

6A Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage - 100 to 1600 V

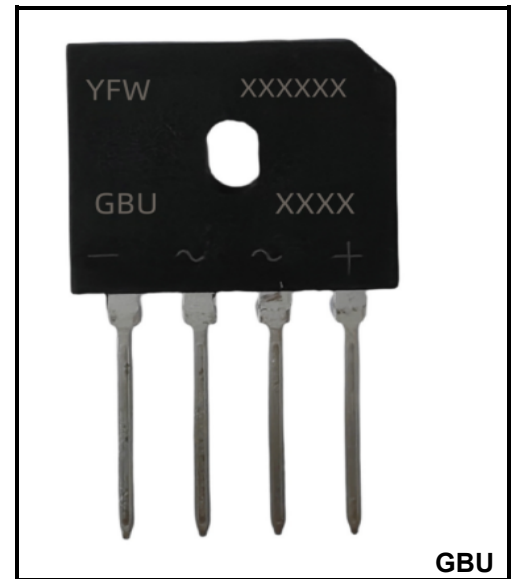
Forward Current -6A

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	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610	GBU612	GBU614	GBU616	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	$I_{F(AV)}$	6									A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	120									A
Forward Voltage per element @ $I_{FM}=6.0A$	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	59									A ² S
Rms isolation voltage from case to leads	V_{isol}	2500									V
Typical Junction Capacitance	C_j	42									pF
Maximum thermal resistance per leg	$R_{θJC}$	4.2									°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

