

**GBJ25005-GBJ2510**

**Single-Phase 25.0A Glass Passivated Bridge Rectifier**

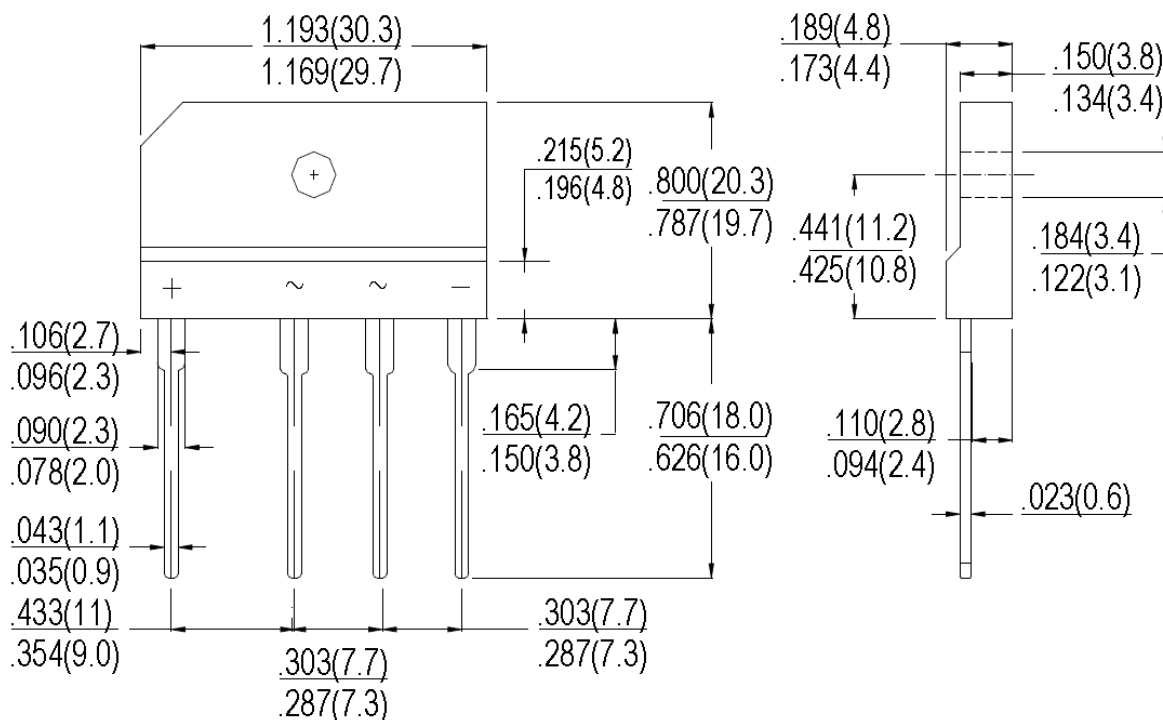
**Features:**

- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

**Mechanical Data:**

- Case: GBJ, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Weight: 0.23ounce, 6.6gram

**Mechanical Dimensions: In Inches/mm**



**GBJ**

**MARKING, MOLDING RESIN**

Marking for Type Number, 1<sup>st</sup> row SSG YYWWL, 2<sup>nd</sup> row Type Number

Where YY is the manufacture year

WW is the manufacture week code

L is the wafer's Lot Number

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## GBJ25005 THRU GBJ2510

Technical Data  
Data Sheet N1754, Rev. -

Green Products

**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%

### Maximum Ratings:

Type number	Symbol	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit
Maximum Recurrent Peak Reverse Voltage Maximum DC Blocking Voltage	$V_{RRM}$ $V_{DC}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current with Heatsink at $T_C=100^\circ\text{C}$	$I_{(AV)}$	25							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	300							A

### Electrical Characteristics:

Type Number	Symbol	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit
Maximum Forward Voltage @ $I_F=12.5\text{A}$	$V_F$	1.1							V
Maximum Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	85							pF

