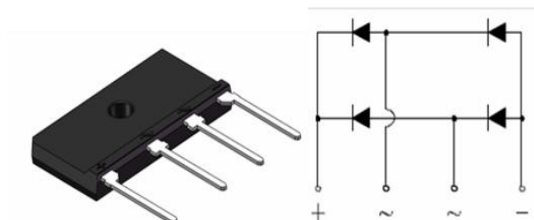


## Reverse Voltage 600~1000V Output Current 8.0A

### Features

- Thin Single In-Line package;
- Ideal for printed circuit boards;
- Glass Passivated chip junction;
- Low profile package;
- High Surge current capability;
- High case dielectric strength of 2500 VRMS;
- Plastic package has Underwrites Laboratory Flammability Classification 94V-0;
- Same footprint V.S GBJ package;



**GBJL**

### 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: GBJL;Epoxy meets UL-94V-0 Flammability rating; Base P/N with suffix"E" on packing code-halogen free;
- Terminals:Matte tin plated leads, solderable per J-STD-002 and JESD22-B102; E3 suffix for customer grade, meet JESD 201;

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

Parameter	Symbol	GBJL8J	GBJL8K	GBJL8M	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	600	800	1000	V
Maximum average forward rectified output current at	$T_C=110^{\circ}C$	$I_{F(AV)}$	8 <sup>(1)</sup>		A
	$T_A=25^{\circ}C$		2.8 <sup>(2)</sup>		
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 <sup>2</sup> s
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to 150			°C

<b>Electrical Characteristics</b> (TA = 25 °C unless otherwise noted)						
Parameter	Test Conditions	Symbol	GBJL8J	GBJL8K	GBJL8M	Unit
Maximum instantaneous forward voltage	I <sub>F</sub> =4.0A	V <sub>F</sub>	0.98			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		150			
Typical thermal resistance per leg		R <sub>θJA</sub> <sup>(2)</sup>	22			°C/W
		R <sub>θJC</sub> <sup>(1,3)</sup>	2.0			

Notes:

- 1). Unit case mounted on Al plate heatsink;.
- 2). Units mounted on PCB without heatsink;
- 3). Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

## Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT  
FIG RECTIFIED CURRENT

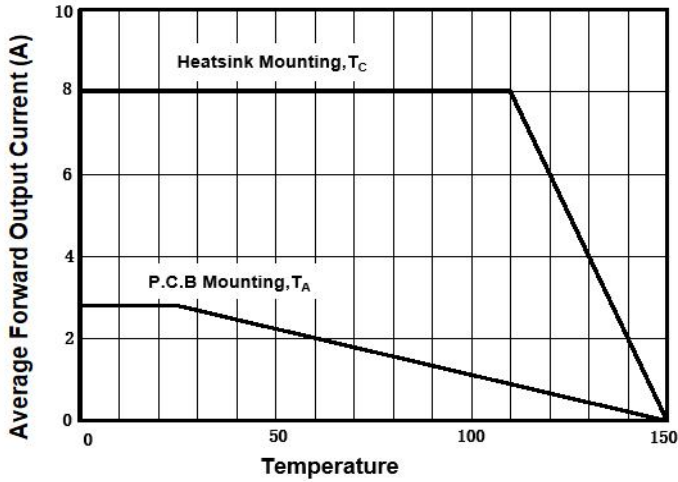
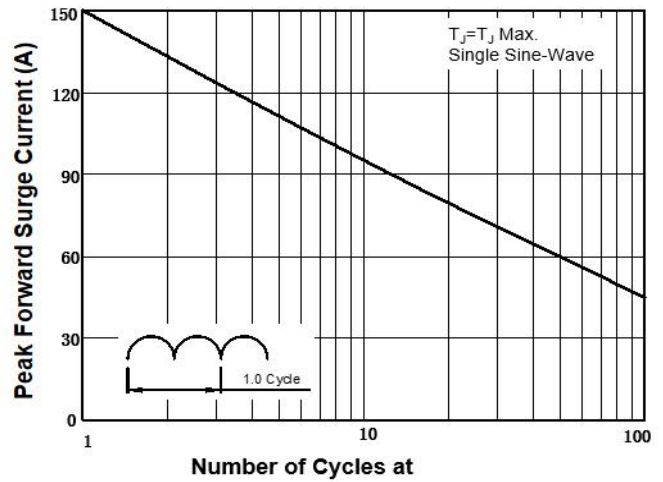


