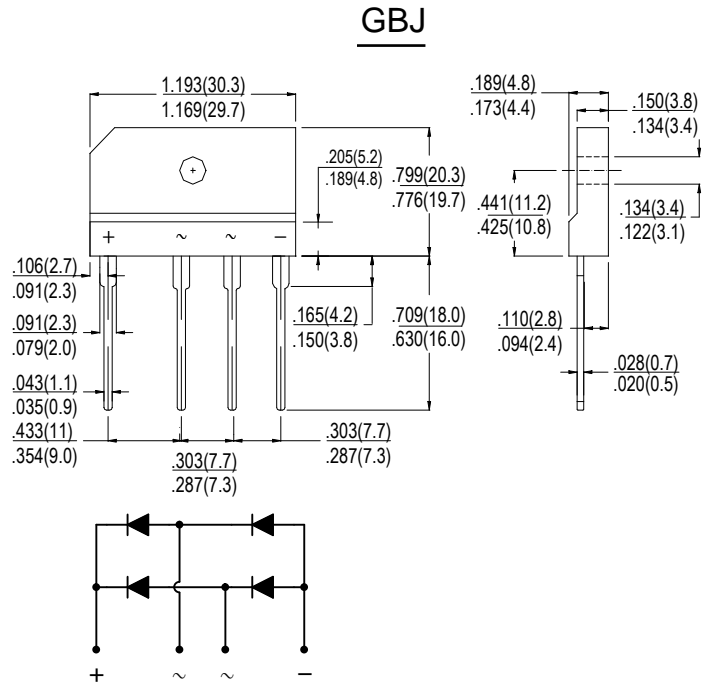


### Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: Molded plastic, GBJ
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version



### 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%.

TYPE NUMBER	SYMBOL	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>								
DC Blocking Voltage	V <sub>DC</sub>								
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T <sub>c</sub> =90°C	I <sub>F(AV)</sub>	25.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	350							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	508.375							A <sup>2</sup> s
Forward Voltage per element @I <sub>F</sub> =12.5A @I <sub>F</sub> =25A	V <sub>FM</sub>	1.0 1.1							V
Peak Reverse Current @T <sub>J</sub> =25°C At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	5.0 200							uA
Dielectric Strength	V <sub>ids</sub>	2500							V
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	110							pF
Between junction and ambient, Without heatsink	R <sub>θJA</sub>	22							°C/W
Between junction and case, With heatsink	R <sub>θJC</sub>	1.0							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55to+150							°C

Note: 1. Unit case mounted on aluminum plate heatsink  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..