### Thermal-Mechanical Specifications:

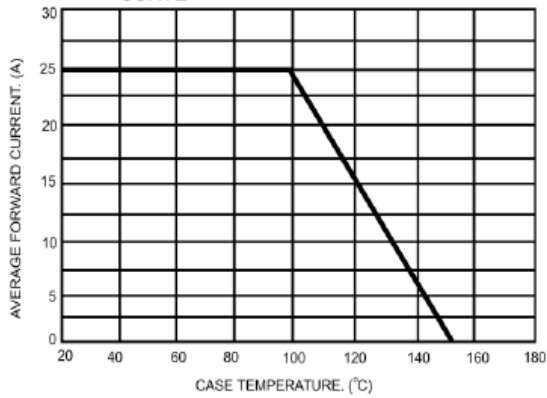
Type Number	Symbol	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.6							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$
Case Style		GBJ							

Note: 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

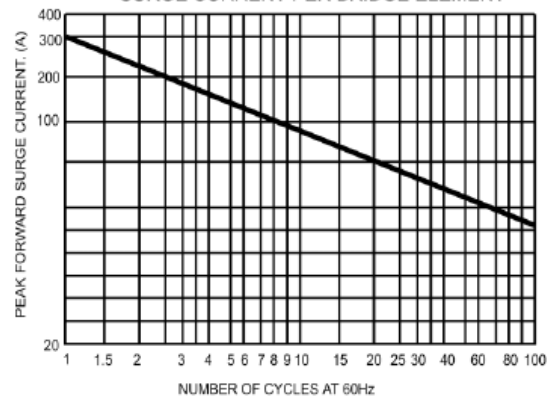
2- Thermal Resistance from Junction to Case with Device Mounted on 300mm x 300mm x 1.6mmC u Plate Heatsink.

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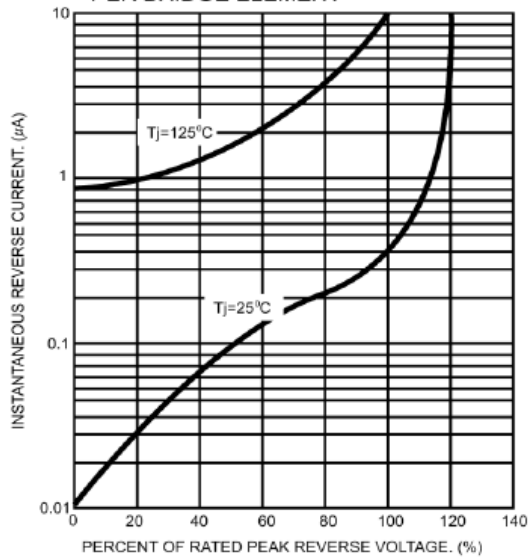
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



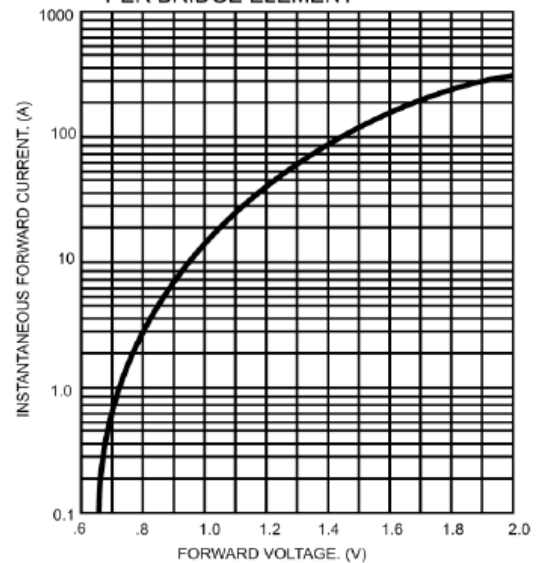
**FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT**



**FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**





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