

Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage - 50 to 1000 V

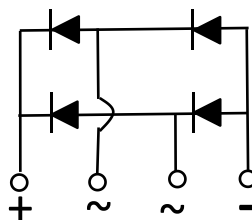
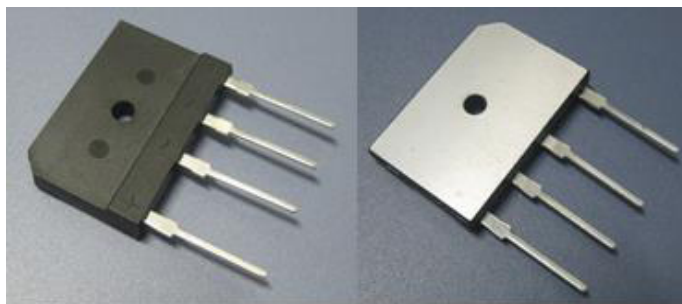
Forward Current - 25A

FEATURES

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

MECHANICAL DATA

- ◆Case: GBJ25
- ◆Marking / Polarity: Marked on Body
- ◆Weight: About 6.9grams



GBJS

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	GBJ25005S	GBJ2501S	GBJ2502S	GBJ2504S	GBJ2506S	GBJ2508S	GBJ2510S	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
Average Forward Output Rectified Current @Ta =120°C	$I_{F(AV)}$	25							A
Forward Voltage Per Leg @Ifm =25A	V_F	1.1							V
Peak Forward Surge Current 8.3ms Single Half Sine-wave superimposed on rated load	I_{FSM}	420							A
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 500							μA
		@Ta=25°C @Ta =125°C							
Rating for fusing (t<8.3ms)	I^2t	730							A²S
Rms isolation voltage from case to leads	V_{isol}	2500							V
Typical Junction Capacitance	C_j	118							pF
Typical Thermal Resistance	$R_{θJC}$	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 .

Characteristics(Typical)

