

## Reverse Voltage 50~1000V Output Current 6.0A

### 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	GBL6A	GBL6B	GBL6D	GBL6G	GBL6J	GBL6K	GBL6M	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 output current at TA=25 °C	$I_{F(AV)}$	6							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	170							A
Rating for fusing ( $t \leq 8.3ms$ )	$I^2t$	121							A <sup>2</sup> 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	GBL6A	GBL6B	GBL6D	GBL6G	GBL6J	GBL6K	GBL6M	Unit
Maximum instantaneous forward voltage	I <sub>F</sub> =3.0A	V <sub>F</sub>				1.0				Volts
Maximum DC reverse current at rated DC blocking voltage	T <sub>A</sub> =25°C	I <sub>R</sub>				5.0				µA
	T <sub>A</sub> =125°C					250				
Typical thermal resistance <sup>1)</sup>		R <sub>θJA</sub>				32				°C/W
		R <sub>θJL</sub>				13				

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

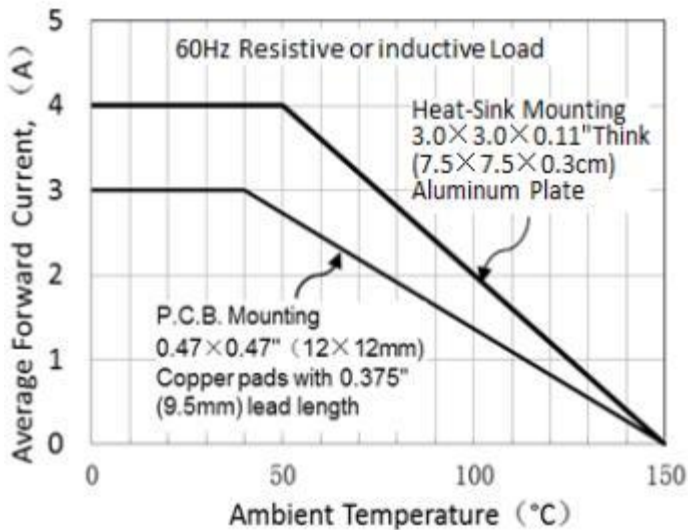


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

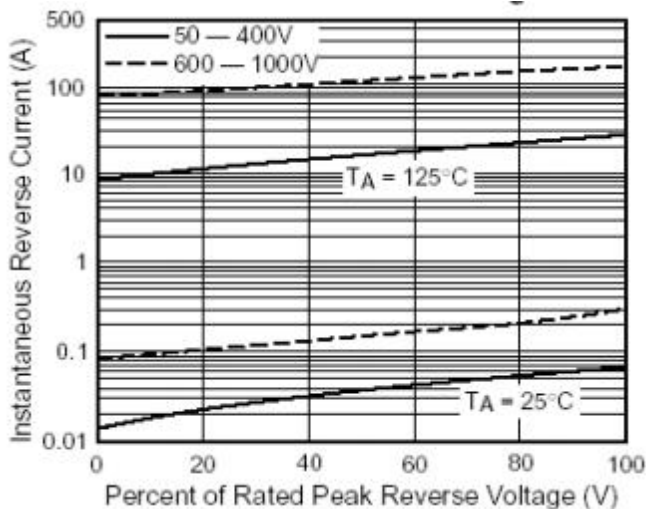


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

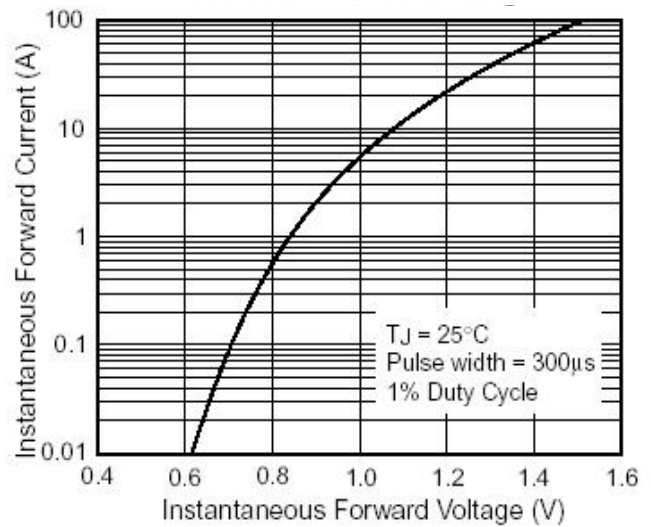
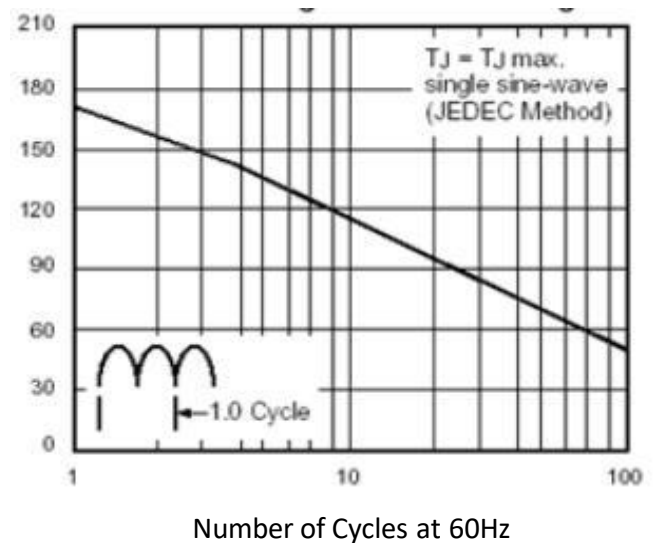


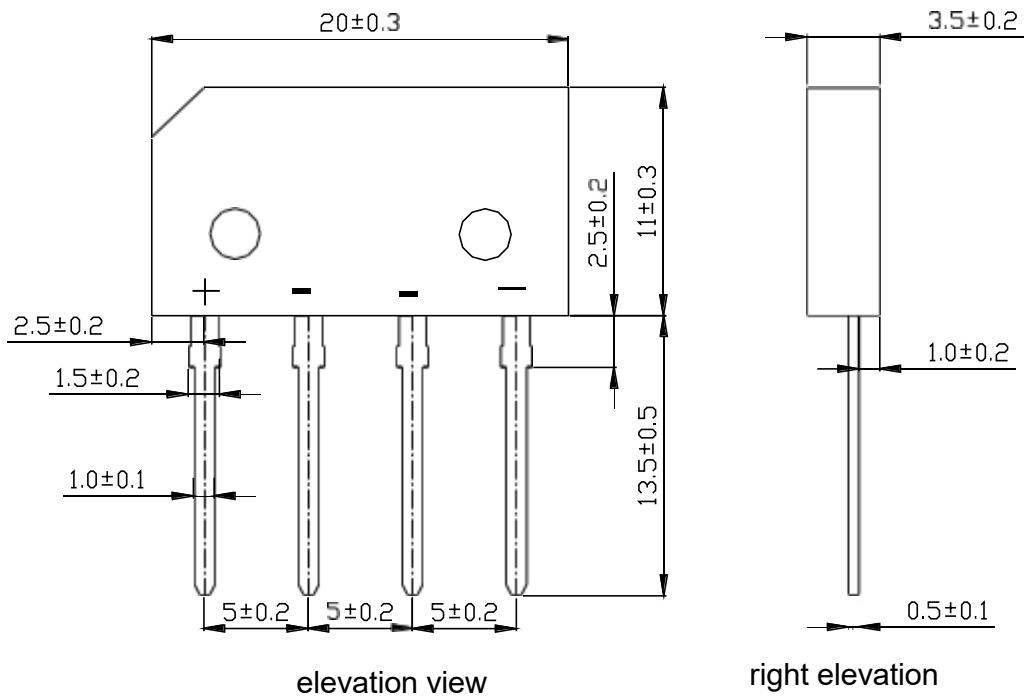
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SUGER CURRENT



**Package Outline Dimensions**

(Unit: millimeters)

First angle projection



**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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