



## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

**GBJ25005 THRU GBJ2510**

**VOLTAGE RANGE**

**50 to 1000 Volts**

**CURRENT**

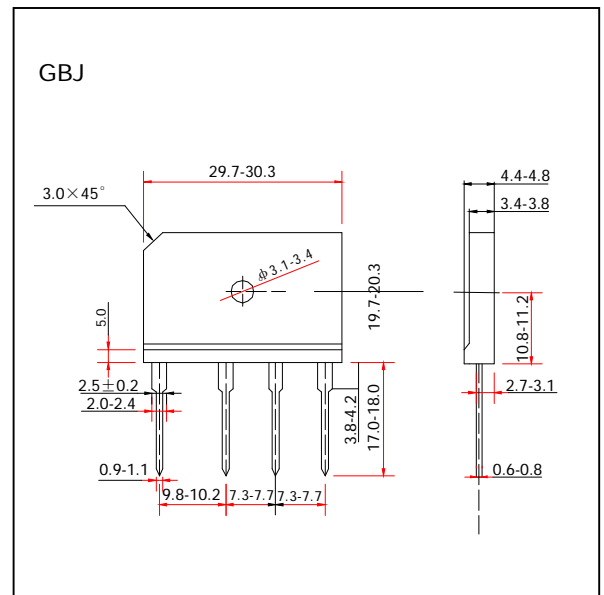
**25.0 Amperes**

### FEATURES

- Plastic package has UL Flammability Classification 94V-0
- High case dielectric strength of 1500 V<sub>RMS</sub>
- Ideal for printed circuit boards
- Glass passivated chip junctions
- High surge current capability
- High temperature soldering guaranteed  
260°C/10 seconds, 0.375”(9.5mm) lead length
- 5 lbs. (2.3Kg) tension

### MECHANICAL DATA

- Case: molded plastic body
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any (Note 3)
- Mounting Torque: 8 in – 1bs max.
- Weight: 0.26 ounce, 7.0 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	UNIT
Maximum Reverse Peak Repetitive Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	100	Volts
Maximum Average Forward Rectified Current, T <sub>C</sub> =98°C (Note 1), T <sub>A</sub> =25°C (Note 2)	I <sub>(AV)</sub>	25							Amps
Peak Forward Surge Current sine wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	3.5							Amps
Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	240							A <sup>2</sup> s
Maximum thermal resistance per leg (Note 2) (Note 1)	R <sub>JA</sub> R <sub>JC</sub>	500							°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	22 1.0							°C
Maximum Instantaneous Forward Drop Per Leg At 12.5A	V <sub>F</sub>	(-55 to +150)							Volts
Maximum DC Reverse Current at rated DC blocking voltage per Leg	I <sub>R</sub>	10 350							μ A

- Notes:**
1. Unit mounted on 300mm × 300mm × 1.6mm A1. Plate heatsink
  2. Unit mounted on P.C.B. without heatsink
  3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum Heat transfer with #6 screw



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## RATINGS AND CHARACTERISTIC CURVES GBJ25A THRU GBJ25M

FIG. 1- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

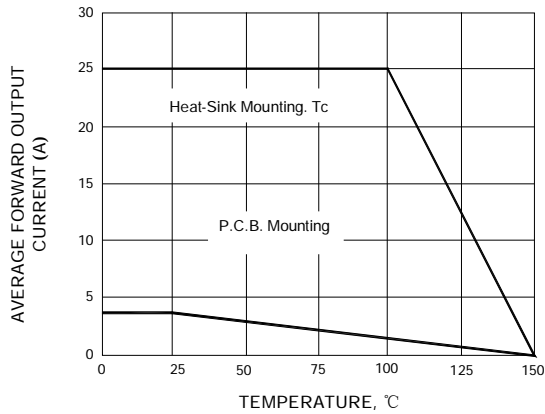


FIG. 2- MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER LEG

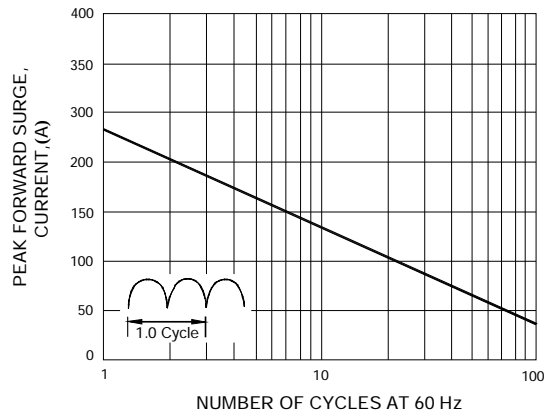


FIG. 3- TYPICAL FORWARD  
CHARACTERISTICS PER LEG

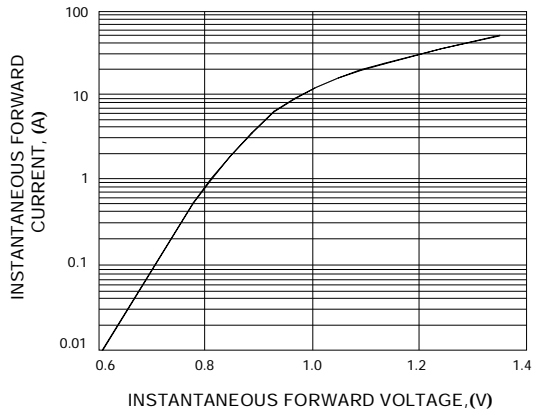


FIG. 4- TYPICAL REVERSE CHARACTERISTICS  
PER LEG

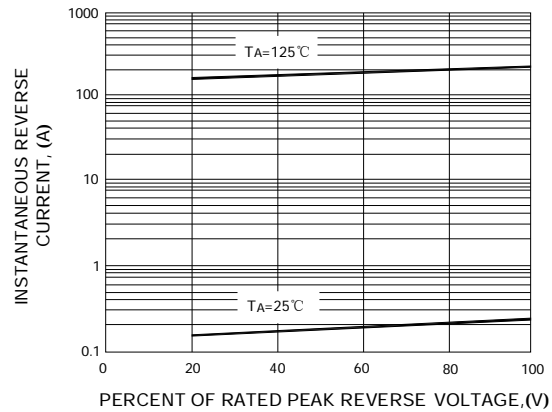


FIG. 5- TYPICAL JUNCTION CAPACITANCE  
PER LEG

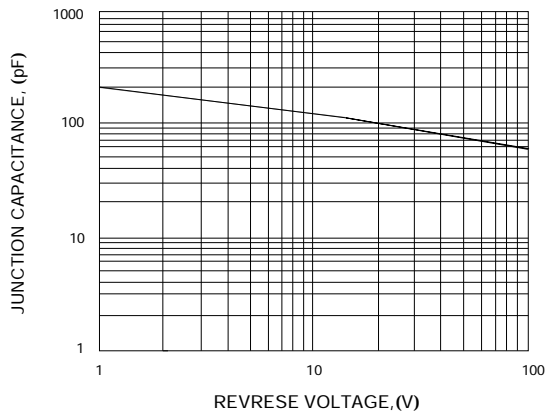


FIG. 6- TYPICAL TRANSIENT THERMAL  
IMPEDANCE

