

GOOD-ARK Electronics

## Reverse Voltage 600~1000V Ountput Current 35.0A

### **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;

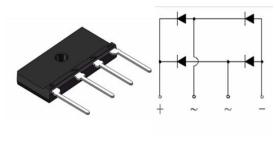
### **Typical Applications**

• 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	GBJL35J	GBJL35K	GBJL35M	Unit		
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	600	800	1000	V		
Maximum RMS voltage		V <sub>RMS</sub>	420	560	700	V		
Maximum DC blocking voltage		V <sub>DC</sub>	600	800	1000	V		
Maximum average forward rectified output current at	T <sub>C</sub> =110°C	I <sub>F(AV)</sub>	<b>35</b> <sup>(1)</sup>					
	T <sub>A</sub> =25°C		<b>3.8</b> <sup>(2)</sup>			A		
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)		I <sub>FSM</sub>	450			А		
Rating for fusing (t≪8.3ms)		l <sup>2</sup> t	844			A <sup>2</sup> s		
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-55 to 150			°C		



GBJL



Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	GBJL35J	GBJL35K	GBJL35M	Unit		
Maximum instantaneous forward voltage	I <sub>F</sub> =17.5A	V <sub>F</sub>	1.05		Volts			
Maximum DC reverse current at rated DC blocking voltage	<b>TA=25</b> ℃		5.0			μA		
	TA=125℃	I <sub>R</sub>	150					
Typical thermal resistance per leg		R <sub>θJA</sub>	22 <sup>(2)</sup>		°C/W			
		$R_{ extsf{ heta}JL}$	1.5					

Notes:

1). Unit case mounted on AI 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.

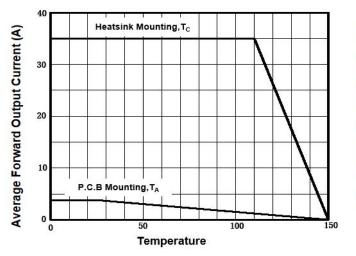


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### **Ratings and Characteristics Curves**

(TA = 25°C unless otherwise noted)

#### FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT



#### FIG.2-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT

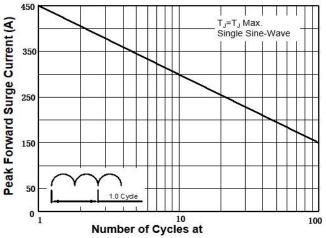
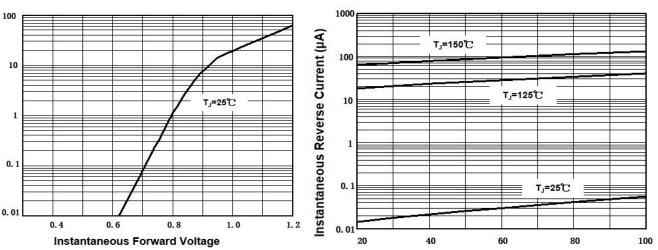


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

## FIG.4-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS



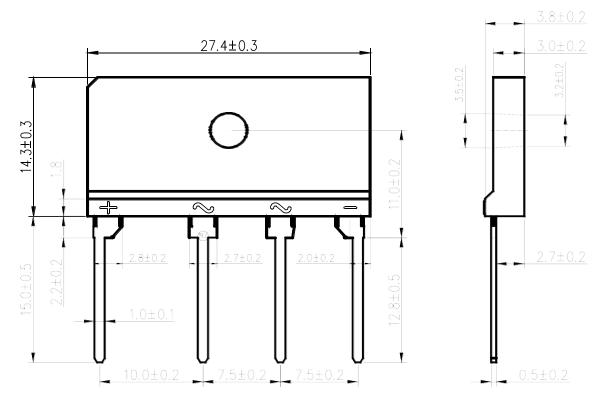
Instantaneous Forward Current (A)



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## **Package Outline Dimensions**

Unit:mm



First angle projection

elevation view

right elevation

### **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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