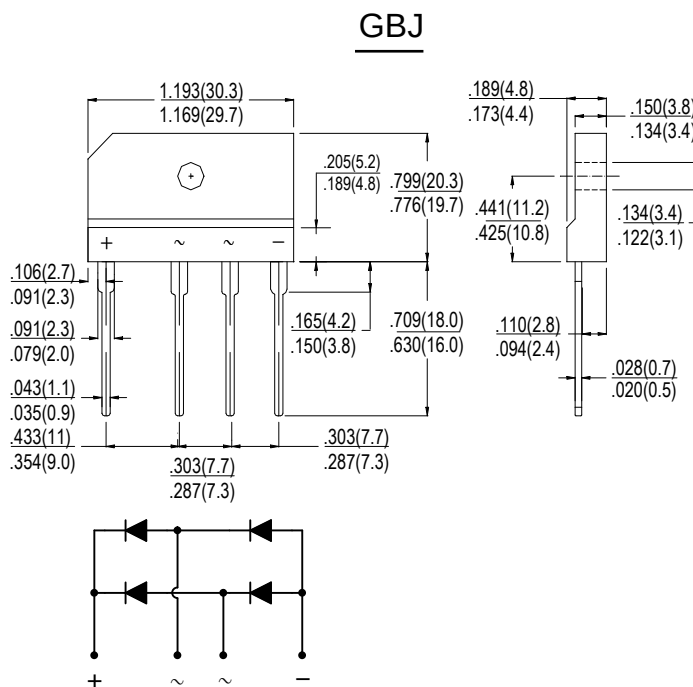


Features

- 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%.

NUMBER	SYMBOL	GBJ 8005	GBJ 801	GBJ 802	GBJ 804	GBJ 806	GBJ 808	GBJ 810	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 2)@T _C =90 °C	IF(AV)	8.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	175							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	127.09							A ² s
Forward Voltage per element @IF=4A @IF=8A	V _{FM}	1.0 1.1							V
Peak Reverse Current @T _A =25 °C At Rated DC Blocking Voltage @T _A =125 °C	I _R	5.0 500							uA
Typical Junction Capacitance per leg	C _J	55							pF
Between junction and ambient, Without heatsink	R _{θJA}	24							°C/W
Between junction and case, With heatsink	R _{θJC}	2.0							
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150							°C

Note: Unit case mounted on aluminum plate heatsink.

Fig. 1 Output Current Derating Curve

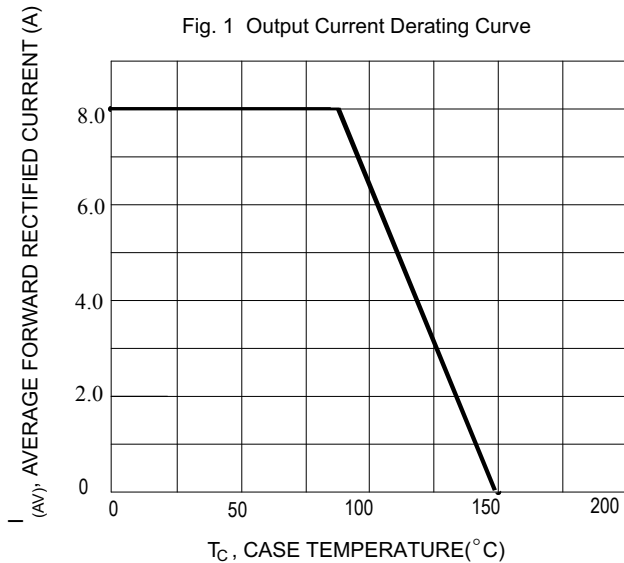


Fig. 2 Typical Forward Characteristics (per leg)

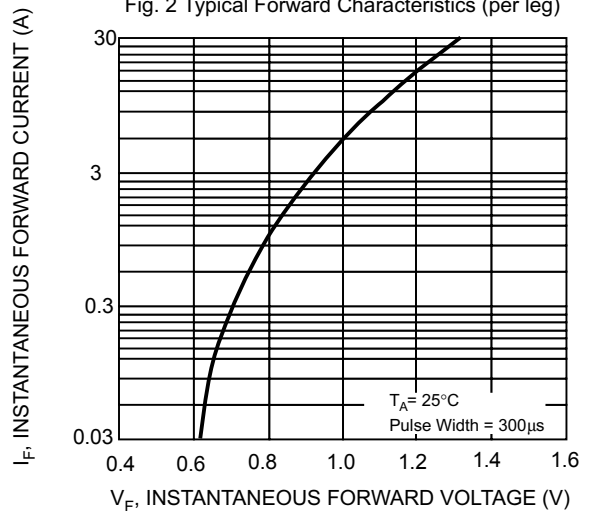


Fig. 3 Maximum Peak Forward Surge Current (per leg)

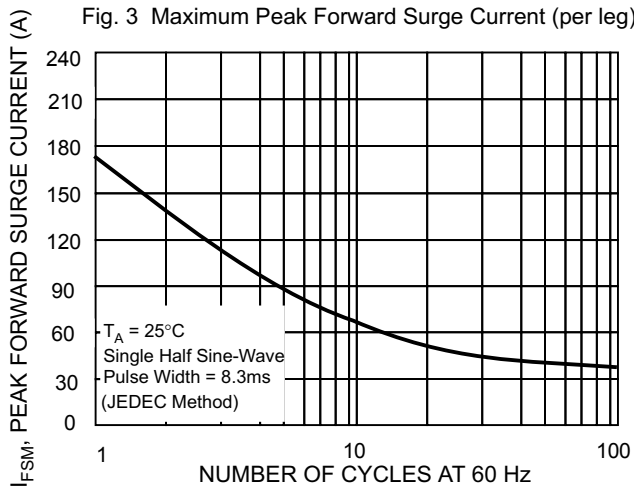


Fig. 4 Typical Junction Capacitance

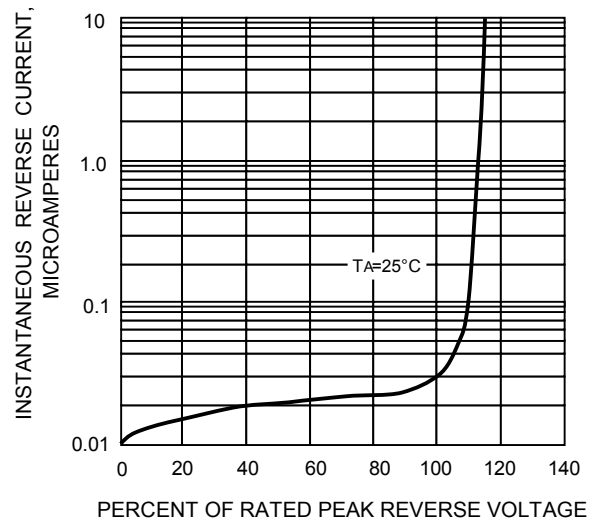


FIG.5 TYPICAL REVERSE CHARACTERISTICS

