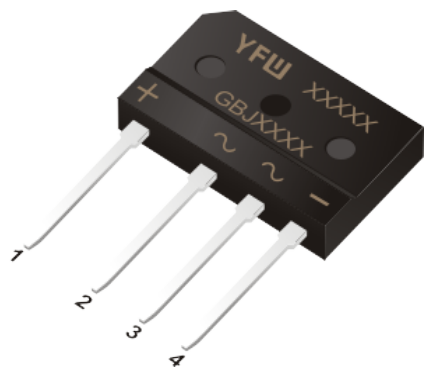
15A Glass Passivated Single-Phase Bridge Rectifier

Voltage – 50 to 1000 V

Forward Current – 15A



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

GBJ

FEATURES

- Glass passivated chip
- Low Reverse Leakage Current
- High surge current capability
- Case to Terminal Isolation Voltage 2500V

MECHANICAL DATA

- Case: plastic package
- Marking / Polarity: Marked on Body
- Weight: About 6.9 grams

Maximum Ratings and Thermal Characteristics @ Ta = 25℃ unless otherwise noted

Parameter	Symbols	GBJ15005	GBJ1501	GBJ1502	GBJ1504	GBJ1506	GBJ1508	GBJ1510	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Ta =85℃	$I_{F(AV)}$	15							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	300							A
Forward Voltage Per Leg @I_{FM} =15A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @Ta=25°C @Ta=125°C	I_R	5 500							μA
Rating for Fusing(t≤8.3ms)	I^2t	370							A^2S
Rms isolation voltage from case to leads	V_{isol}	2500							V
Maximum thermal resistance per leg	$R_{\theta JC}$	1.0							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ 150							°C

Note:

(1) Junction to case with heatsink

(2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw .

