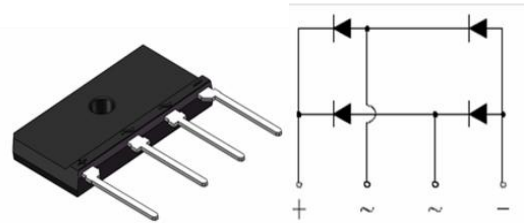


Reverse Voltage 600~1000V Output Current 20.0A

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	GBJL20J	GBJL20K	GBJL20M	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	$T_C=110^{\circ}C$	$I_{F(AV)}$	20 ⁽¹⁾ 3.5 ⁽²⁾		A
	$T_A=25^{\circ}C$				
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	280			A
Rating for fusing ($t \leq 8.3ms$)	I^2t	327			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	GBJL20J	GBJL20K	GBJL20M	Unit
Maximum instantaneous forward voltage	I _F =10.0A	V _F	0.98			Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	5.0			μA
	TA=125°C		150			
Typical thermal resistance per leg		R _{θJA} (2)	22			°C/W
		R _{θJC} (1,3)	2.5			

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 RECTIFIED CURRENT

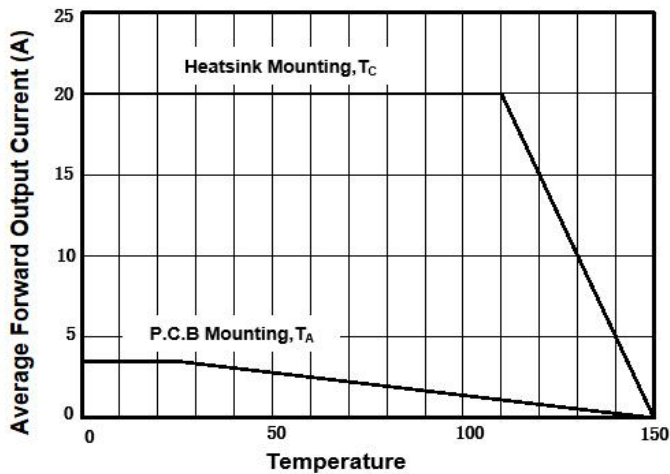


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

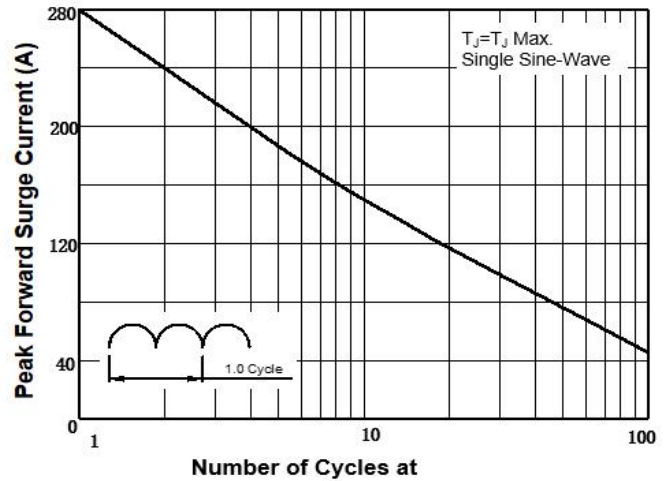


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

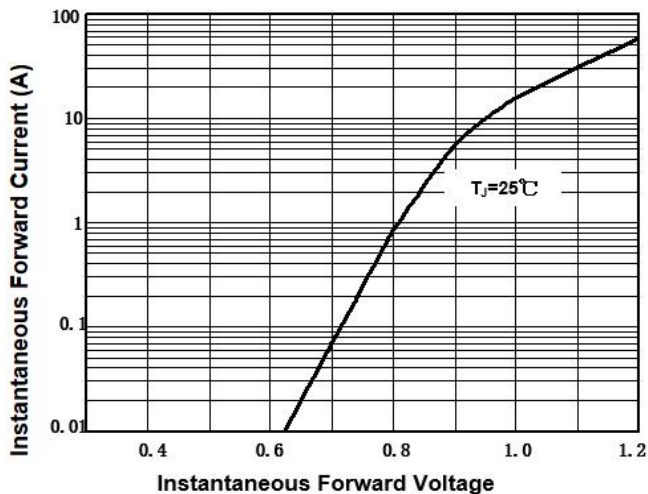
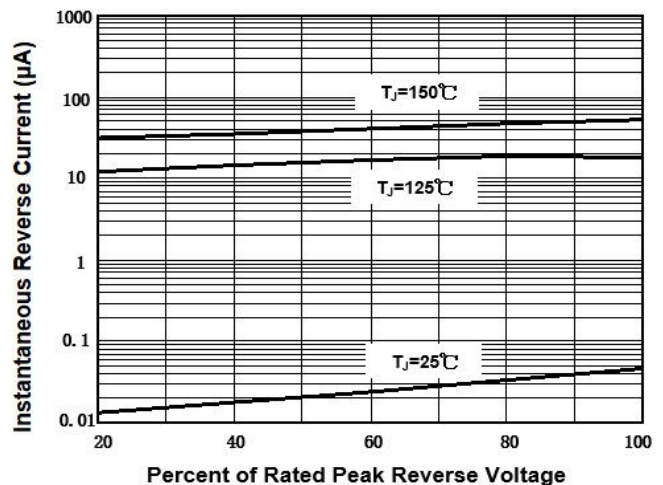


