

**15A Super Fast Recovery Rectifier Bridge**

**Reverse Voltage - 300 to 600 V**  
**Forward Current –15A**

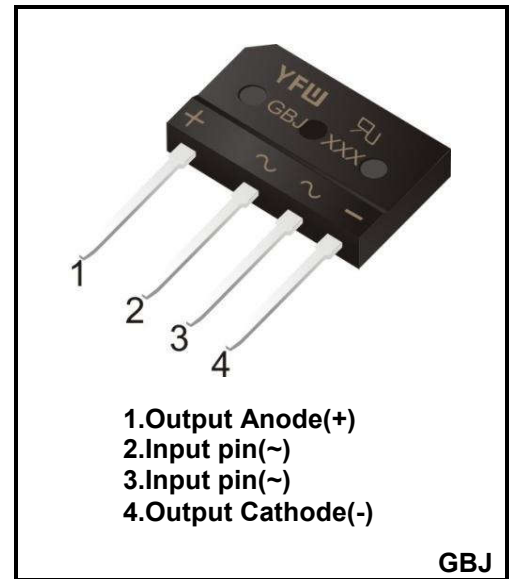


**FEATURES**

- ◆Surge overload rating-200 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, Method208
- ◆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	GBJ1503SF	GBJ1506SF	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	300	600	V
Maximum RMS voltage	$V_{RMS}$	200	420	V
Maximum DC Blocking Voltage	$V_{DC}$	300	600	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	15		A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250		A
Forward Voltage per element @ $I_F=15A$ DC	$V_F$	1.20	1.50	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^{\circ}C$ @ $T_J=125^{\circ}C$	$I_R$	10 500		$\mu A$
I2t Rating for Fusing(3ms≤t≤8.3ms)	$I^2t$	166		A <sup>2</sup> S
Typical Junction Capacitance (Note1)	$C_j$	66		pF
Maximum Reverse Recovery Time (Note2)	$T_{rr}$	38	45	nS
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.3		°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175		°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

