



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

GBJ25005 THRU GBJ2510

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

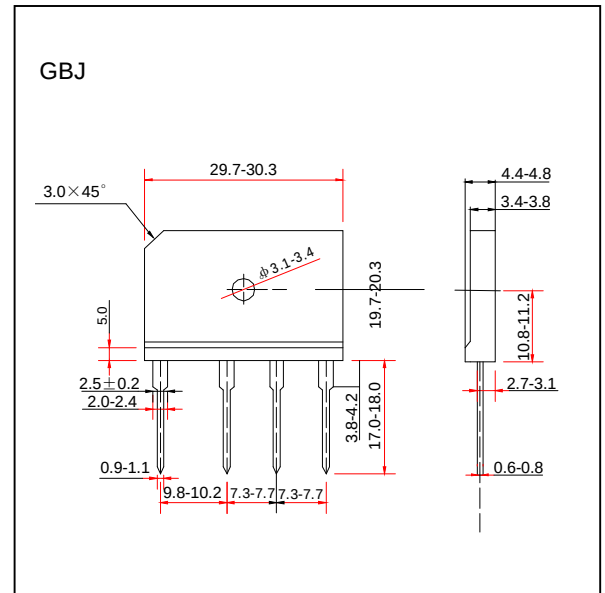
25.0 Amperes

FEATURES

- Plastic package has UL Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- 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 _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current, T _C =98°C (Note 1), T _A =25°C (Note 2)	I _(AV)	25							Amps
		3.5							
Peak Forward Surge Current sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	240							Amps
Rating for Fusing (t<8.3ms)	I ² t	500							A ² s
Maximum thermal resistance per leg (Note 2) (Note 1)	R _{JA} R _{JC}	22 1.0							°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	(-55 to +150)							°C
Maximum Instantaneous Forward Drop Per Leg At 12.5A	V _F	1.00							Volts
Maximum DC Reverse Current at rated DC blocking voltage per Leg T _A =25°C T _A =125°C	I _R	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

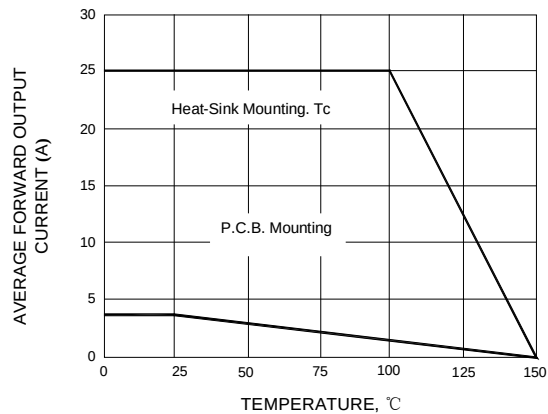


FIG. 2- MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER LEG

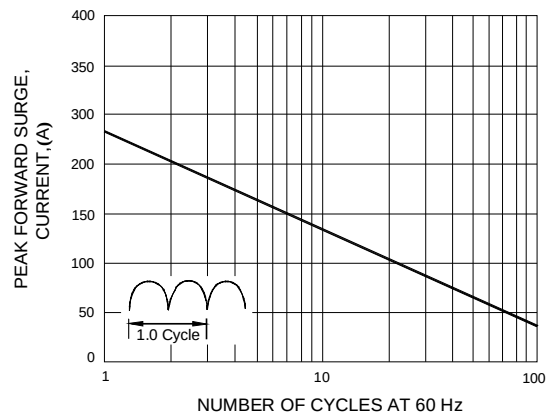


FIG. 3- TYPICAL FORWARD
CHARACTERISTICS PER LEG

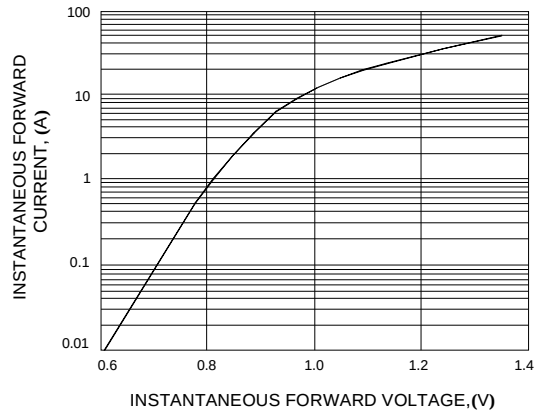


FIG. 4- TYPICAL REVERSE CHARACTERISTICS
PER LEG

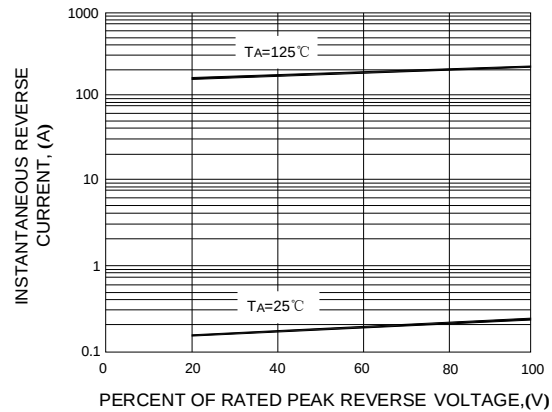


FIG. 5- TYPICAL JUNCTION CAPACITANCE
PER LEG

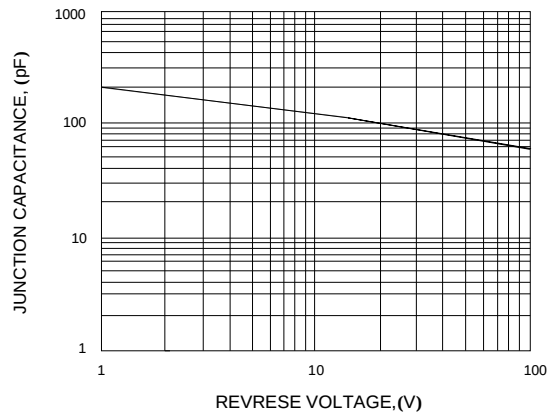


FIG. 6- TYPICAL TRANSIENT THERMAL
IMPEDANCE

