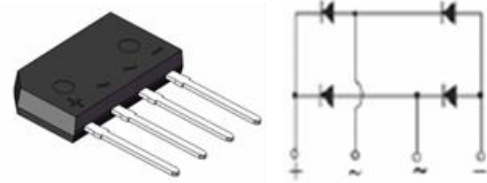


Reverse Voltage 50~1000V Output Current 4.0A

Features

- Glass passivated Bridge Rectifiers
- Ideal for PCB
- High surge current capability
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



GBL

Typical Applications

- General purpose use in ac-to-dc bridge full wave rectification for TV, Monitor, SMPS, Adapter, Printer, Audio equipment, and Home Applications application

Mechanical Data

- Case:GBL,Molding compound meets UL 94V-0 flammability rating Base P/N with suffix"E" on packing code-halogen free;
- Terminals:Matte tin plated leads, solderable per MII-STD-750 Method 2026, J-STD-002 and JESD22-B102, meets JESD 201 class 1A whisker test

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

Parameter	Symbol	GBL005	GBL01	GBL02	GBL04	GBL06	GBL08	GBL10	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
Maximum average forward rectified TC=50°C output current at TA=40°C	$I_{F(AV)}$	4.0 ⁽¹⁾ 3.0 ⁽²⁾							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Rating for fusing (t≤8.3ms)	I^2t	94							A ² s
Operating junction and storage temperature range	T_J, T_{STG}	-55 to 150							°C

Electrical Characteristics (TA = 25°C unless otherwise noted)										
Parameter	Test Conditions	Symbol	GBL005	GBL01	GBL02	GBL04	GBL06	GBL08	GBL10	Unit
Maximum instantaneous forward voltage	I _F =2.0A	V _F				1.0				Volts
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C	I _R				5.0				μA
	T _A =125°C					250				
Typical thermal resistance ¹⁾		R _{θJA}				47				°C/W
		R _{θJL}				10				

1. Unit mounted on 3.0x3.0x0.11" thick (7.5x7.5x0.3cm) Aluminum plate.
2. Unit mounted on P.C.B at 0.375"(9.5mm) lead length and 0.5x0.5"(12x12mm) copper pads.

