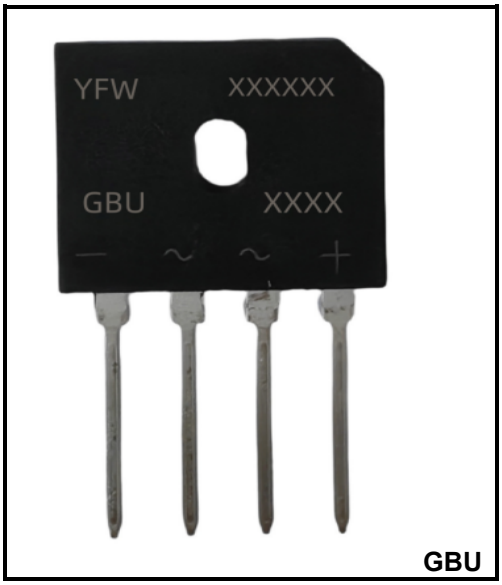
8A Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage - 100 to 1600 V

Forward Current -8A



FEATURES

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

MECHANICAL DATA

- Case: GBU
- Marking / Polarity: Marked on Body
- Weight: About 3.85grams

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	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	GBU812	GBU814	GBU816	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	840	980	1120	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	1200	1400	1600	V
Average Forward Output Rectified Current@Ta =120°C	$I_{F(AV)}$	8									A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	125									A
Forward Voltage per element @I_{FM} =8.0A	V_F	1.15									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	64.8									A^2S
Rms isolation voltage from case to leads	Visol	2500									V
Typical Junction Capacitance	C_j	50									pF
Maximum thermal resistance per leg	$R_{\theta JC}$	2									°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