Fig. 1 Output Current Derating Curve

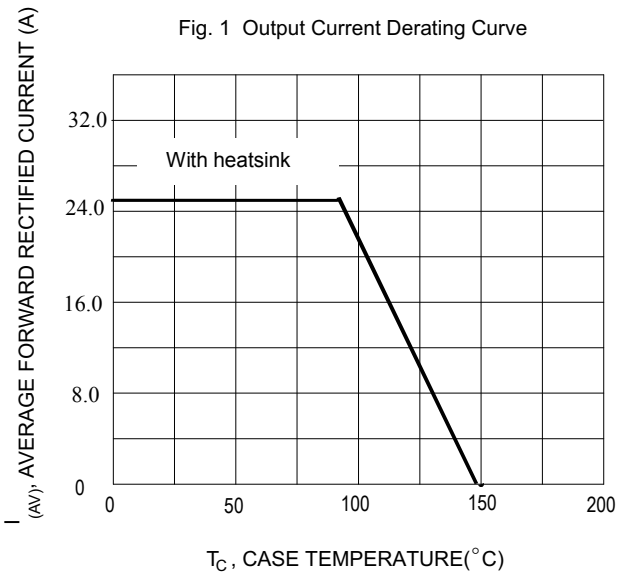


Fig. 2 Typical Forward Characteristics

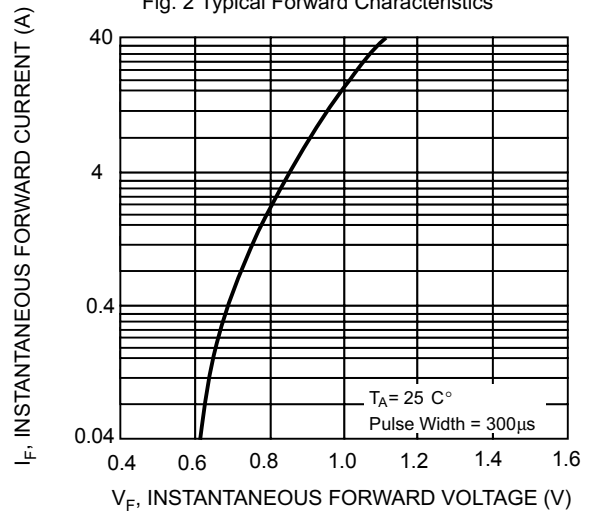


Fig. 3 Maximum Peak Forward Surge Current

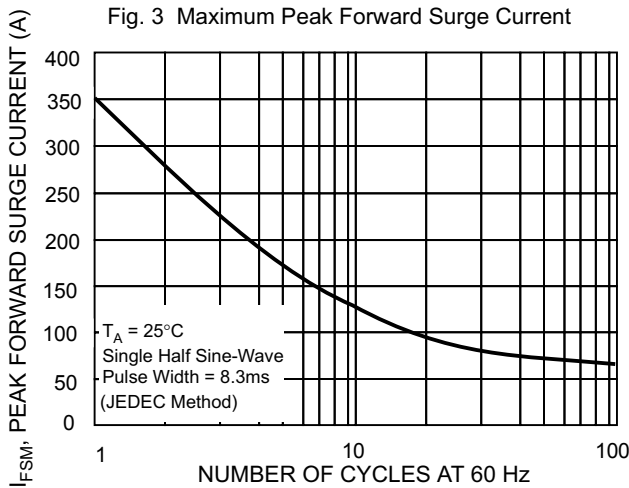


Fig. 4 Typical Junction Capacitance

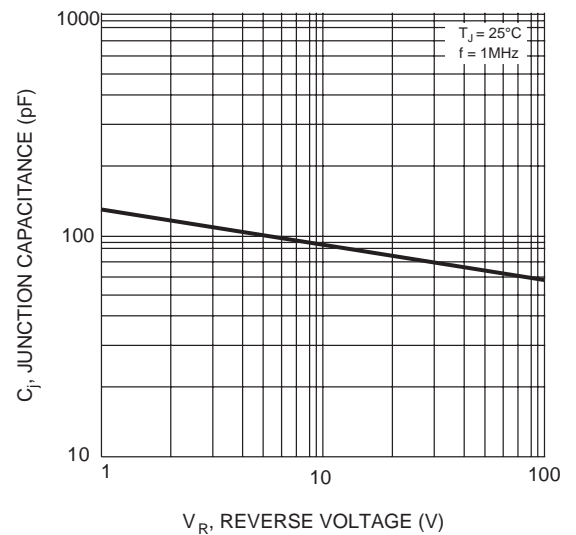
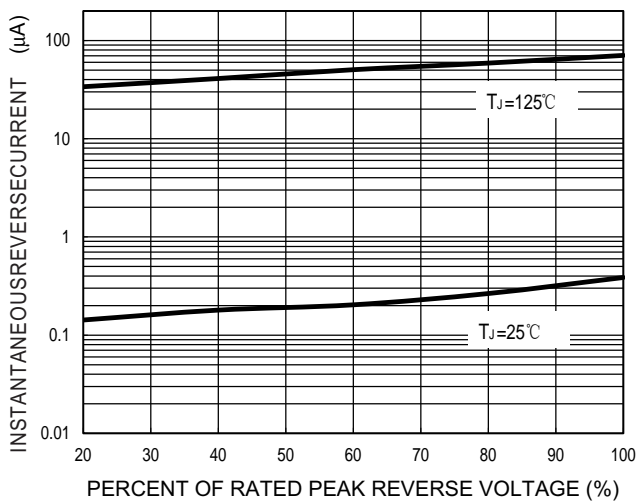


Fig. 5 Typical Reverse Characteristics



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