**Ratings and Characteristic Curves**

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

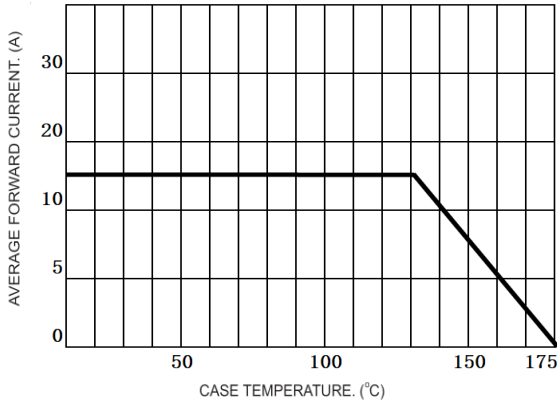


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

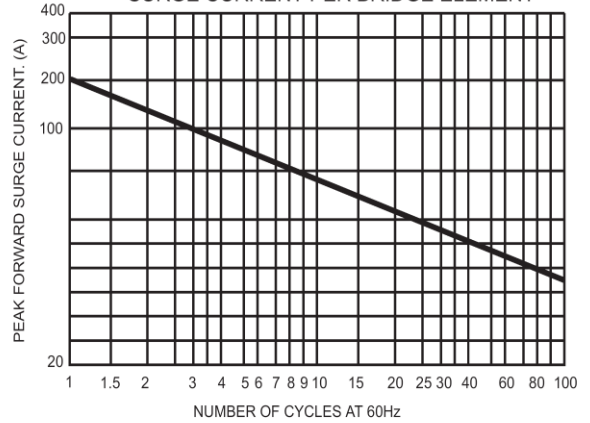


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

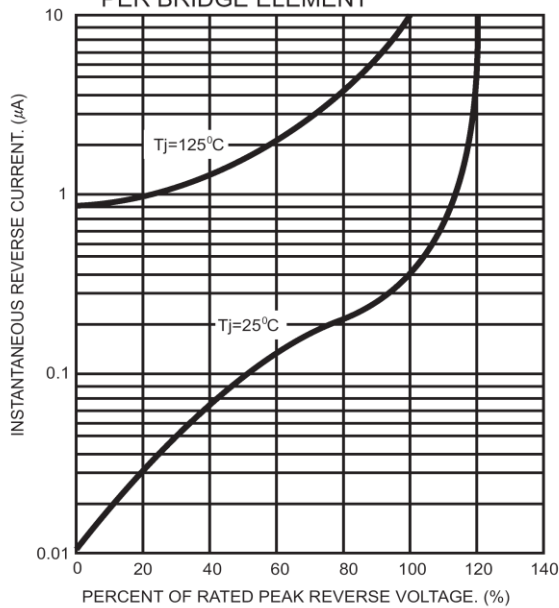


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

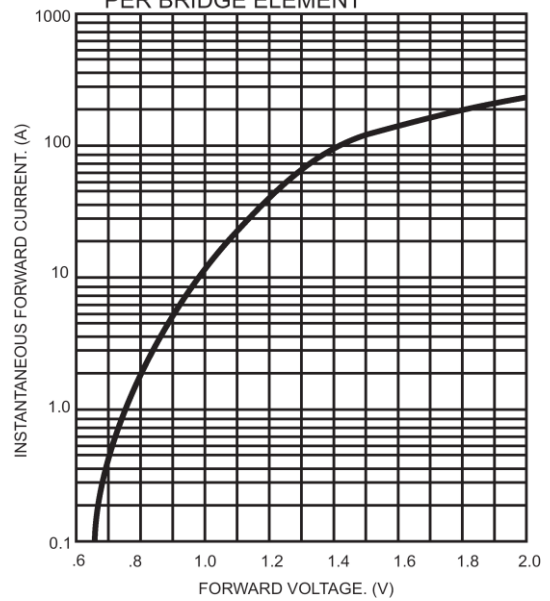
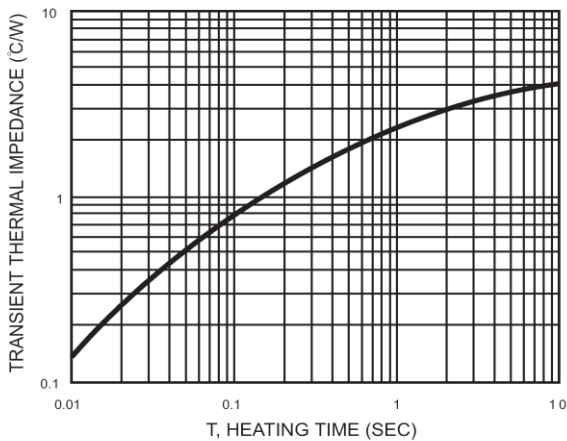
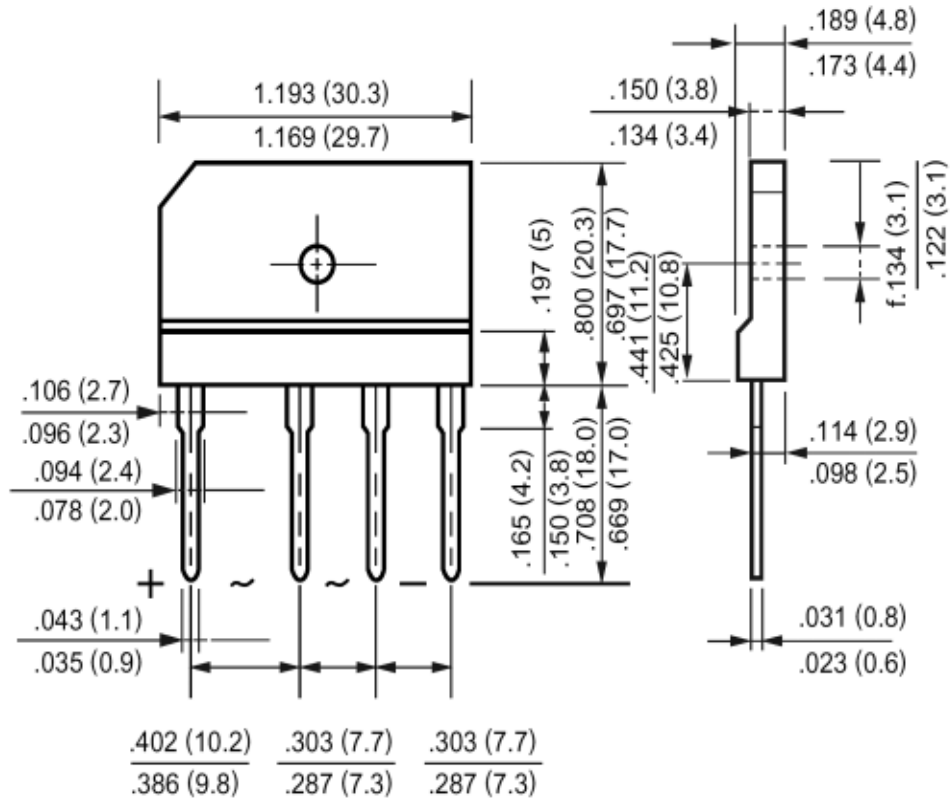


FIG.5- TYPICAL TRANSIENT THERMAL IMPEDANCE





### Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
GBJ	BOX	200	EIA-481-1