

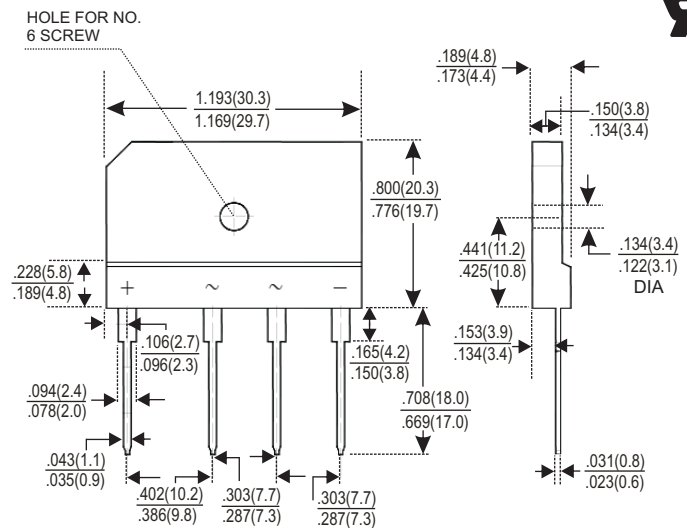


**FEATURES**

- UL Recognized
- Current 8 Amps
- Voltage Range 50V ~ 1000V
- Glass passivated chip junction
- High surge forward current capability
- GBJ available in 6A, 8A, 10A, 15A, 20A, 25A, 35A and 50A

**MECHANICAL DATA**

- Molded plastic body (UL 94V-0 rated)
- Mounting through hole for No. 6 screw
- Mounting Torque: recommend 5Kg • cm
- Polarity: As marked
- Lead: solder plated



**GBJ**

Dimensions in inches and (millimeters)

**MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS**

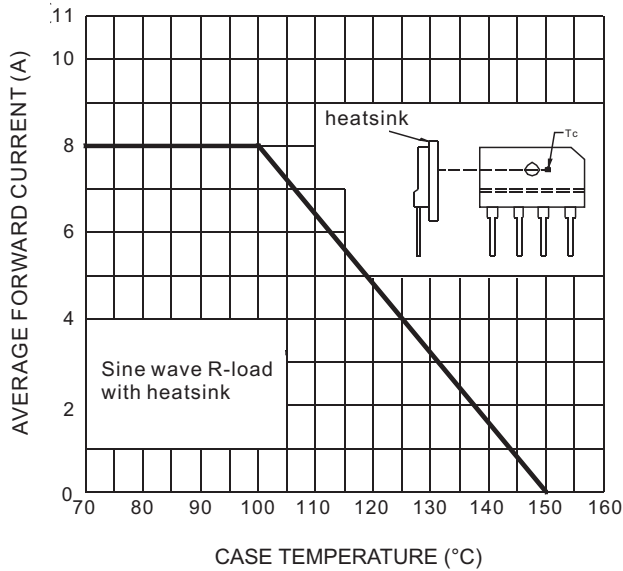
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load  
For capacitive load, derate current by 20%

Parameter	Symbol	GBJ 8005	GBJ 801	GBJ 802	GBJ 804	GBJ 806	GBJ 808	GBJ 810	Unit
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 Rectified Current, @T <sub>c</sub> =100°C (with heat sink)	I <sub>o (AV)</sub>	8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	170							A
I <sup>2</sup> t for fusing (t < 8.3ms), non-repetitive	I <sup>2</sup> t	120							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage @4.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at rated DC Blocking voltage Per Element	I <sub>R</sub>	10							µA
Typical Thermal Resistance (Note)	R <sub>θJC</sub>	2.3							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to + 150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C

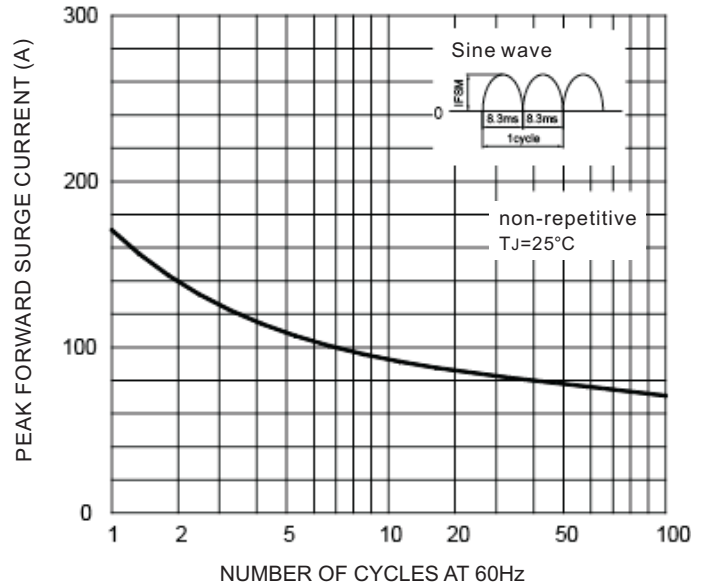
**NOTE:** Thermal Resistance from Junction to Case, with heat sink

**RATING & CHARACTERISTIC CURVES**

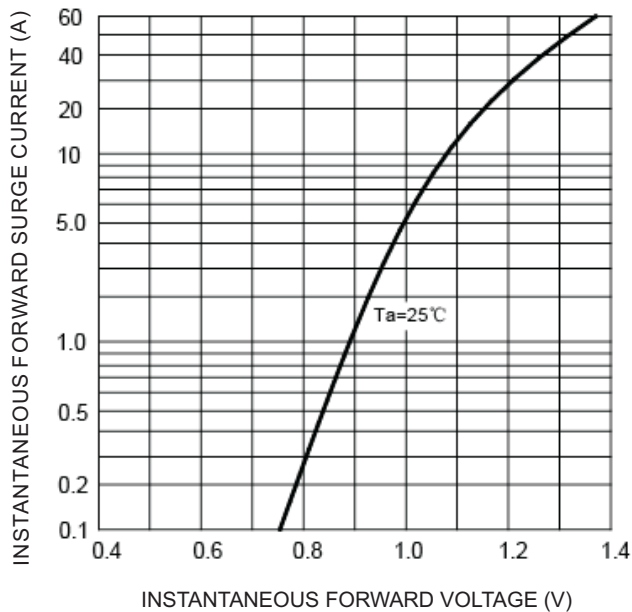
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

