

**15A Super Fast Recovery Rectifier Bridge**

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

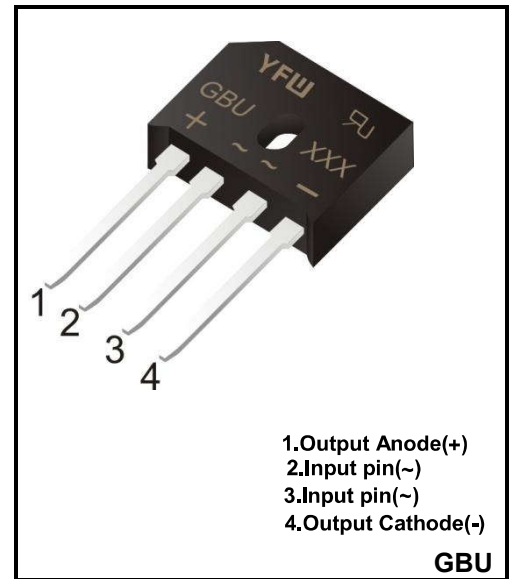


**FEATURES**

- ◆Surge overload rating-220 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: GBU
- ◆Terminals: Solderable per MIL-STD-202, Method208
- ◆Approx. Weight: 3.9g /0.138oz



**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 %.**

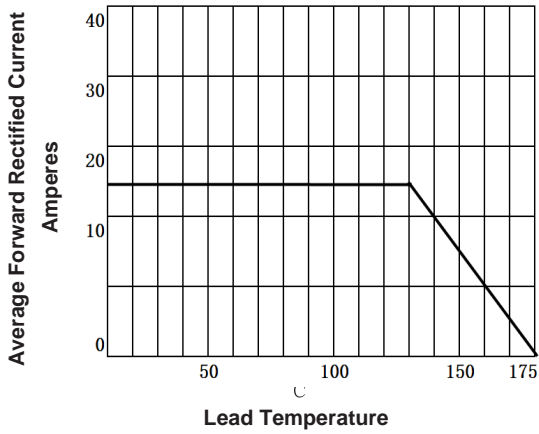
Parameter	Symbols	GBU1503SF	GBU1506SF	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	300	600	V
Maximum RMS voltage	$V_{RMS}$	200	420	V
Maximum DC Blocking Voltage	$V_{DC}$	300	600	V
Maximum Average Forward $T_C=100^{\circ}C$ Rectified Current at	$I_{(AV)}$	15		A
Peak Forward Surge Current 8.3 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 @ $T_a=25^{\circ}C$ @ $T_a=125^{\circ}C$	$I_R$	10 500		$\mu A$
$I^2t$ Rating for Fusing( $3ms \leq t \leq 8.3ms$ )	$I^2t$	200		$A^2S$
Typical Junction Capacitance (Note1)	$C_j$	86		pF
Maximum Reverse Recovery Time (Note2)	$T_{rr}$	38	45	nS
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.0		$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175		$^{\circ}C$

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

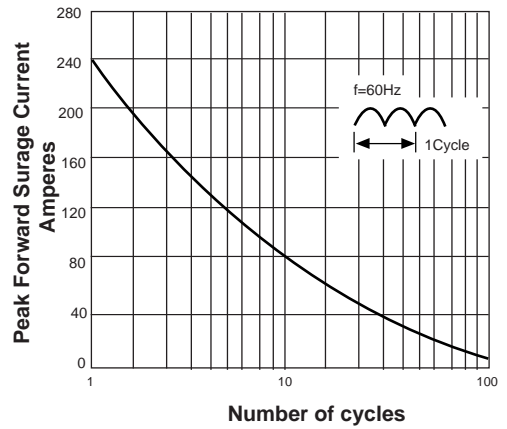
(2) Device mounted on 150mm\*150mm\*16mm cu plate heatsink

