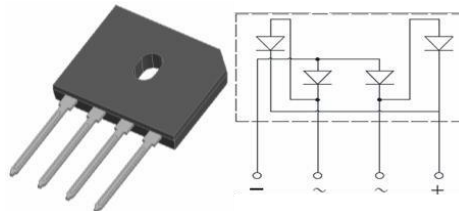


Reverse Voltage 50~1000V Output Current 6.0A

Features

- Glass passivated Bridge Rectifiers
- Ideal for PCB
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106



GBU

Typical Applications

- General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

Mechanical Data

- Case:GBU,Molding compound meets UL 94V-0 flammability rating,RoHS-compliant
- Terminals:Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked on body

Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbol	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	Unit
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 rectified output current at 60Hz sinewave, R-load	TC=110°C	6.0							A
	TA=25°C	2.8							
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Rating for fusing ($t \leq 8.3ms$)	I^2t	94							A ² s
Operating junction temperature range	T_J	-55 to 150							°C
Storage temperature range	T_{STG}	-55 to 150							°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)											
Parameter	Test Conditions	Symbol	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	Unit	
Maximum instantaneous forward voltage	I _F =3.0A	V _F	1.0								Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	5.0								μA
	TA=125°C		250								
Typical thermal resistance		R _{θ JA}	26								° C/W
		R _{θ JC}	3.4								

