

**50A GLASS PASSIVATED BRIDGE RECTIFIER Reverse**
**Voltage - 100 to 1000 V**
**Forward Current – 50A**
**FEATURES**

- ◆Surge overload rating-400 amperes peak
- ◆Polarity:As marked on body
- ◆Ideal for printed circuit board
- ◆Plastic material has U/L

The flammability classification 94V-0

- ◆Reliable low cost construction utilizing molded plastic technique

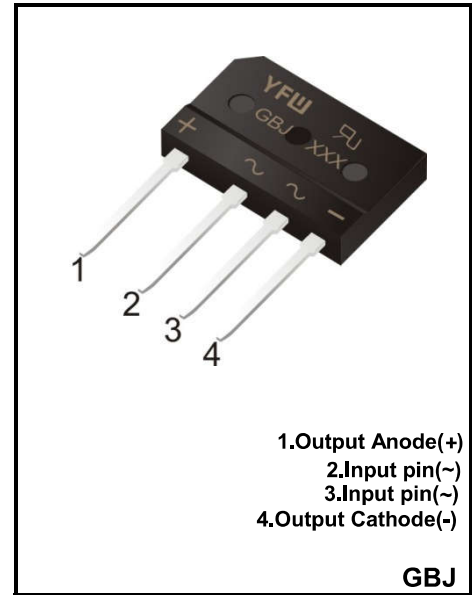
**MECHANICAL DATA**

- ◆Case: GBJ
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: 6.79g /0.24oz

**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.



Parameter	Symbols	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_a = 85^{\circ}C$	$I_{(AV)}$	50						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	500						A
Forward Voltage per element @ $I_F = 25A$ DC	$V_F$	1.1						V
Maximum DC Reverse Current @ $T_J = 25^{\circ}C$ at Rated DC Blocking Voltage @ $T_J = 125^{\circ}C$	$I_R$	5 500						$\mu A$
$I^2t$ Rating for Fusing( $3ms \leq t \leq 8.3ms$ )	$I^2t$	664						$A^2S$
Typical Junction Capacitance (Note1)	$C_j$	140						pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	1.0						$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^{\circ}C$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Device mounted on 75mm\*75mm\*1.6mm cu plate heatsink

