

**35A Super Fast Recovery Rectifier Bridge**

**Reverse Voltage - 300 to 600 V**

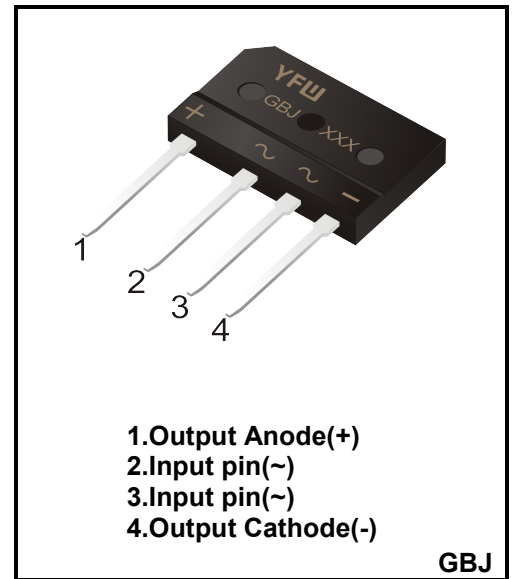
**Forward Current –35A**

**FEATURES**

- ◆Surge overload rating-350 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	GBJ3503SF	GBJ3506SF	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	$I_{(AV)}$	35		A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	380		A
Forward Voltage per element @ $I_F=35A$ 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		$\mu A$
I2t Rating for Fusing(3ms≤t≤8.3ms)	$I^2t$	374		A <sup>2</sup> S
Typical Junction Capacitance (Note1)	$C_j$	94		pF
Maximum Reverse Recovery Time (Note2)	$T_{rr}$	38	45	nS
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	1.1		°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