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

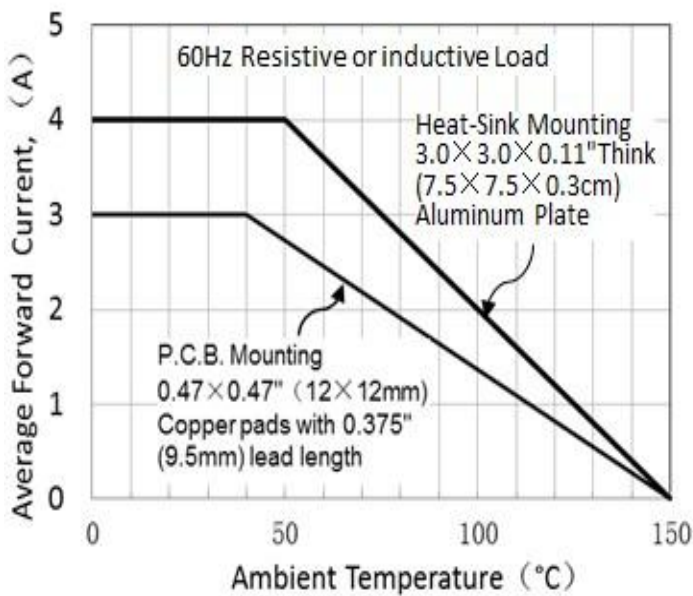


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

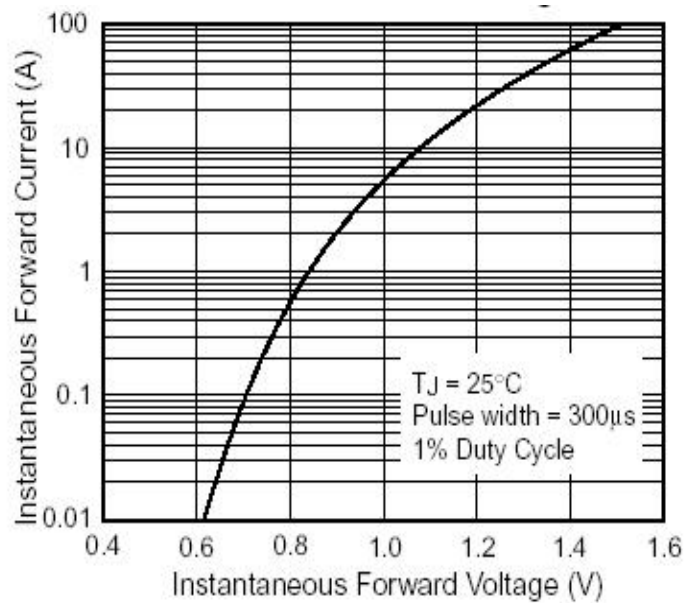


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

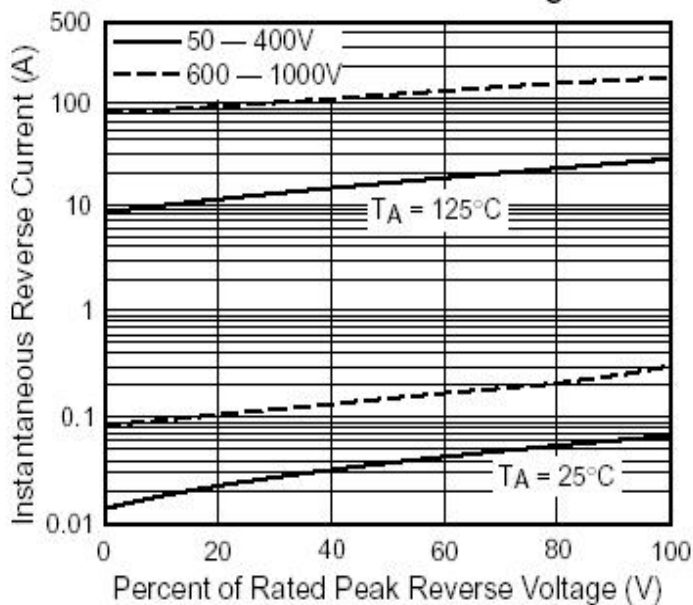
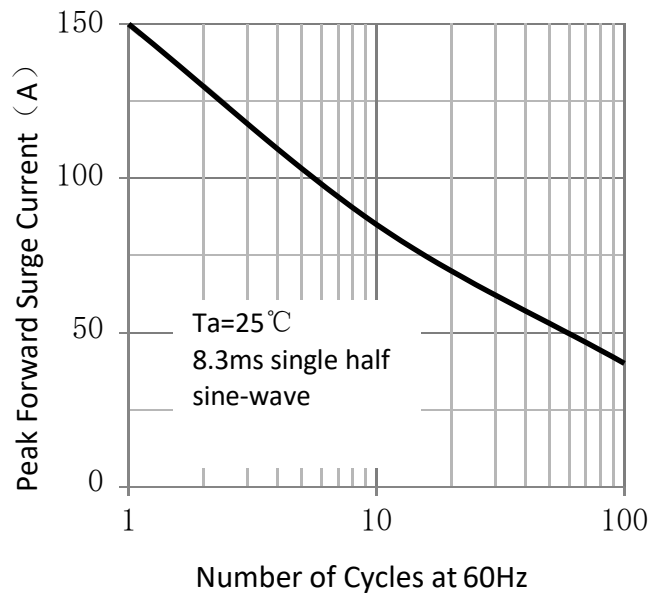


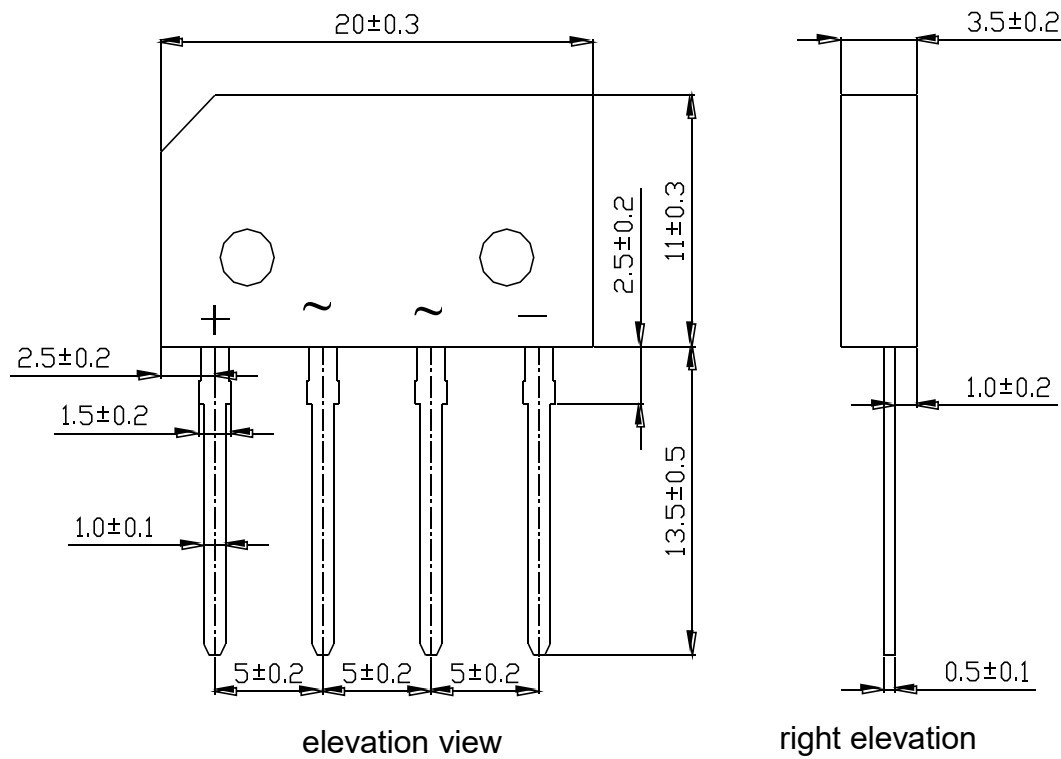
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SUGER CURRENT



Package Outline Dimensions

Unit:mm

First angle projection



Revision History

Document Version	Date of release	Discription of changes
A	2023/3/1	Released Datasheet
B	2023/12/7	Modify document format

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