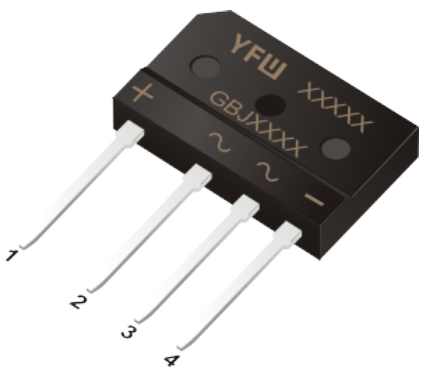
10A GLASS PASSIVATED BRIDGE RECTIFIER Reverse Voltage - 100 to 1000 V

Forward Current – 10A



1.Output Anode(+)
2.Input pin(~)
3.Input pin(~)
4.Output Cathode(-)

GBJ

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 at Rated DC Blocking Voltage @TJ=25°C @TJ=125°C	I_R	5 500						μA
I2t Rating for Fusing(3ms≤t≤8.3ms)	I^2t	166						A^2S
Typical Junction Capacitance (Note1)	Cj	50						pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.5						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°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

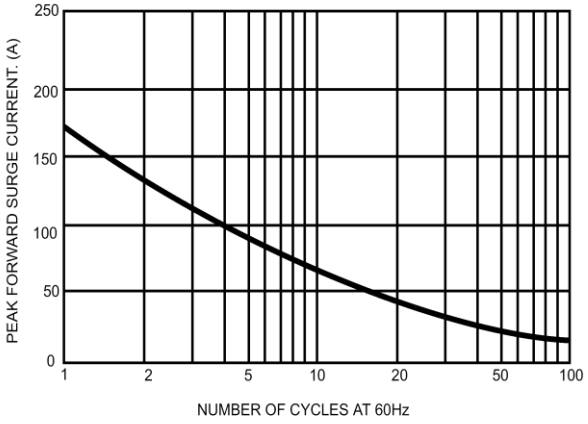


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

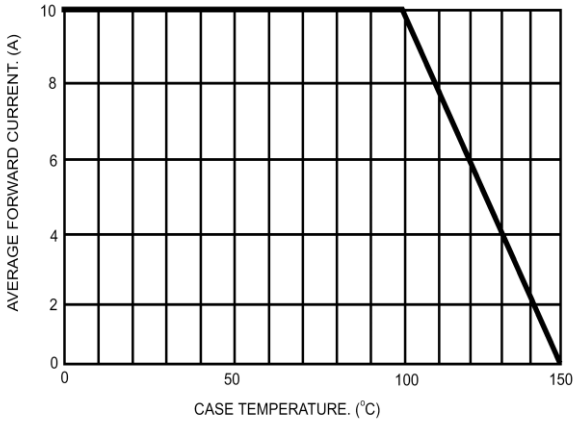


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

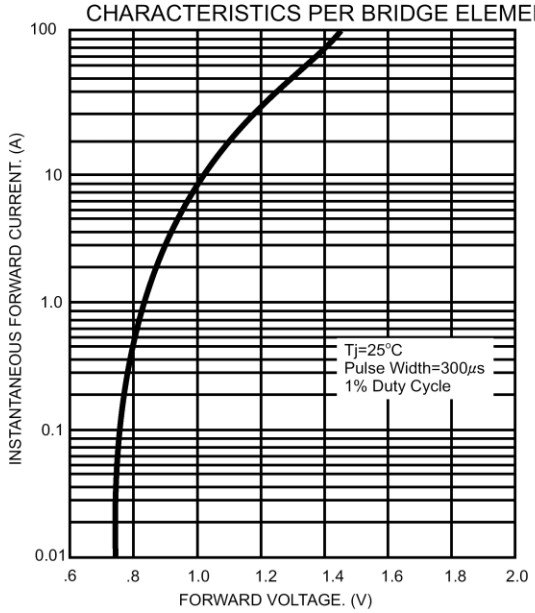
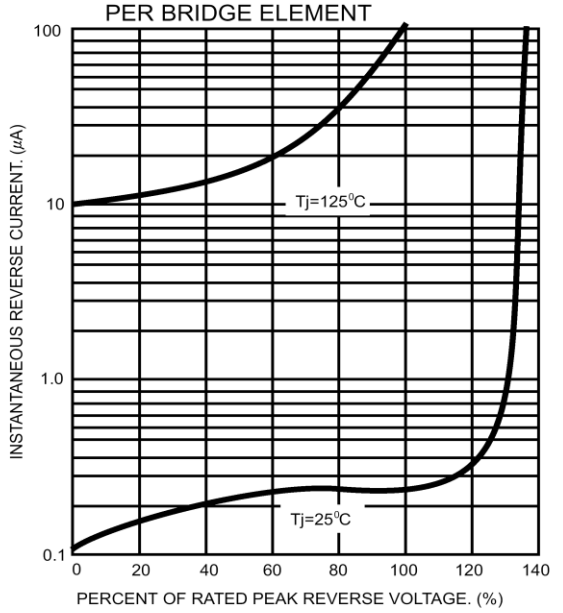
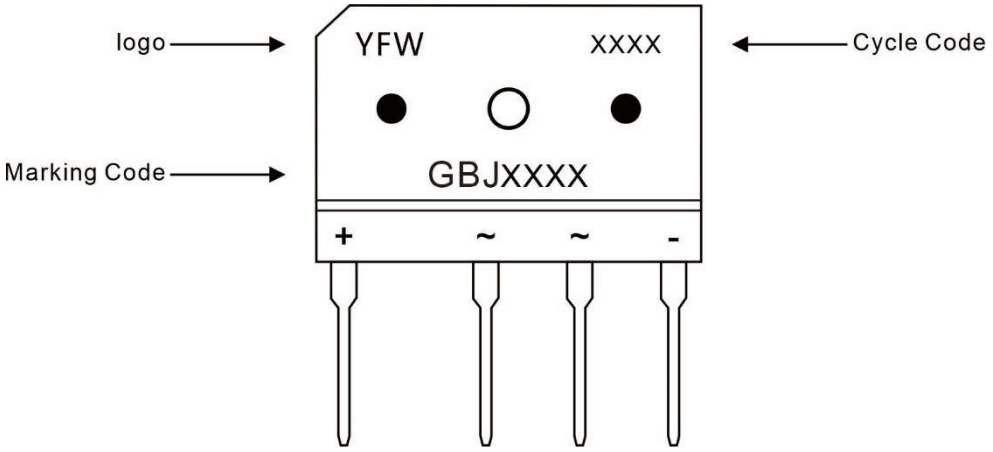


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Marking Diagram

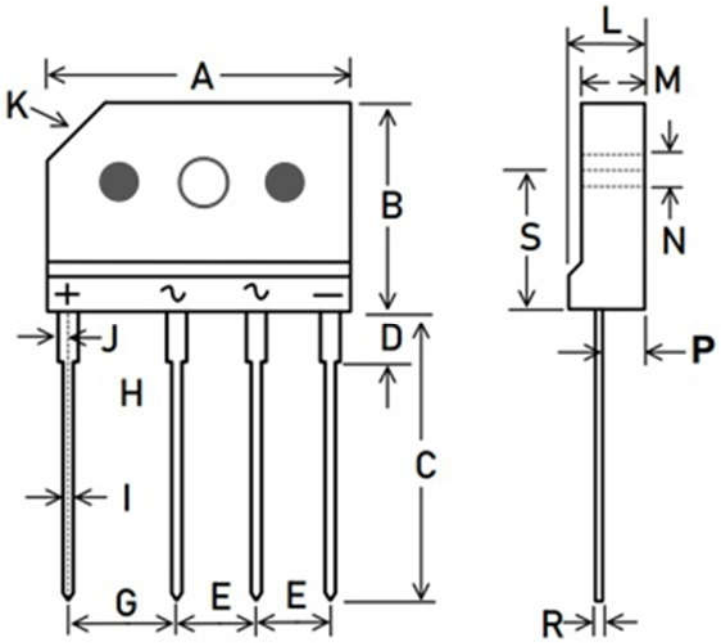


Ordering information

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

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