

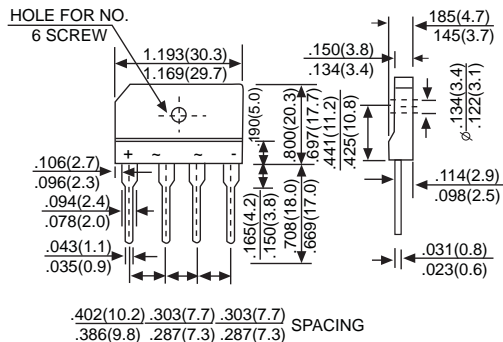
# GBJ/KBJ15005 THRU GBJ/KBJ1510

**SINGLE PHASE 15AMPS.  
GLASS PASSIVATED BRIDGE  
RECTIFIERS**

**Voltage Range**  
50 to 1000 Volts  
**Current**  
15 Amperes

## FEATURES

- \*UL Recognized File # 230084
- \*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 94 V-0



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 50Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	GBJ KBJ 15005	GBJ KBJ 1501	GBJ KBJ 1502	GBJ KBJ 1504	GBJ KBJ 1506	GBJ KBJ 1508	GBJ KBJ 1510	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 (with heatsink Note 2) Rectified Current@T <sub>c</sub> = 100°C (without heatsink)	I <sub>F(AV)</sub>	15.0 3.2							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I <sub>FSM</sub>	240							A
Maximum Instantaneous Forward Voltage Drop Per Leg@7.5A	V <sub>F</sub>	1.05							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	I <sub>R</sub>	10 500							µA
I <sup>2</sup> t Rating for fusing (t<8.3ms)	I <sup>2</sup> t	240							A <sup>2</sup> S
Typical Junction Capacitance per Leg(Note 1)	C <sub>J</sub>	60							pF
Typical Thermal Resistance(Note 2)	R <sub>θC</sub>	0.8							°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 300mm x 300mm x 1.6mm Cu Plate Heatsink.

# RATING AND CHARACTERISTIC CURVES

## GBJ/KBJ15005 THRU GBJ/KBJ1510

FIG.1 - FORWARD CURRENT DERATING CURVE

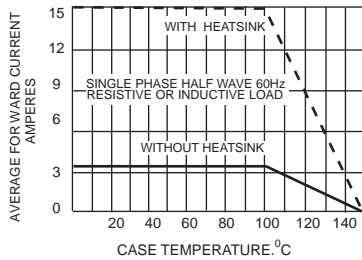


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

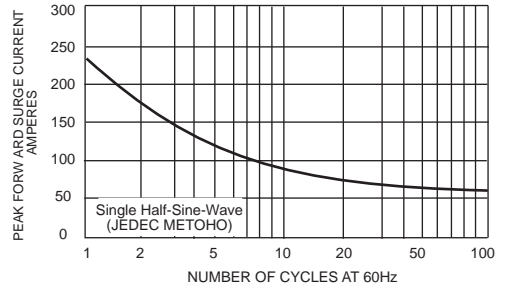


FIG.3 - TYPICAL JUNCTION CAPACITANCE

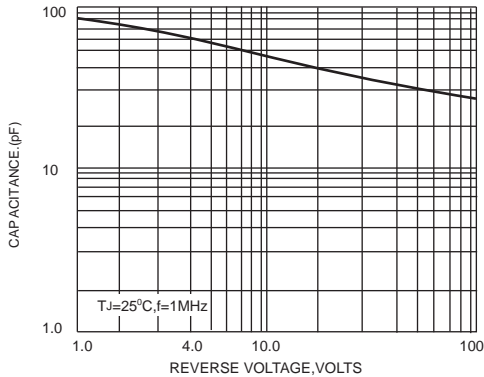


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

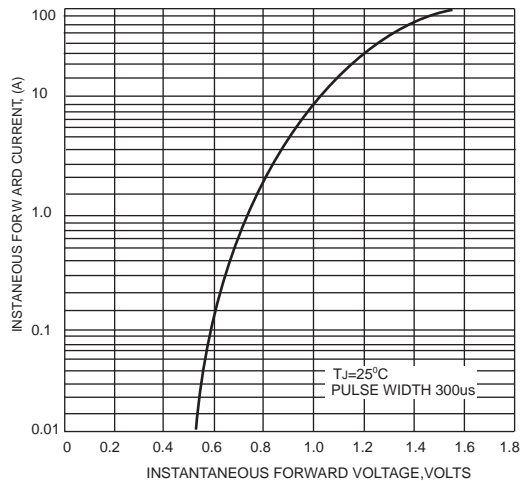


FIG.5-TYPICAL REVERSE CHARACTERISTICS