FIG.2-MAXIMUM NON-REPETITIVE  
PEAK FORWARD SURGE  
CURRENT



### FORWARD CHARACTERISTICS

FIG.3-TYPICAL INSTANTANEOUS

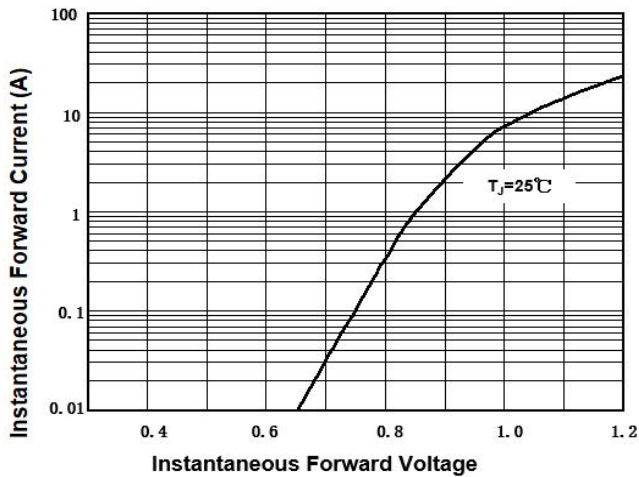
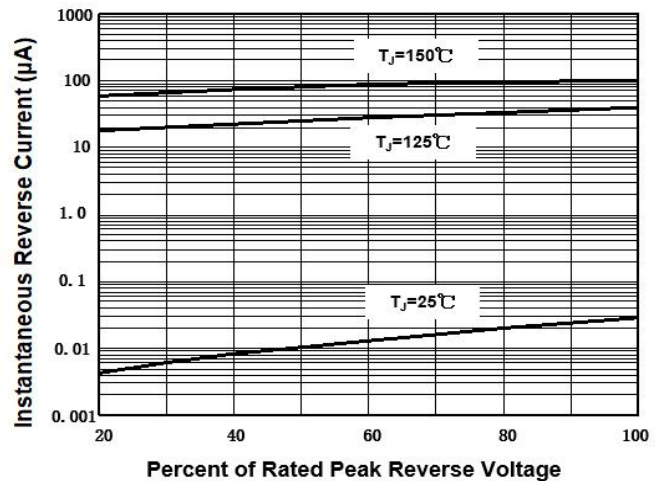


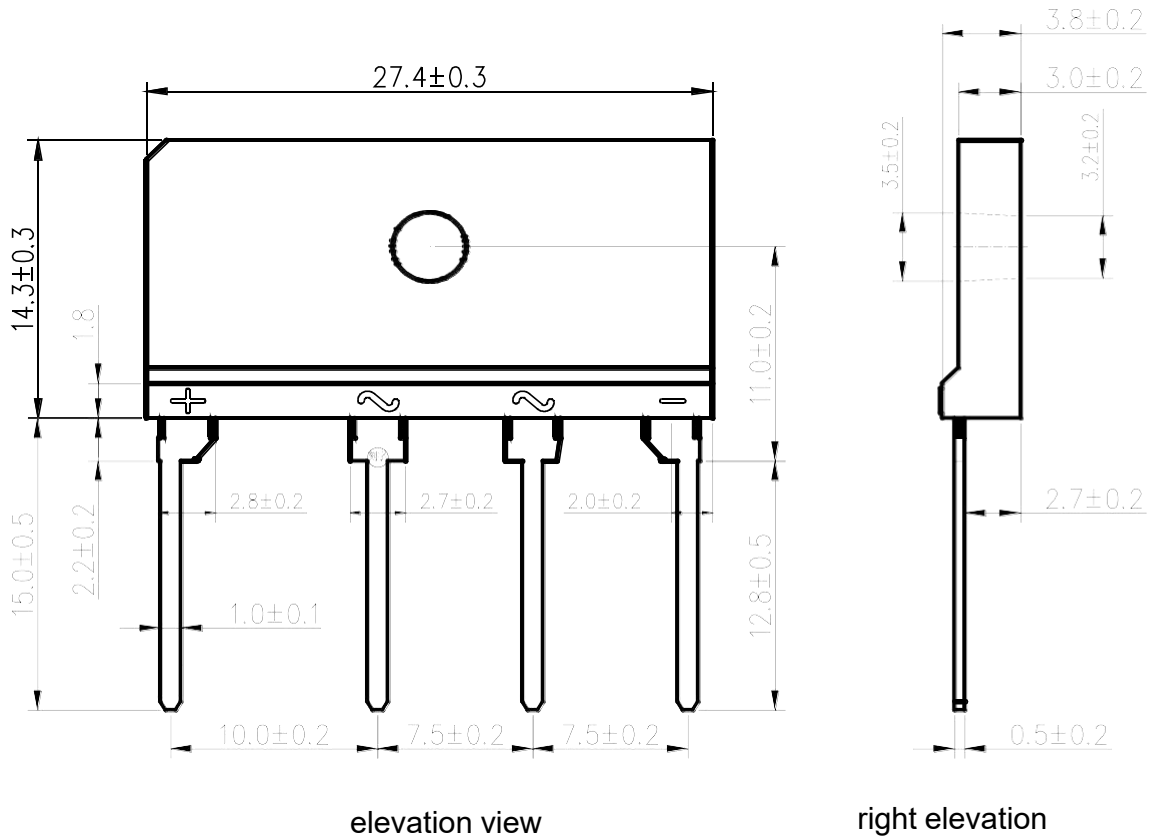
FIG.4-TYPICAL REAK REVERSE  
VOLTAGE CHARACTERISTICS



## Package Outline Dimensions

Unit:mm

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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