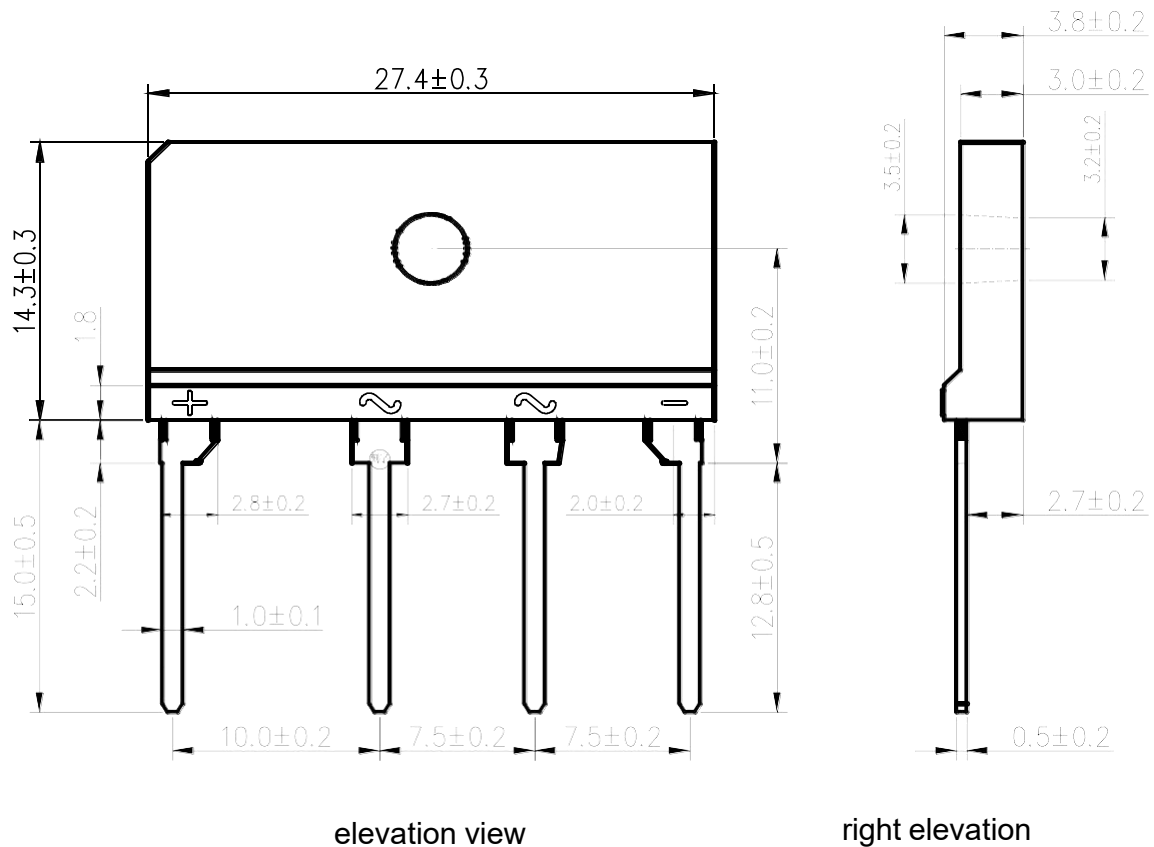
FIG.4-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS



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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