

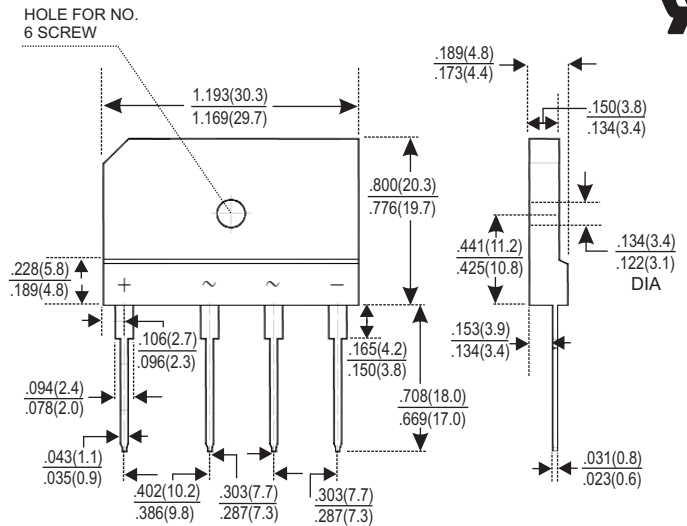


**FEATURES**

- UL Recognized
- Current 50 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 50005	GBJ 5001	GBJ 5002	GBJ 5004	GBJ 5006	GBJ 5008	GBJ 5010	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current, @ $T_c=100^\circ C$ (with heat sink)	$I_O (AV)$	50							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	500							A
$I^2t$ for fusing (t < 8.3ms), non-repetitive	$I^2t$	1040							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage @25.0A	$V_F$	1.1							V
Maximum DC Reverse Current at rated DC Blocking voltage Per Element	$I_R$	10							$\mu A$
Typical Thermal Resistance (Note)	$R_{\theta JC}$	0.5							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to + 150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to + 150							$^\circ C$

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

■ **RATING & CHARACTERISTIC CURVES**

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

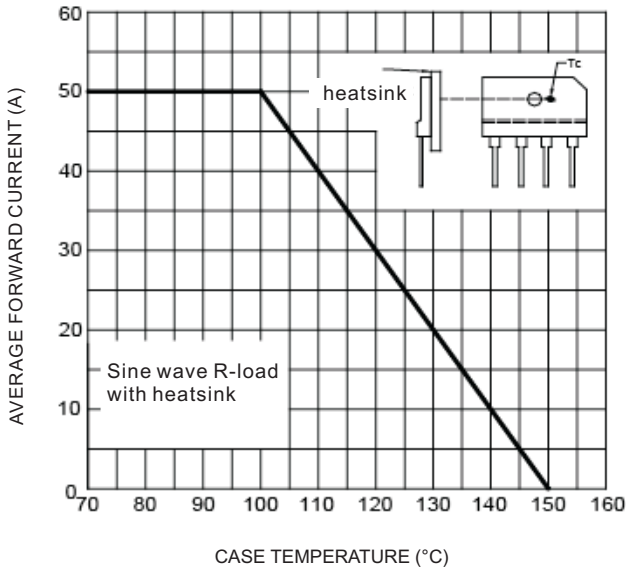


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

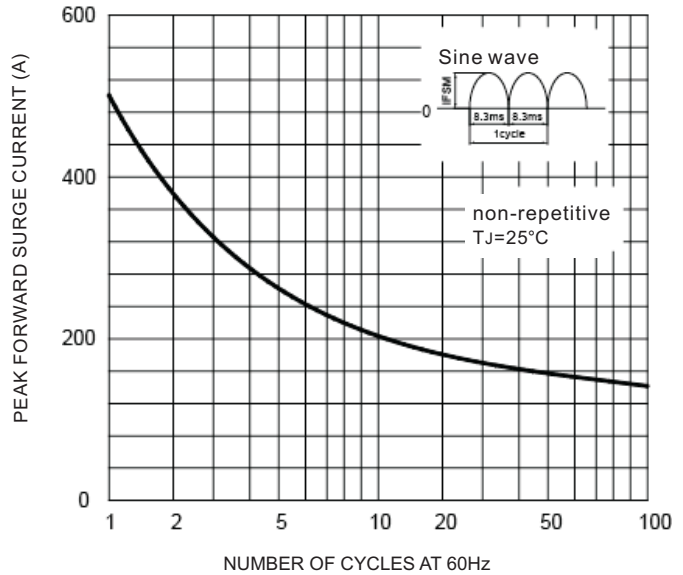


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

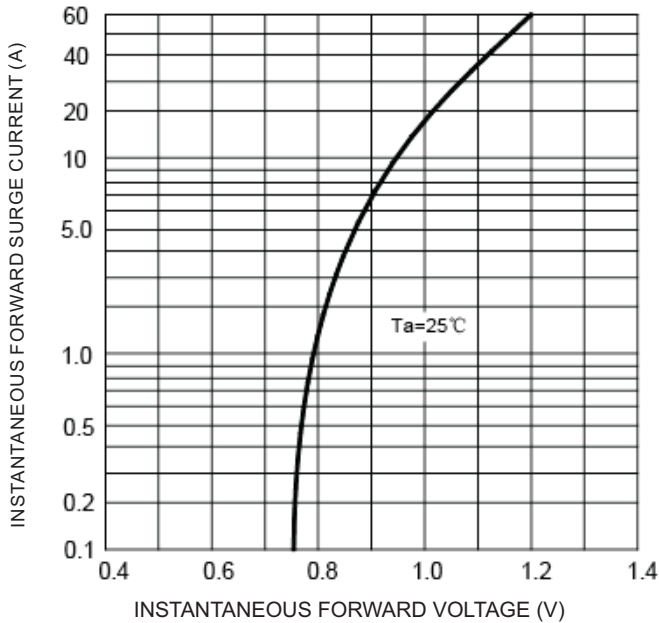


FIG.4- TYPICAL REVERSE CHARACTERISTICS

