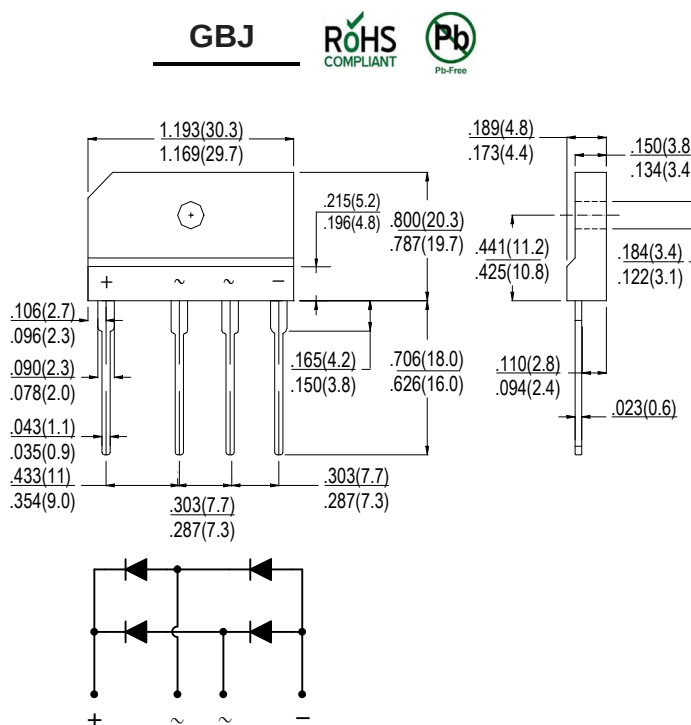


Features

- 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



dimensions in inches and (millimeters)

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 50005	GBJ 5001	GBJ 5002	GBJ 5004	GBJ 5006	GBJ 5008	GBJ 5010	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 1)@T _C =90℃	IF(AV)	50.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	450							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	840.375							A ² s
Forward Voltage per element @IF=25A	V _{FM}	1.1							V
Peak Reverse Current @T _A =25℃ At Rated DC Blocking Voltage @T _A =125℃	I _R	5.0 500							uA
Typical Junction Capacitance per leg	C _J	75							pF
Between junction and ambient, Without heatsink	R _{θJA}	22							℃/W
Between junction and case, With heatsink	R _{θJC}	0.8							
Operating and Storage Temperature Range	T _J ,T _{STG}	-55to+150							℃

NOTES: 1.Device mounted on 300mm*300mm*1.6mm cu plate heatsink.

Typical Characteristics

Fig. 1 Output Current Derating Curve

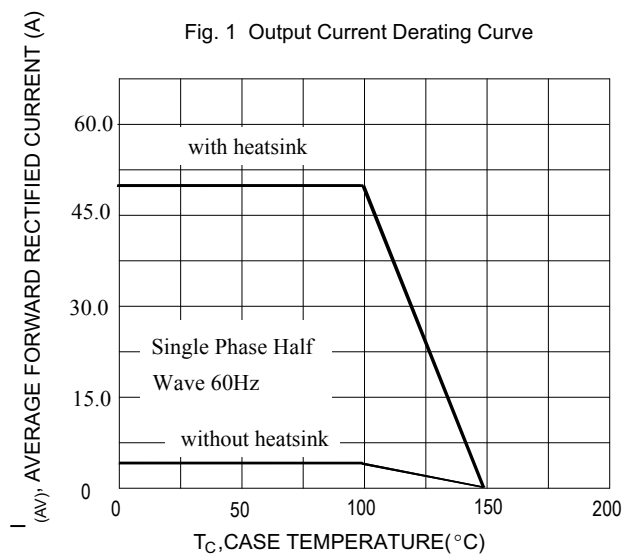


Fig. 2 Typical Forward Characteristics (per leg)

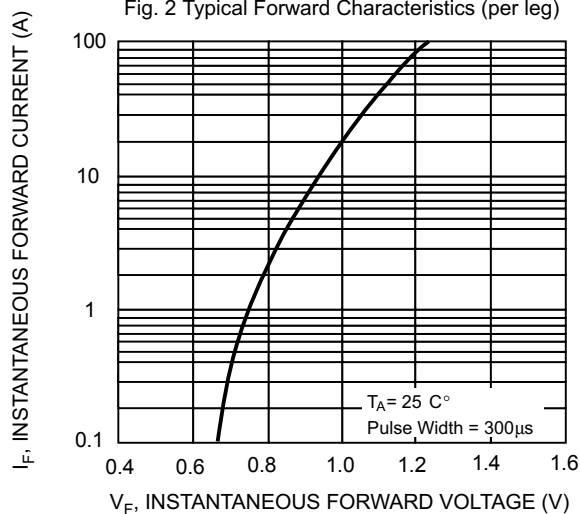


Fig. 3 Maximum Peak Forward Surge Current (per leg)

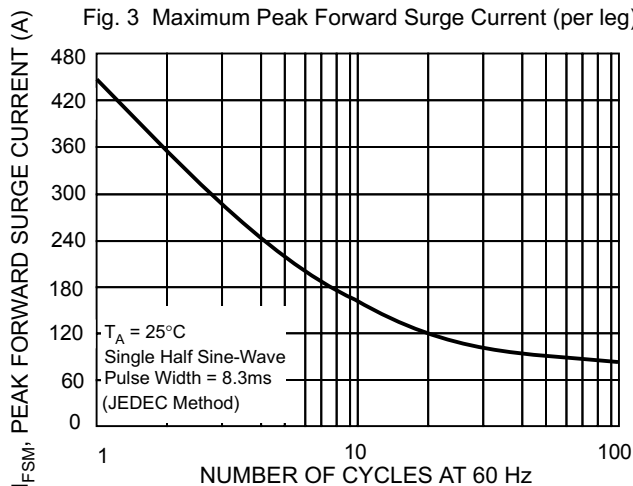


Fig. 4 Typical Junction Capacitance

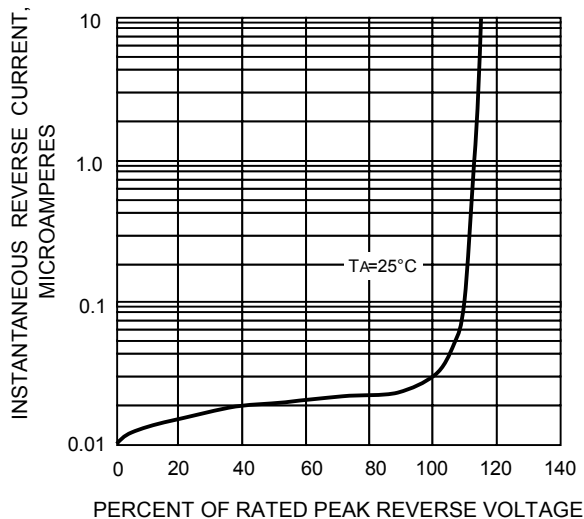


FIG.5 TYPICAL REVERSE CHARACTERISTICS