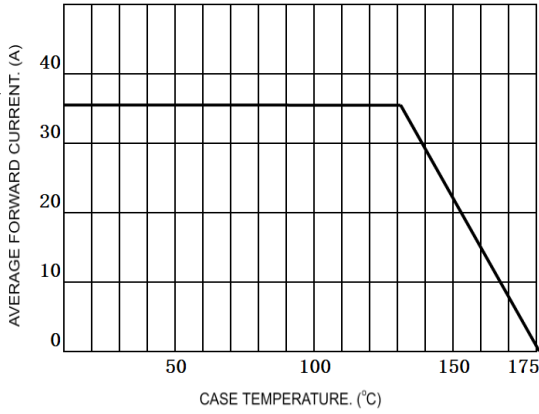


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

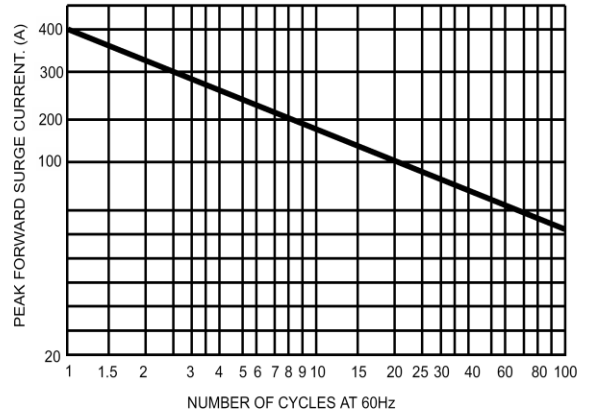


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

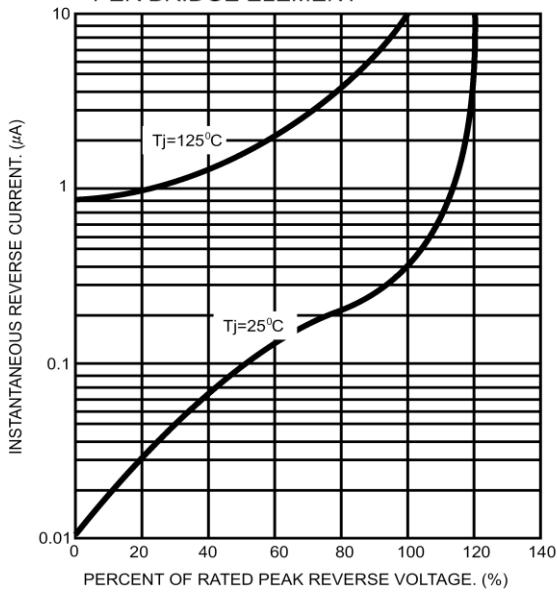
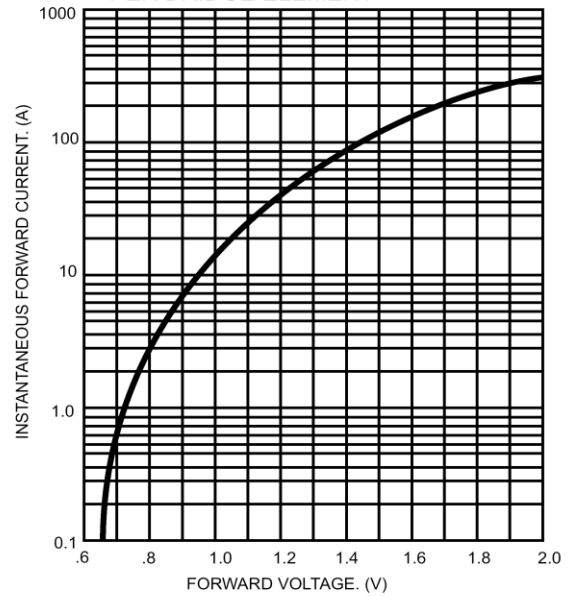
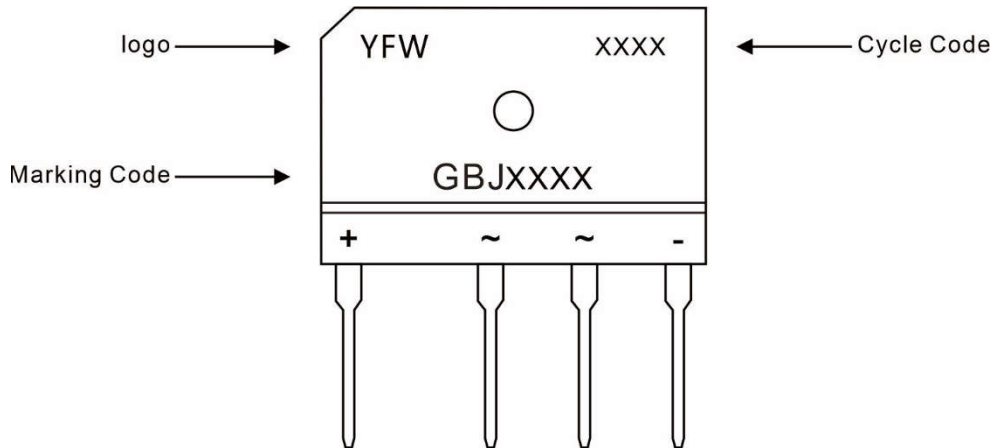


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT



**Marking Diagram**



**Ordering information**

Package	Packing Description	Packing Quantity
GBJ	bulk	250PCS/Box 2000PCS/Carton

**Package Dimensions**

**GBJ**

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	29.70	30.3	1.17	1.19
B	19.70	20.3	0.78	0.80
C	17.00	18.00	0.67	0.71
D	3.80	4.20	0.15	0.17
E	7.30	7.70	0.29	0.30
G	9.80	10.20	0.39	0.40
H	2.00	2.40	0.08	0.09
I	0.90	1.10	0.04	0.04
J	2.30	2.70	0.09	0.11
K	33.0×45°		1.30×45°	
L	4.40	4.80	0.17	0.19
M	3.40	3.80	0.13	0.15
N	3.10	3.40	0.12	0.13
P	2.50	2.90	0.10	0.11
R	0.60	0.80	0.02	0.03
S	10.80	11.20	0.43	0.44

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