**Ratings and Characteristic Curves**

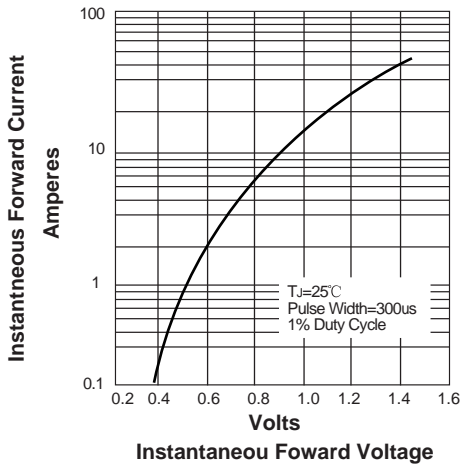
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



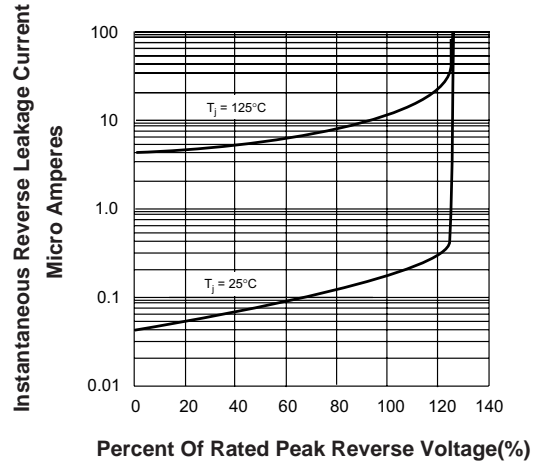
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**

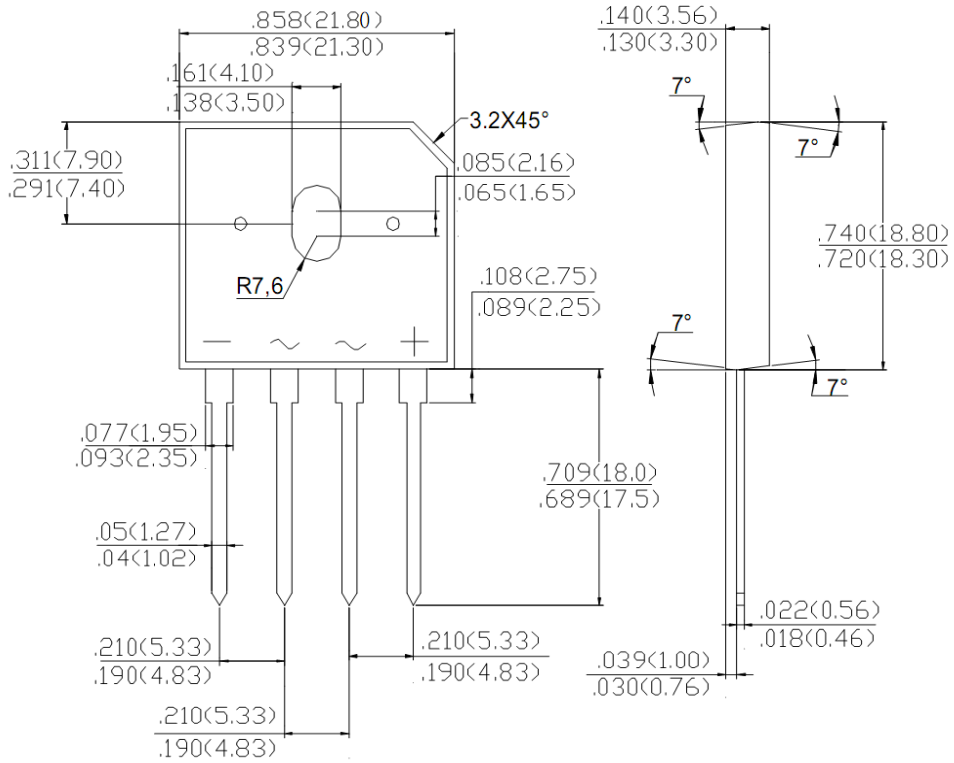


**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



Package Outline

GBU



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
GBU	BOX	500	EIA-481-1