FIG.1-FORWARD CURRENT DERATING CURVE

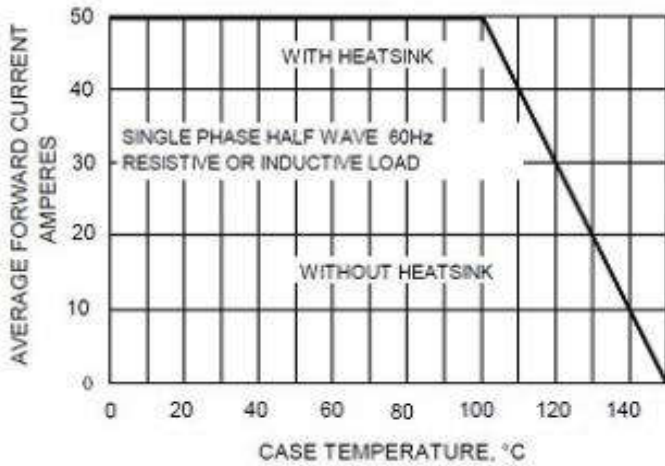


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

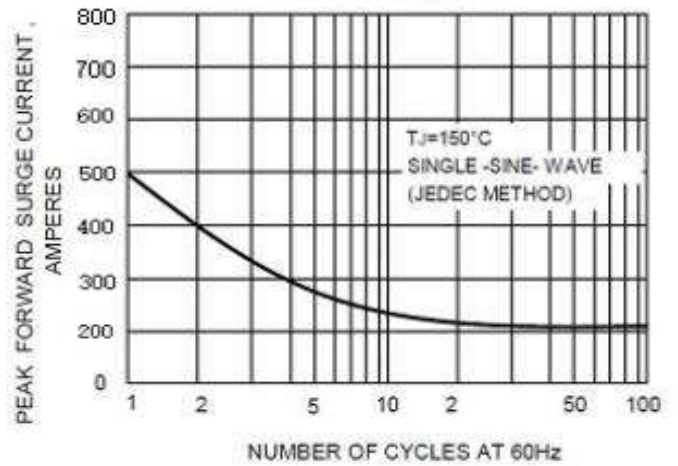


FIG.3-TYPICAL FORWARD CHARACTERISTICS

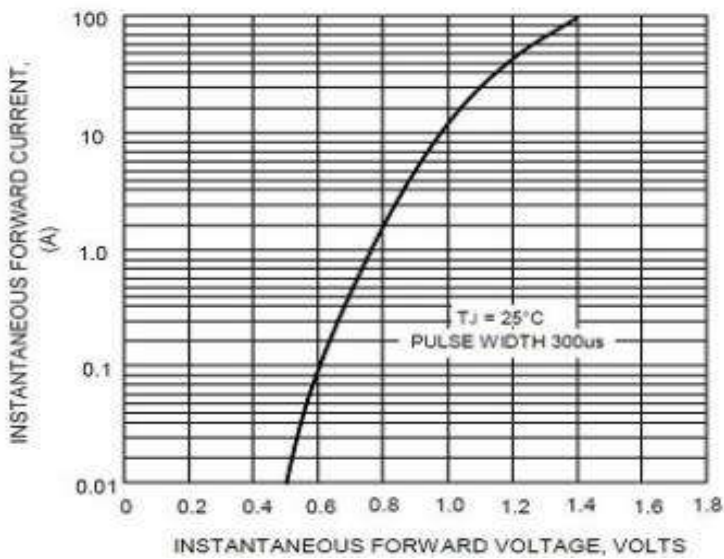
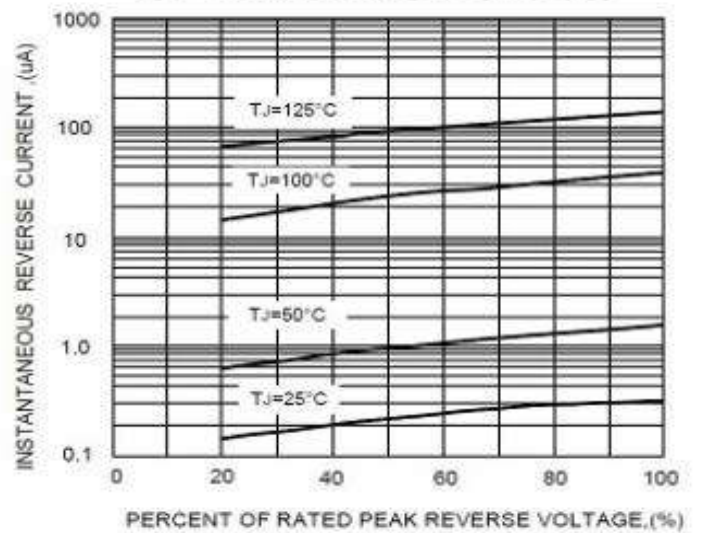
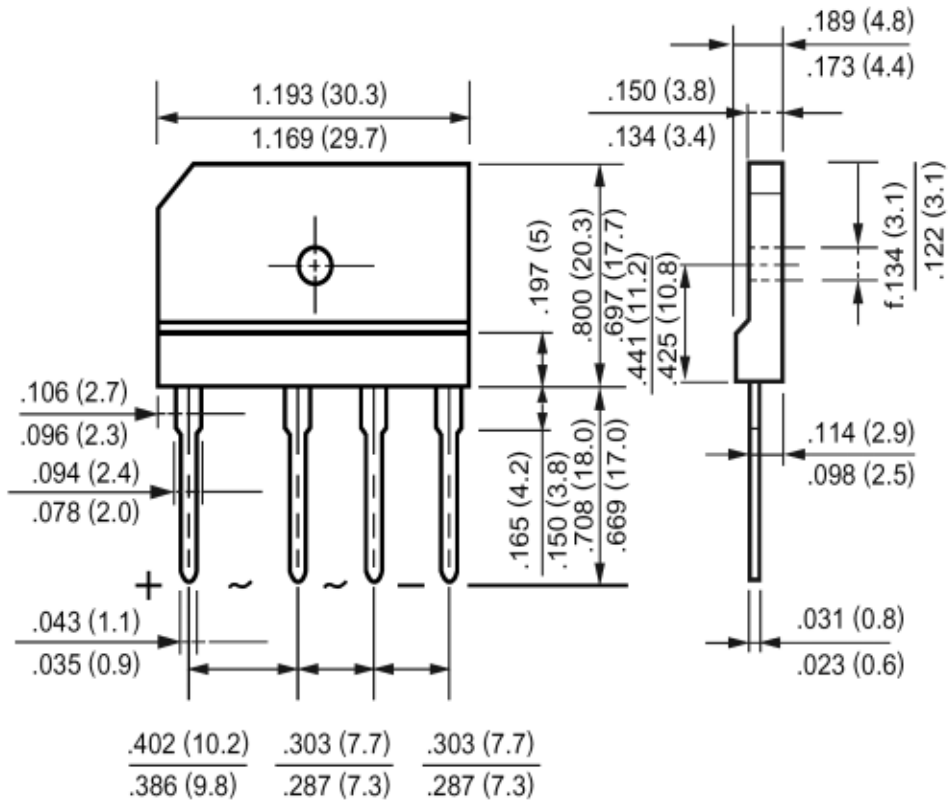


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Package Outline

GBJ



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
GBJ	BOX	250	EIA-481-1