Fig. 1-forwardCurrent derating Curve

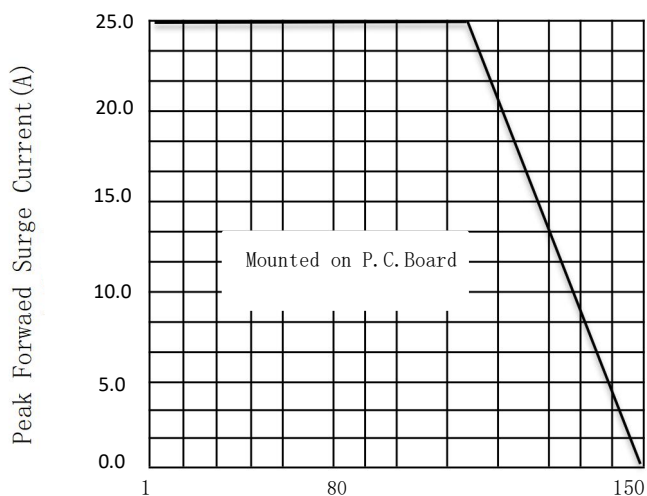


Fig.2-Maximum Non-Repetitive Surge Currnet

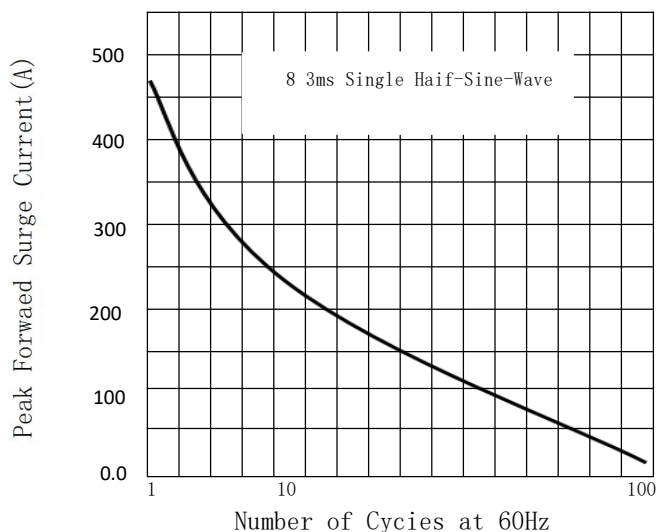


Fig. 3-Typical Reverse Characteristics

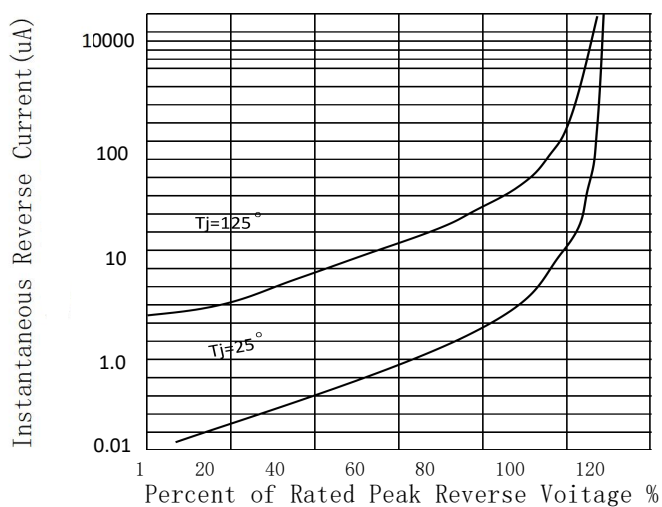
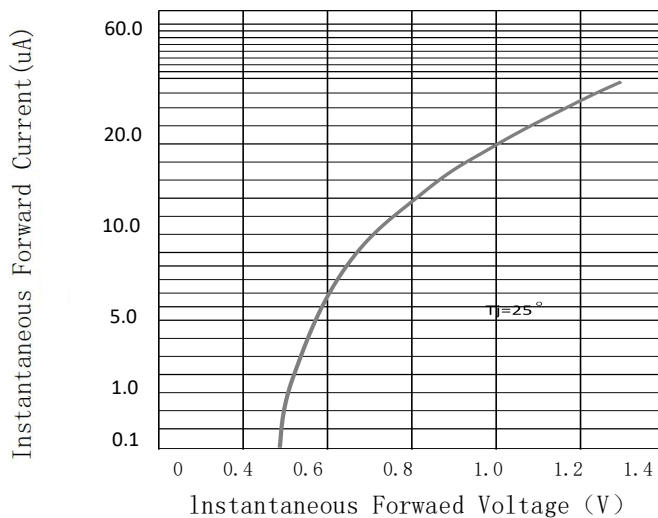
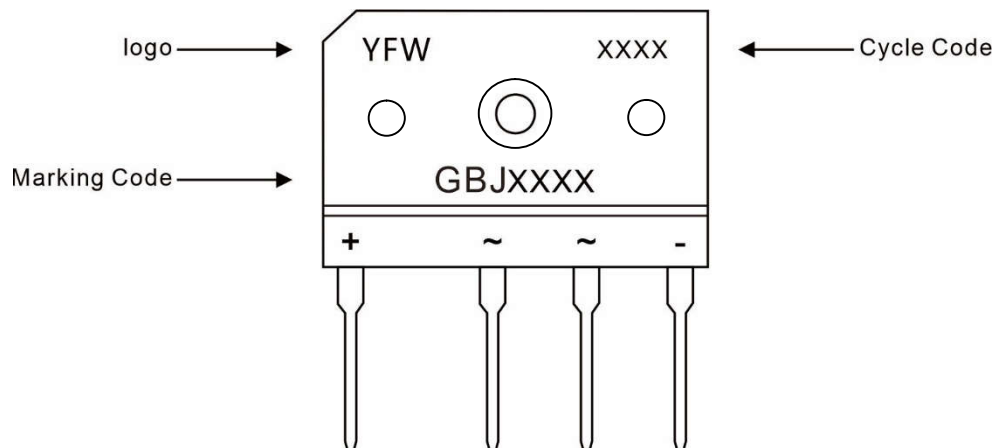


Fig.4-Typical Forwaed Characteristics



Marking Diagram



Ordering information

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

Package Dimensions

GBJS

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	29.70	30.3	1.17	1.19
B	26.8	27.2	1.06	1.07
C	19.7	27.2	0.776	1.07
D	17.4	17.8	0.685	0.701
E	0.98	1.02	0.039	0.04
F	9.8	10.2	0.386	0.402
G	3.8	4.3	0.15	0.169
H	3.46	3.85	0.136	0.152
I	0.4	0.5	0.016	0.020
J	4.45	4.85	0.175	0.191
K	0.58	0.62	0.023	0.025
L	5.7	6.3	0.224	0.248
M	1.9	2.3	0.075	0.09
N	9.8	10.2	0.39	0.402
O	7.2	7.7	0.283	0.303
Q	4.0	4.46	0.157	0.176

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