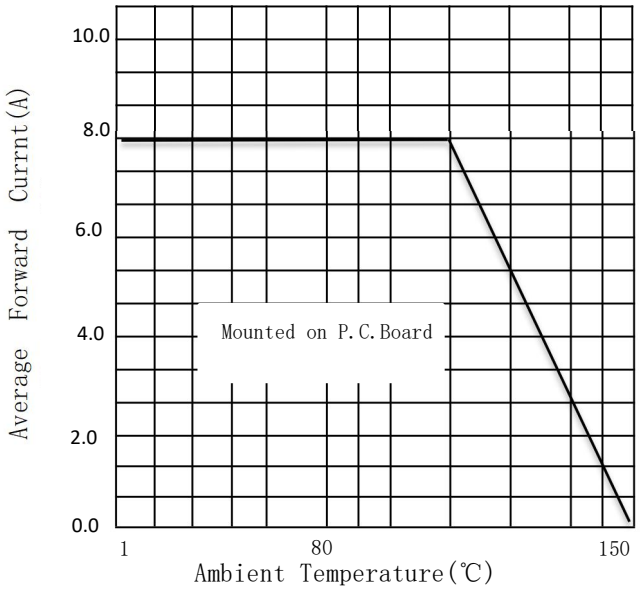


Fig.2-Maximum Non-Repetitive Surge Currnet

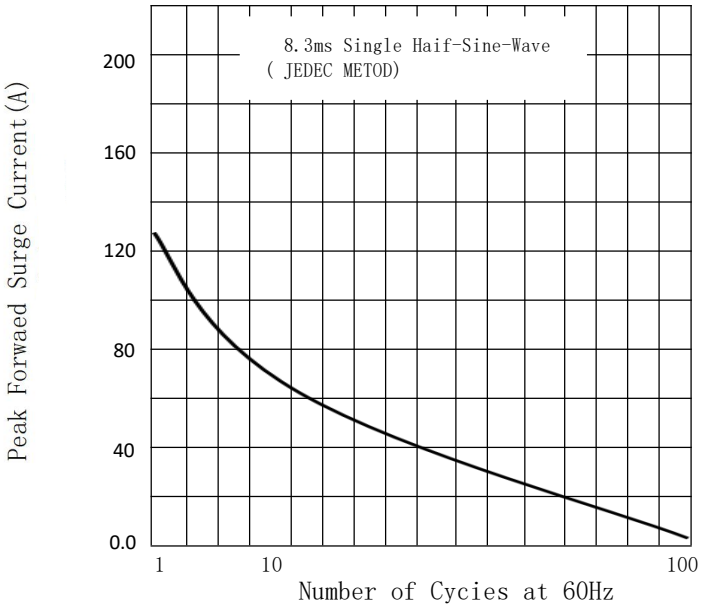


Fig.3-Typical Reverse Characteristics

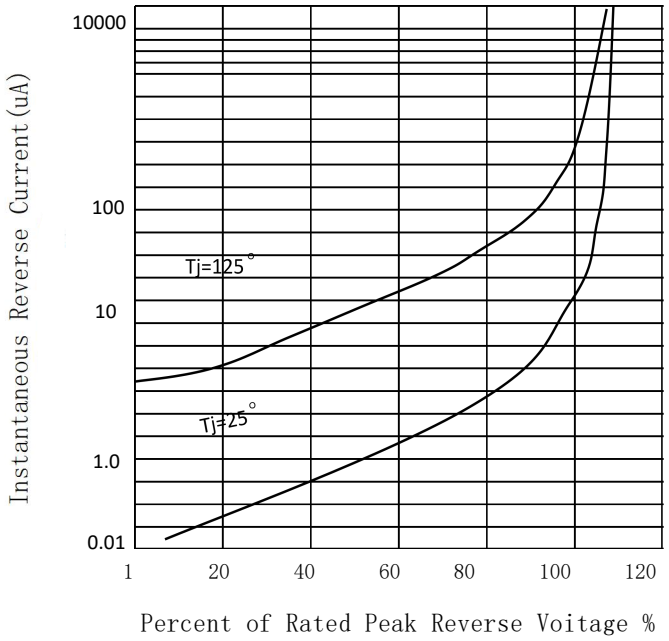
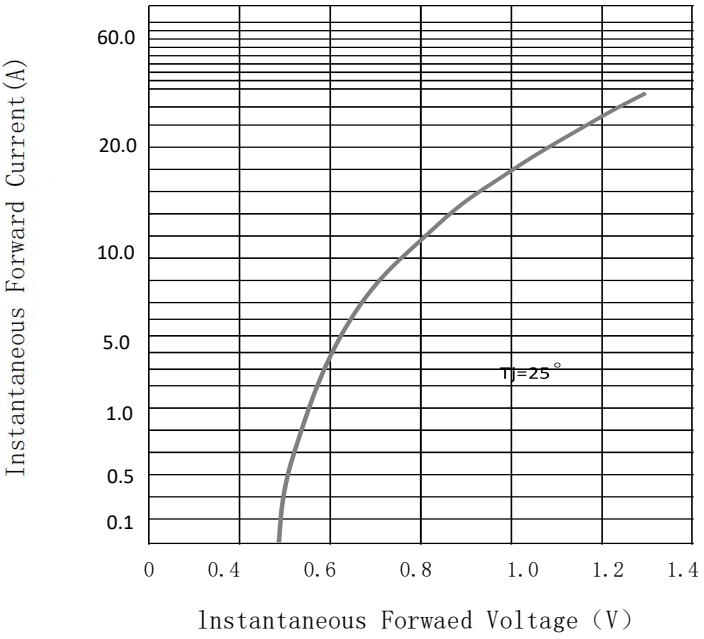
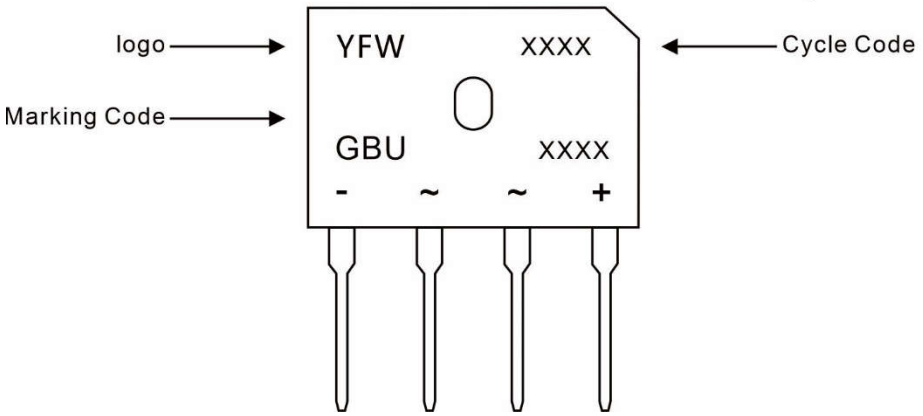


Fig.4-Typical Forwaed Characteristics



Marking Diagram

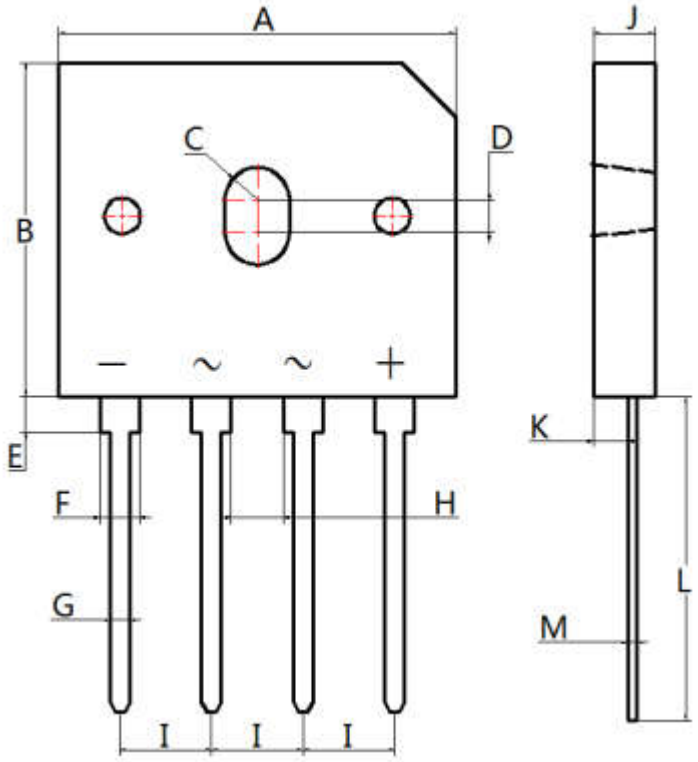


Ordering information

Package	Packing Description	Packing Quantity
GBU	bulk	500PCS/Box 5000PCS/Carton

Package Dimensions

GBU



Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	21.70	22.30	0.86	0.88
B	18.20	18.80	0.72	0.74
C	3.70	3.90	0.146	0.154
D	1.60	2.00	0.06	0.08
E	1.80	2.20	0.07	0.09
F	2.00	2.40	0.08	0.09
G	0.90	1.30	0.04	0.05
H	3.00	/	0.12	/
I	4.88	5.28	0.19	0.21
J	3.20	3.60	0.13	0.14
K	1.70	2.10	0.07	0.08
L	17.50	18.50	0.69	0.73
M	0.40	0.60	0.02	0.02

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