

## FEATURES

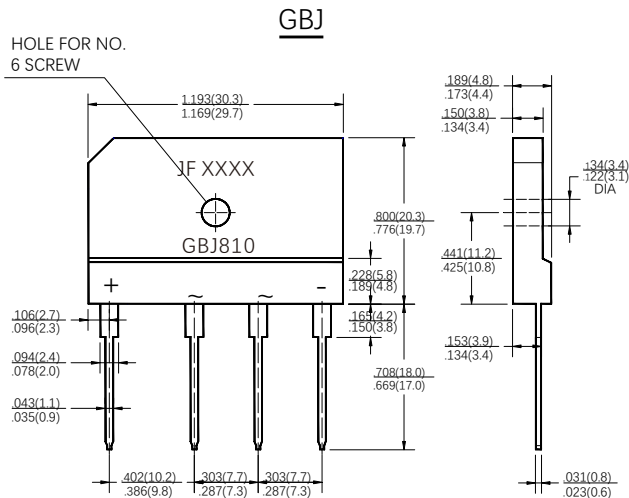
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

## MECHANICAL DATA

- Case: GBJ molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any

## TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.



Dimensions in inches and (millimeters)

Marking  
JF: Logo  
XXXX: Data code  
GBJ810: Type

## 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%.)

Parameters	Symbols	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{FAV}$	8.0						Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	175						Amps
Rating for fusing (t=8.3ms)	$I^2t$	127						A <sup>2</sup> s
Maximum Instantaneous Forward Voltage at 4.0 A DC	$V_F$	1.1						Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_J=25^\circ\text{C}$	5						$\mu\text{A}$
	$T_J=125^\circ\text{C}$	100						$\mu\text{A}$
Typical thermal resistance (Note 1)	$R_{\theta JA}$	18						$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	2.0						$^\circ\text{C}/\text{W}$
Operating temperature range	$T_J$	-55 to +150						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150						$^\circ\text{C}$

Note: 1. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

FIG.1-MAXIMUM FORWARD SURNGE CURRENT

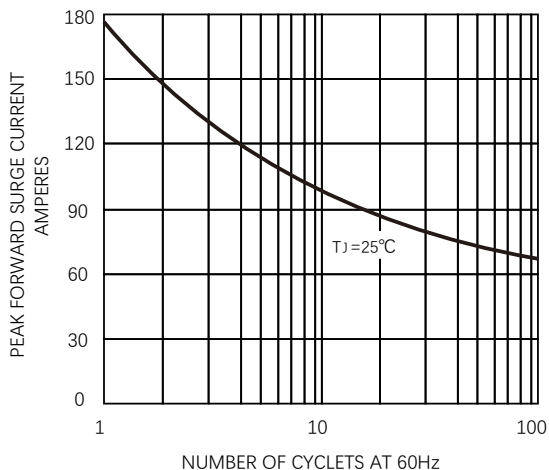


FIG.2-FORWARD CURRENT DERATING CURVE

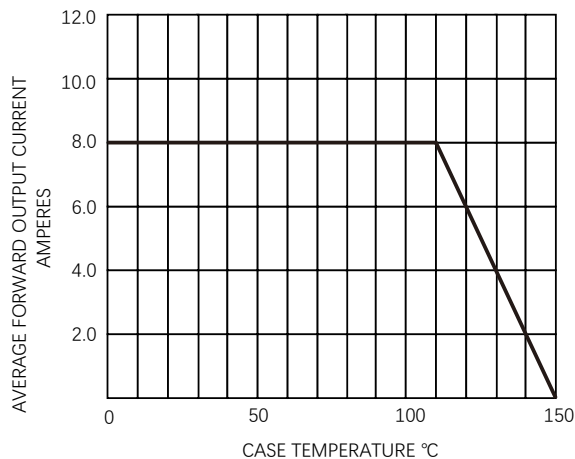


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

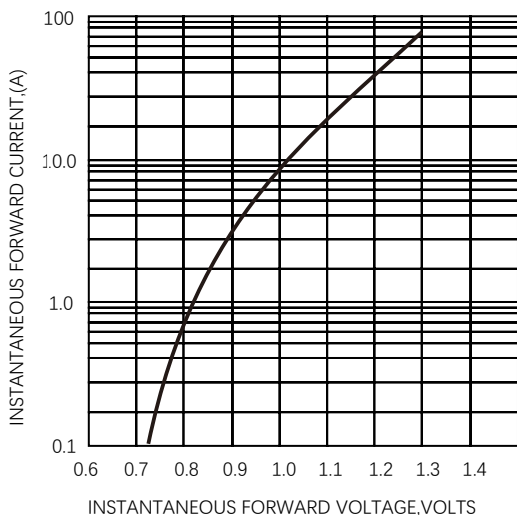
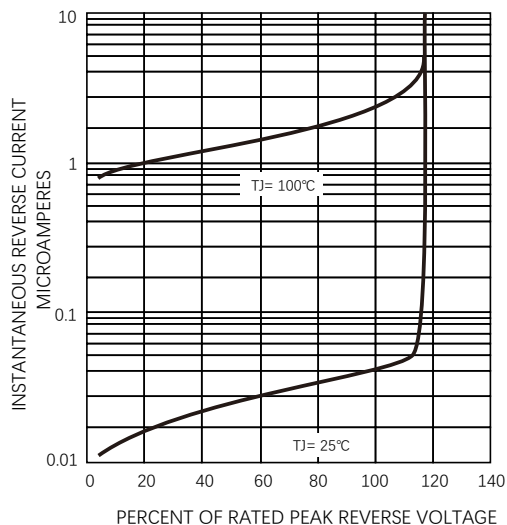


FIG.4 -TYPICAL REVERSE CHARACTERISTICS



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