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

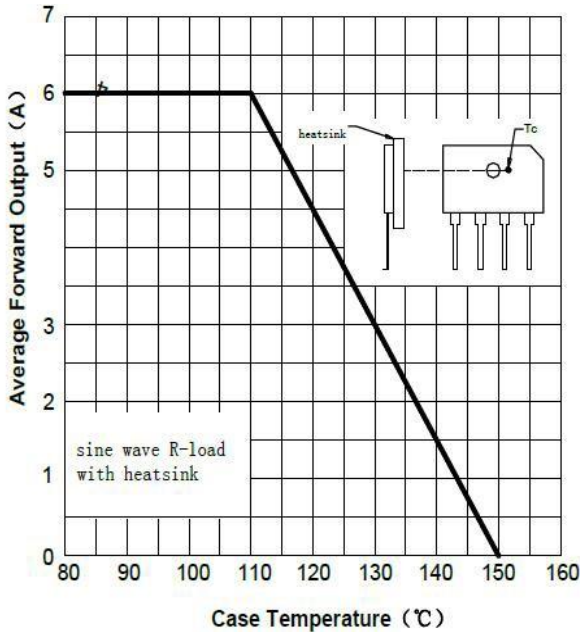


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

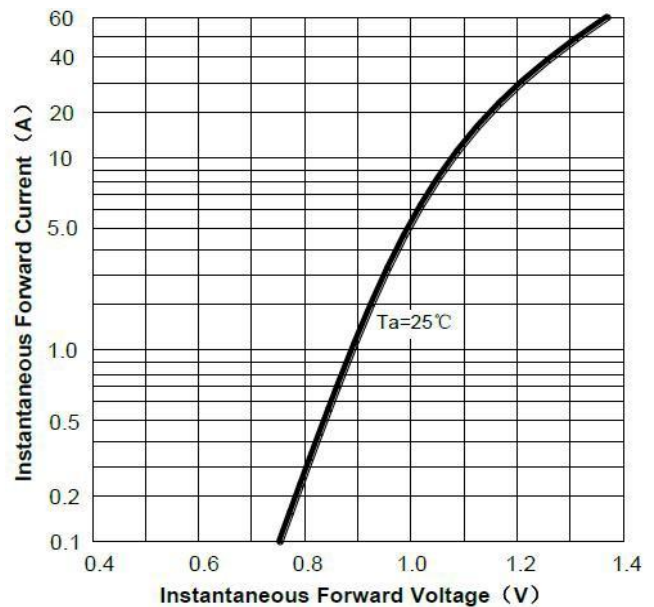


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

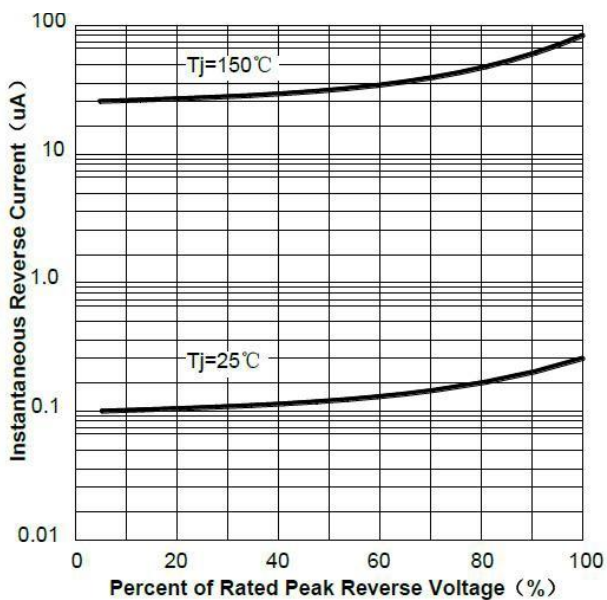
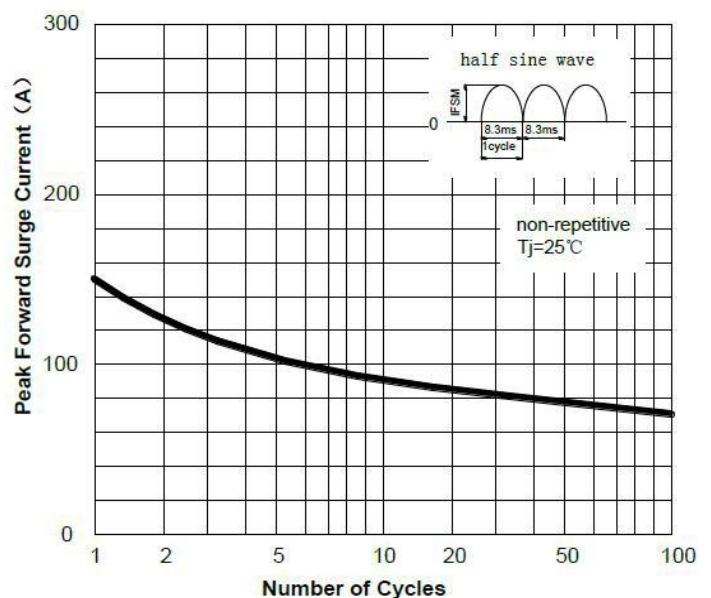


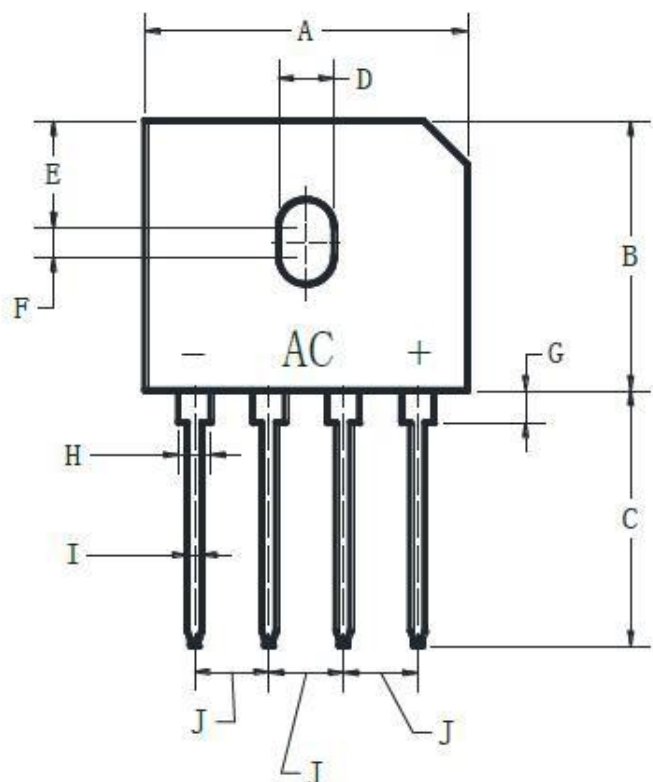
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Package Outline Dimensions

Dimensions in millimeters

First angle projection



elevation view



left elevation

GBU		
Dim	Min	Max
A	21.70	22.30
B	18.20	19.10
C	17.20	18.29
D	3.40	4.10
E	7.40	7.90
F	1.65	2.16
G	1.53	2.54
H	1.65	2.54
I	0.90	1.27
J	4.80	5.33
K	3.30	3.56
L	2.30	3.00
M	0.45	0.56

Revision History

Document Version	Date of release	Discription of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/17	Modify document format

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