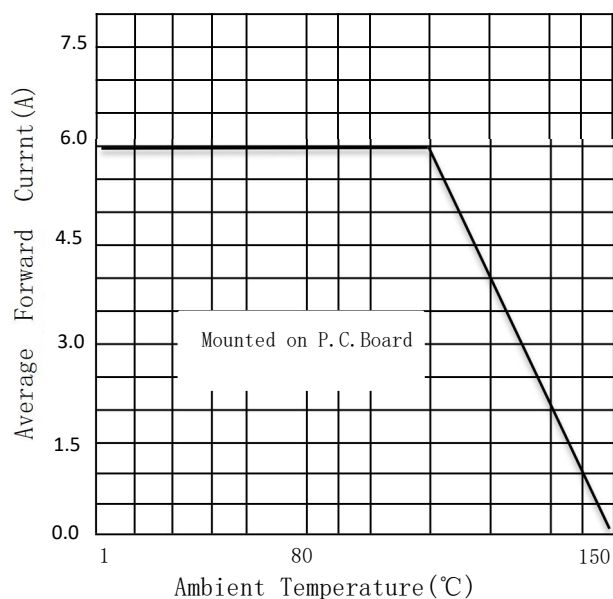


Fig.3-Typical Reverse Characteristics

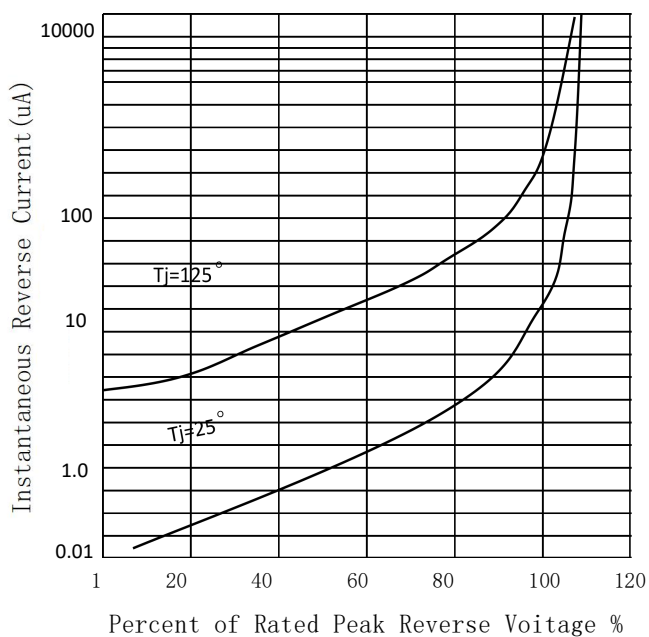


Fig.2-Maximum Non-Repetitive Surge Current

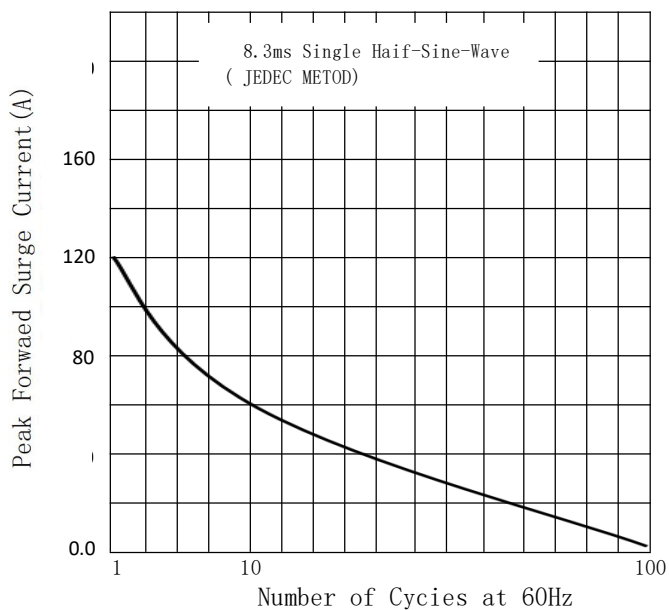
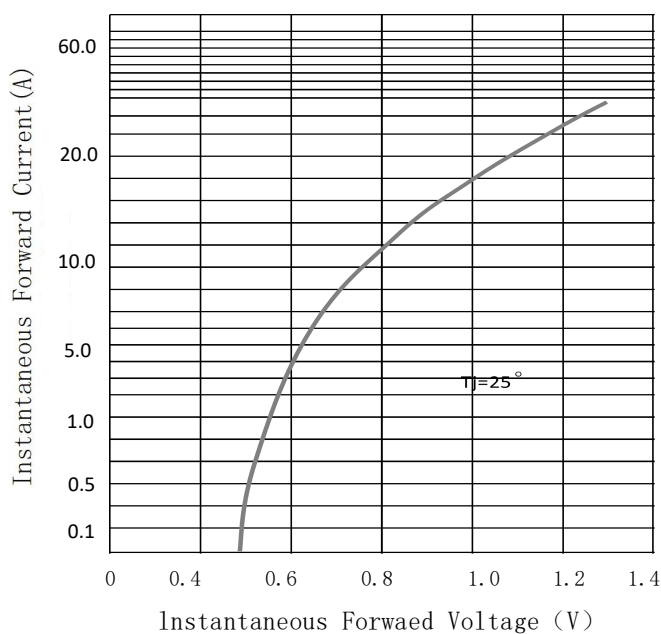
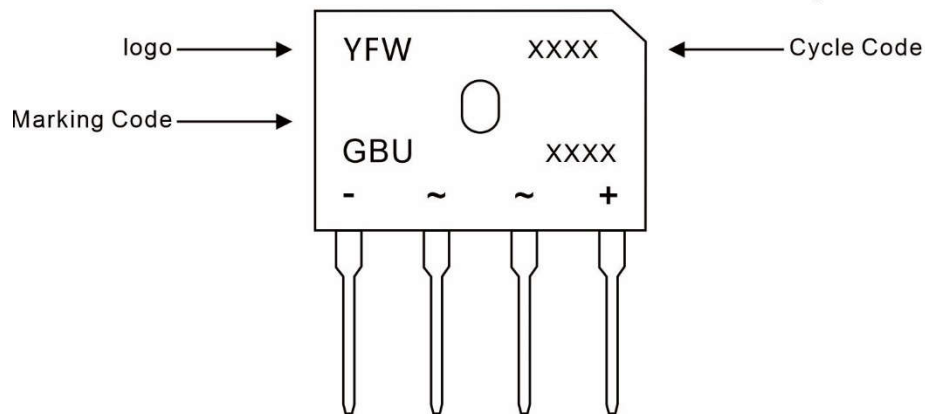


Fig.4-Typical Forward Characteristics



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

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.