

## 15 AMPERE SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

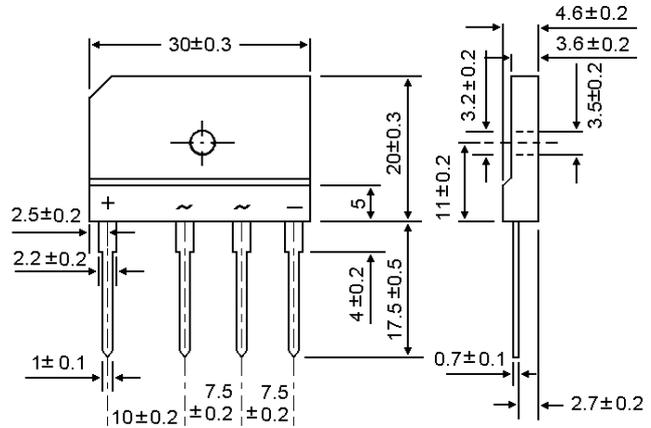
Case Style GBJ

### FEATURES

- \* Glass Passivated Die Construction
- \* Low Reverse Leakage Current
- \* High Case dielectric strength 1500 V<sub>RMS</sub>
- \* Ideal for printed circuit boards
- \* Surge Overload Rating to 240A Peak

### MECHANICAL DATA

- \* Case: Molded Plastic
- \* Epoxy: UL94V-O rate flame retardant
- \* Terminals : Plated Leads Solderable  
Per MIL-STD-202 Method 208
- \* Polarity : As Marking on Body
- \* Mounting: Through Hole for #6 Screw
- \* Mounting: Torque:6.0 In-lbs Maximum
- \* Weight : 6.6 grams (approx.)
- \* Marking:Type Number



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- \* Rating at 25 °C ambient temperature unless otherwise specified
- \* Single phase, half wave, 60Hz, resistive or inductive load.
- \* For capacitive load derate current by 20 %

Characteristic	Symbo l	GBJ15005	GBJ1501	GBJ1502	GBJ1504	GBJ1506	GBJ1508	GBJ15010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectifier Forward Current @ T <sub>C</sub> =100	I <sub>O(AV)</sub>	15							A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load (note 1)	I <sub>FSM</sub>	240							A
Forward Voltage (per element) ( I <sub>F</sub> =7.5 Amp)	V <sub>FM</sub>	1.05							V
Peak Reverse Current ( Rated DC Voltage, T <sub>C</sub> = 25 °C ) ( Rated DC Voltage, T <sub>C</sub> = 125 °C )	I <sub>R</sub>	10 500							uA
I <sup>2</sup> t Rating for Fusing( t<8.3 ms)	I <sup>2</sup> t	240							A <sup>2</sup> s
Typical Junction Capacitance per element(Note2)	C <sub>j</sub>	60							pF
Typical Thermal Resistance Junction to Case (note 3)	R <sub>θ jc</sub>	2.7							k/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150							

- Note: 1. Non-repetitive for 1>1ms and < 8.3 ms  
2. Measured at 1.0 Hz and applied reverse voltage 4.0 V DC.  
3. Thermal resistance junction to case per element, Unit mounted on 300×300×1.0 mm thick AL plate.

