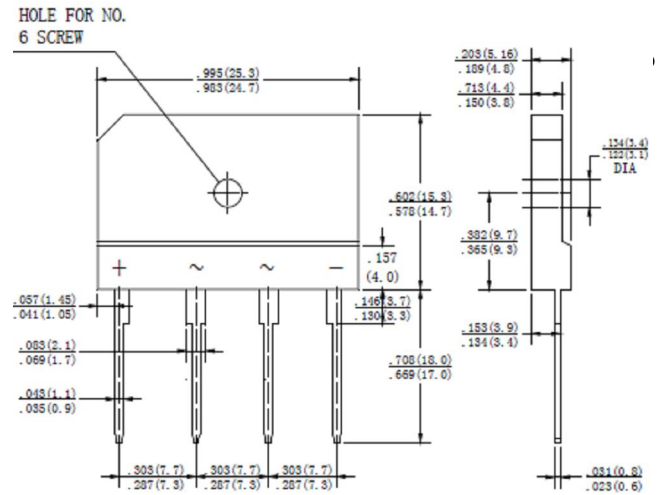
### Features

- 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

KBJ4



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.

Type Number		GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	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> =115°C	I(AV)	10							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	170							A
Maximum Instantaneous Forward Voltage @ 5.0A	V <sub>F</sub>	1.05							V
Maximum DC Reverse Current @ TA=25°C rated DC blocking voltage per leg TA = 125°C	I <sub>R</sub>	10 250							μ A
Typical Thermal Resistance (Note1) (Note2)	R <sub>θJC</sub> R <sub>θJA</sub>	1.9 2.6							°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 :** Device Mounted on 100X100X1.6mm Thick Al Plate Heatsink.  
Device Mounted on P.C.B without Heatsink.

# RATING AND CHARACTERISTIC CURVES

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

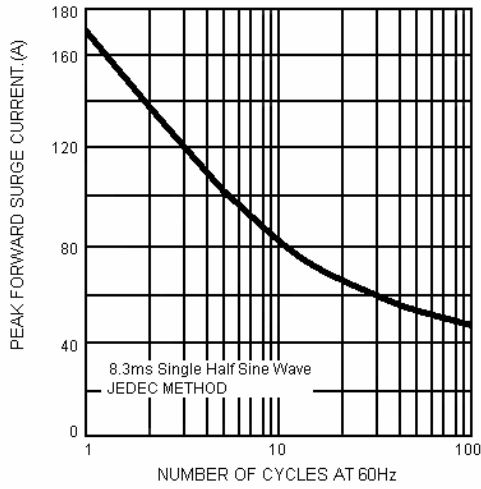


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

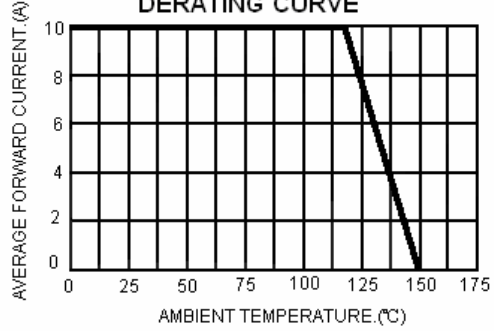


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

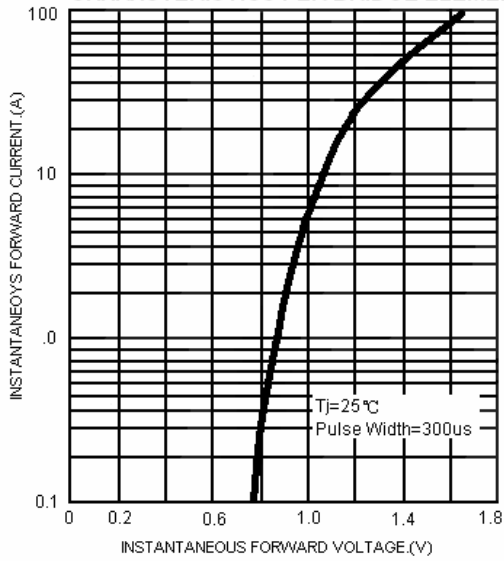


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

