

10A GLASS PASSIVATED BRIDGE RECTIFIER Reverse

Voltage - 100 to 1000 V

Forward Current – 10A

FEATURES

- ◆ Surge overload rating-175 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

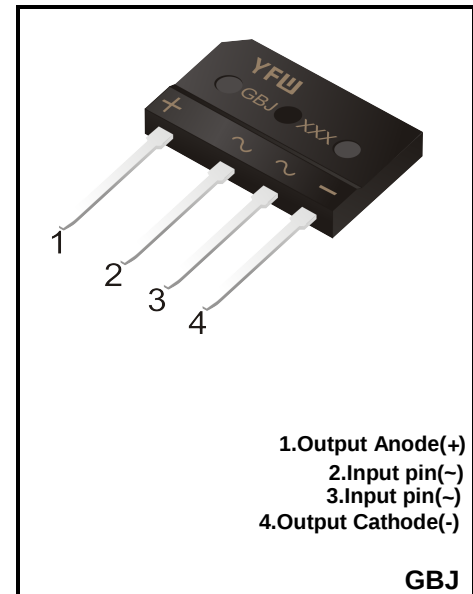
MECHANICAL DATA

- ◆ 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	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	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	$I_{(AV)}$	10						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175						A
Forward Voltage per element @ $I_F=5A$ DC	V_F	1.0						V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_J=125^{\circ}C$	I_R	5 500						μA
I^2t Rating for Fusing($3ms \leq t \leq 8.3ms$)	I^2t	166						A^2S
Typical Junction Capacitance (Note1)	C_j	50						pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.5						$^{\circ}C/W$
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

Ratings And Characteristic Curves

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

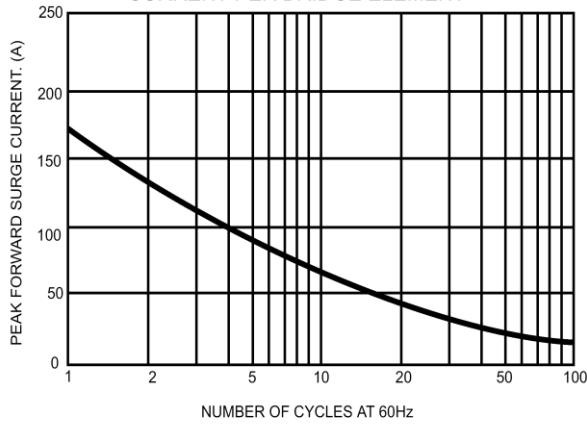


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

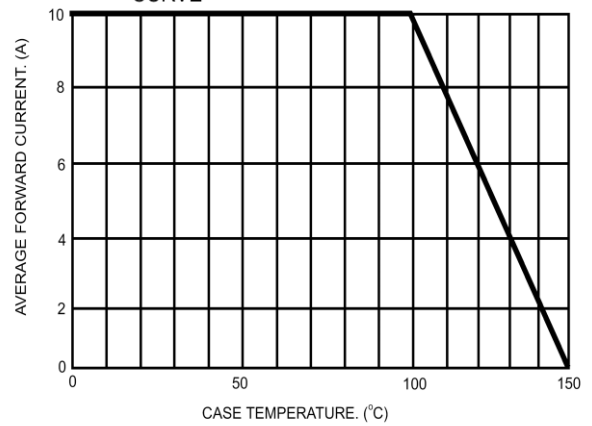


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

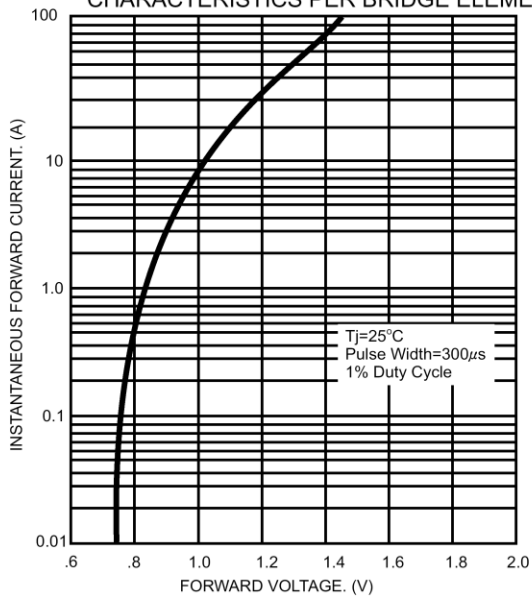
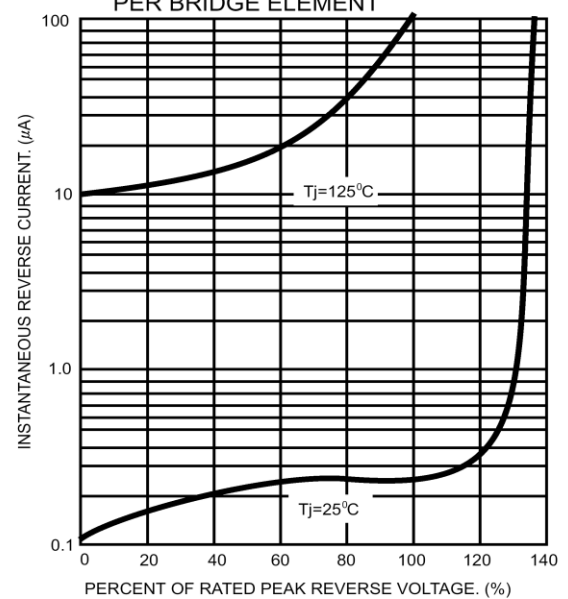
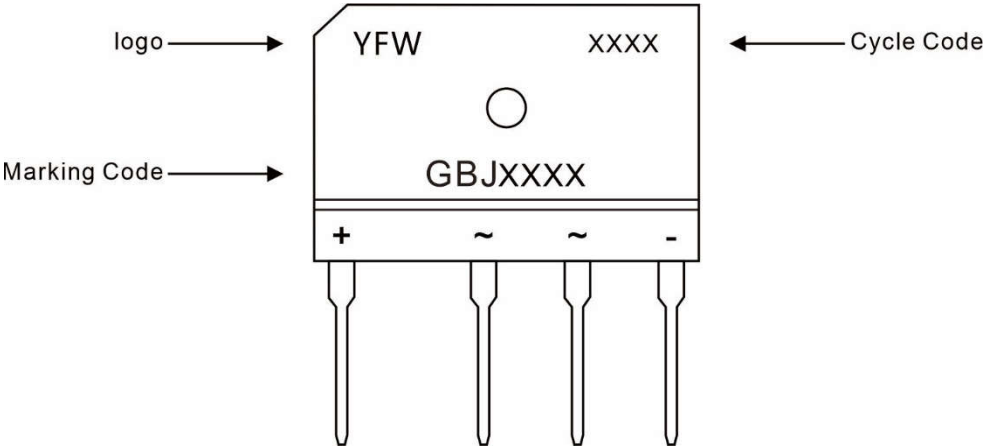


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



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

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.