# GBJ15005 thru GBJ15010

FIG-1 FORWARD CURRENT DERATING CURVE

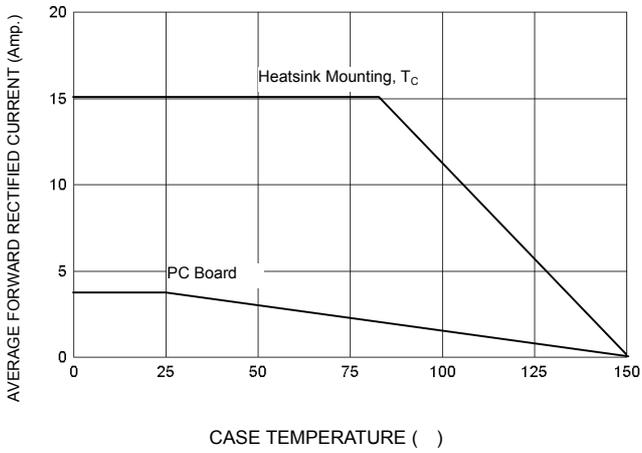


FIG-2 TYPICAL FORWARD CHARACTERISTICS

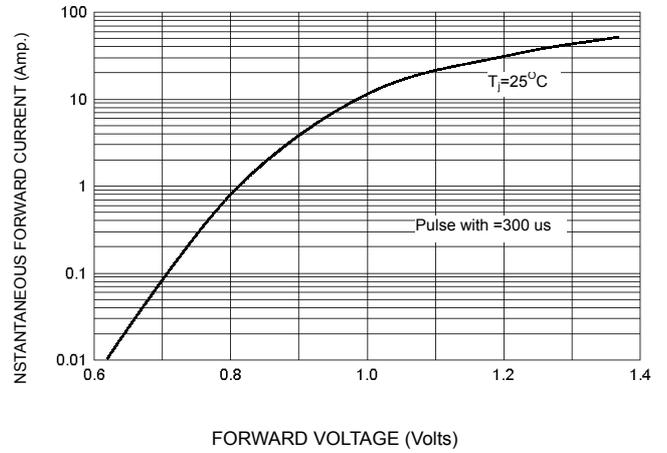


FIG-3 PEAK FORWARD SURGE CURRENT

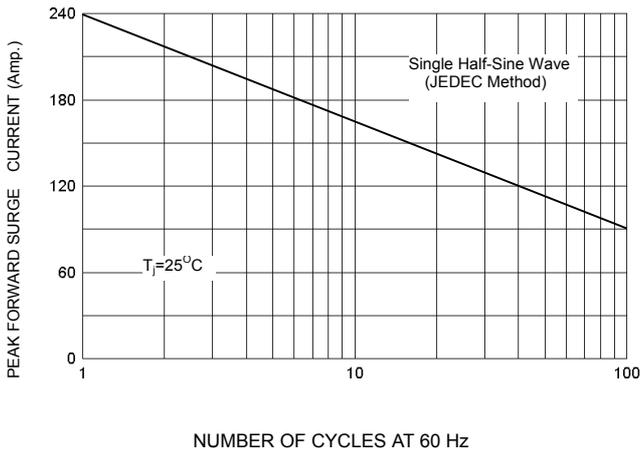


FIG-4 TYPICAL JUNCTION CAPACITANCE

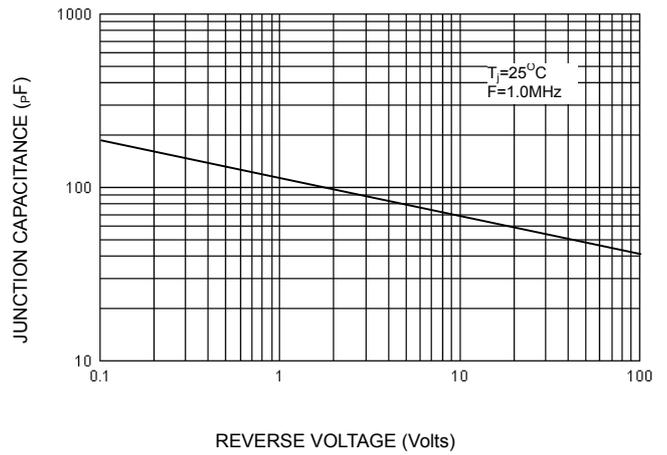
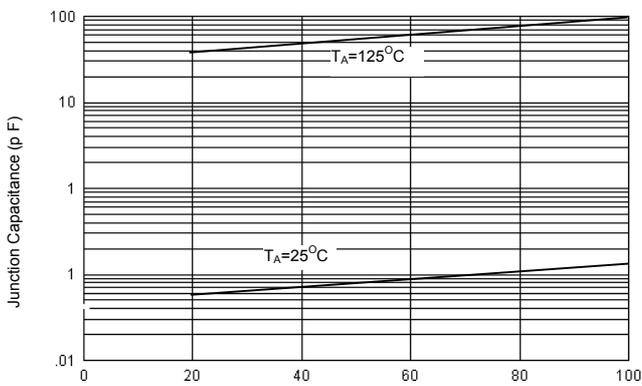


FIG-5 Typical Junction Capacitance Per Leg



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