Ratings And Characteristic Curves

Fig 1-forwardCurrent derating Curve

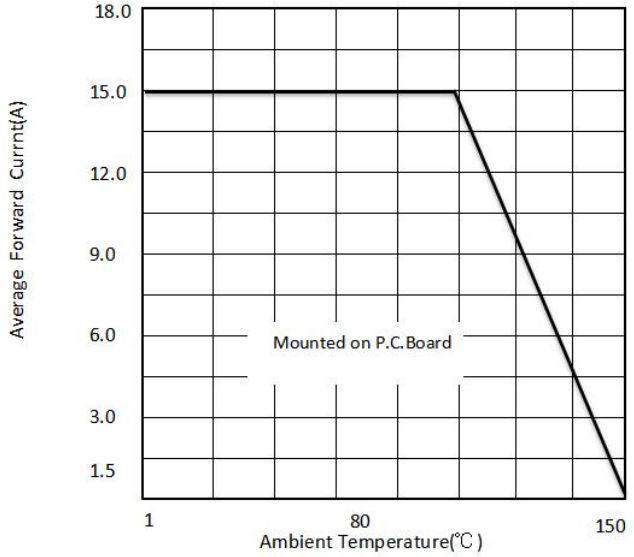


Fig.2-Maximum Non-Repetitive Surge Current

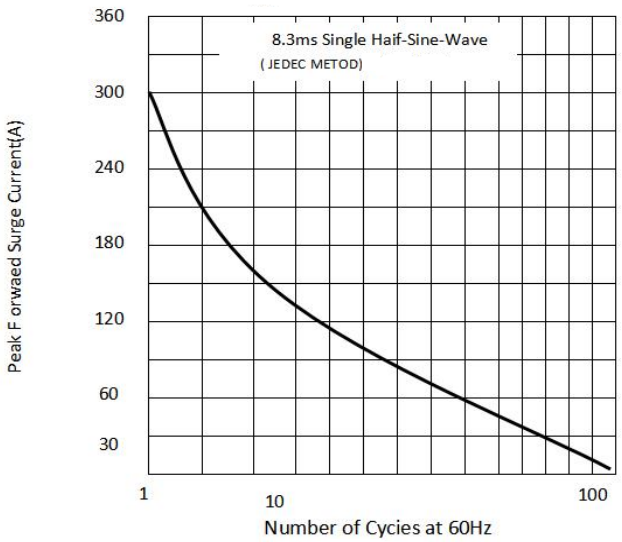


Fig.3-Typical Reverse Characteristics

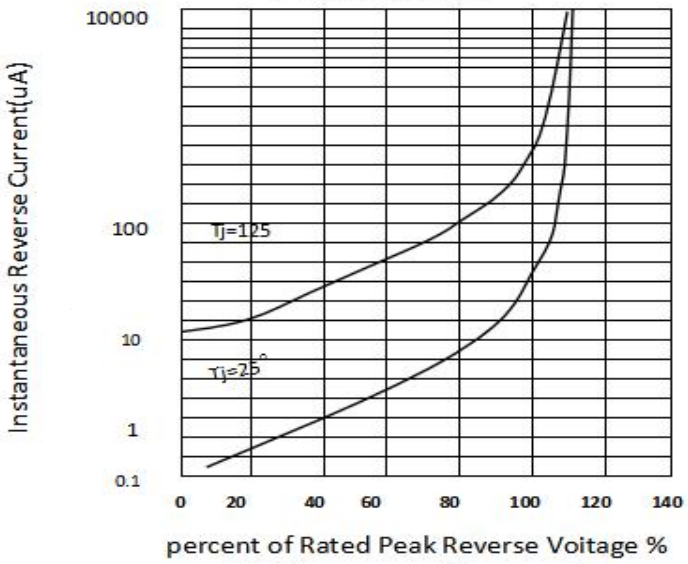
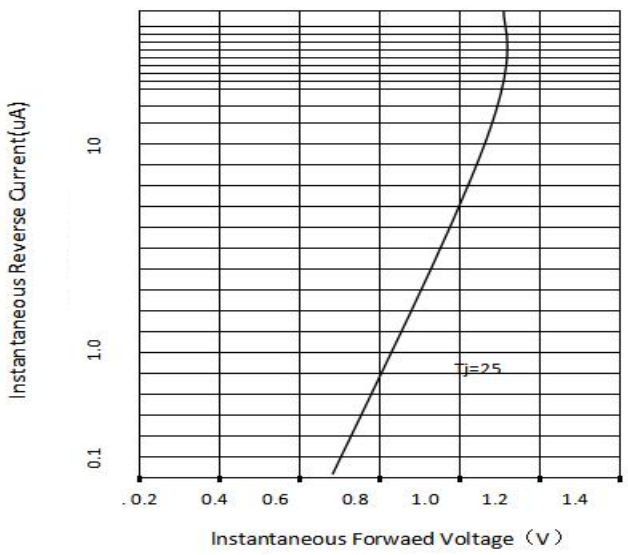
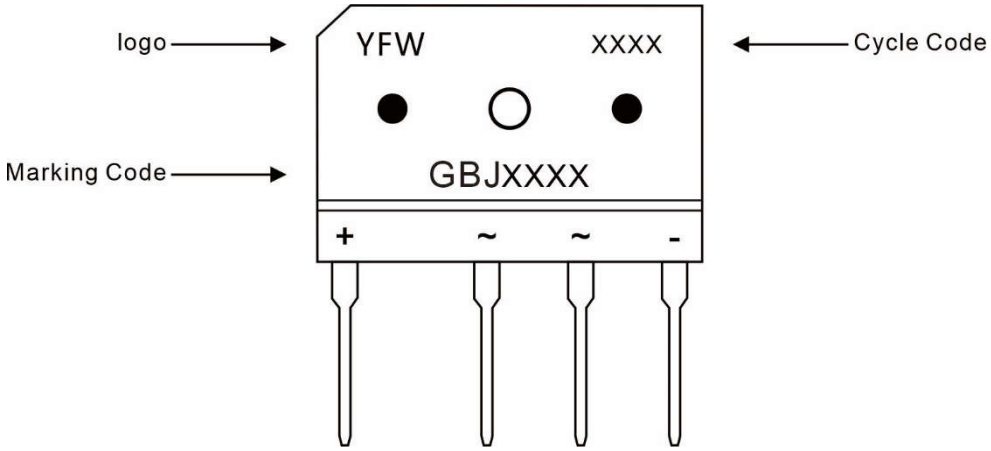


Fig.4-Typical Forwaed Characteristics



Marking Diagram

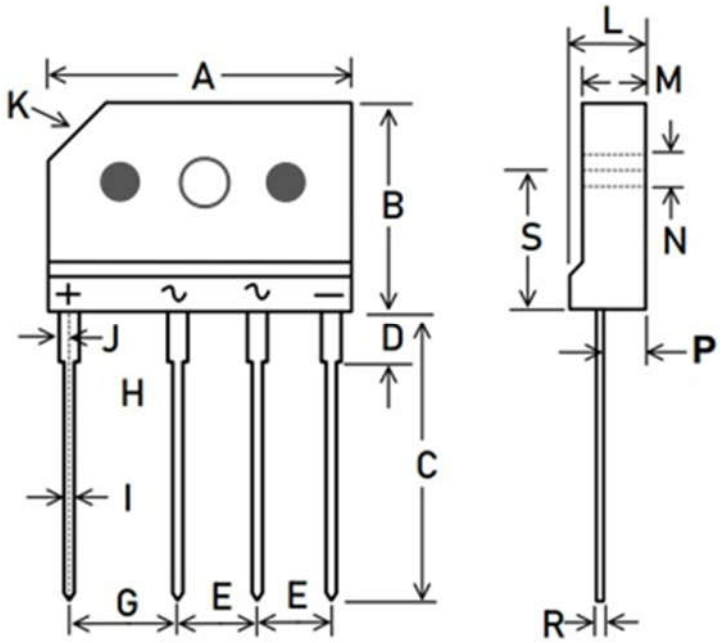


Ordering information

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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