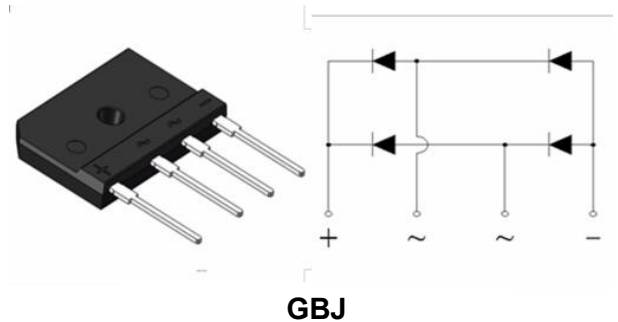


Reverse Voltage 50V~1000V Output Current 25A

Features

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



Typical Applications

- Appliances, Office Equipment, Industrial Automation applications.

Mechanical Data

- Case: GBJ(5S)Molded plastic body;Base P/N with suffix"E" on packing code-halogen free
- Terminals:Plated leads solderable per MIL-STD-750, Method 2026;
- High temperature soldering guaranteed: Solder Dip 260°C, 10seconds;
- Polarity: As marked on body;
- Mounting Torque: 10cm·kg (8.8 inches·lbs) max;
- Recommend Torque:Mounting Torque: 5.7cm·kg (5inches·lbs);

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

Parameter	Symbol	GBJ25A	GBJ25B	GBJ25D	GBJ25G	GBJ25J	GBJ25K	GBJ25M	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	$I_{F(AV)}$	25.0 ⁽¹⁾							A
		3.5 ⁽²⁾							
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	350							A
Rating for fusing(t<8.3ms)	I^2t	511							A ² sec
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150							°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)									
Parameter	Symbol	GBJ25A	GBJ25B	GBJ25D	GBJ25G	GBJ25J	GBJ25K	GBJ25M	Unit
Maximum instantaneous forward voltage drop per leg at 12.5A	V _F	1.00							Volts
Maximum DC reverse at rated DC blocking voltage per leg	TA=25°C	5.00							μA
	TA=125°C	250.00							
Typical thermal resistance per leg	R _{θJA} ⁽²⁾	22 ⁽²⁾							° C /W
	R _{θJC} ⁽³⁾	1.0 ⁽¹⁾							

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

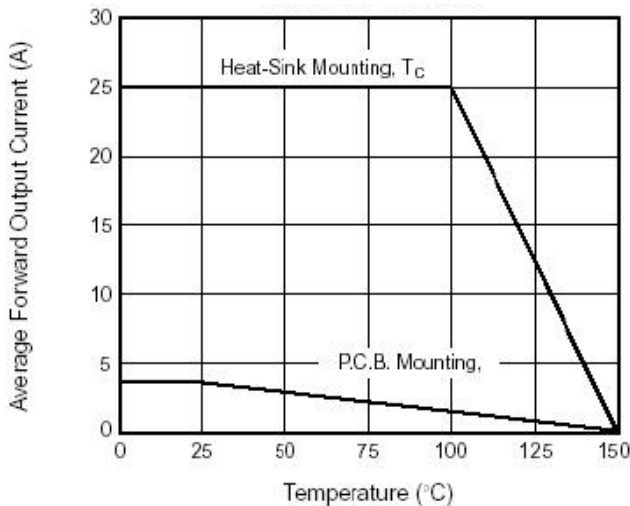


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

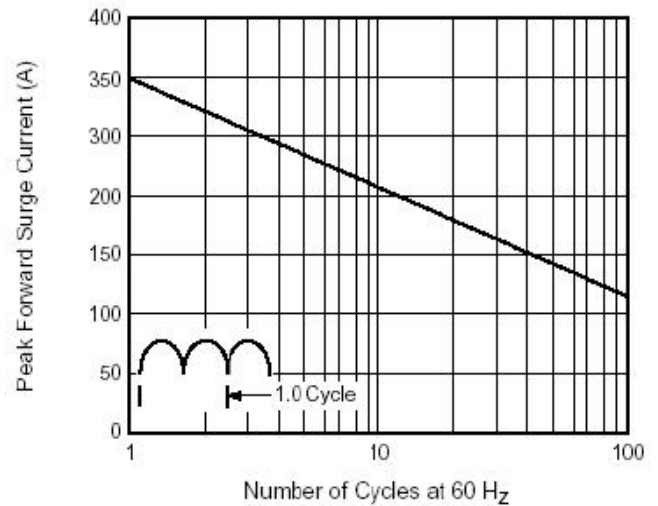


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

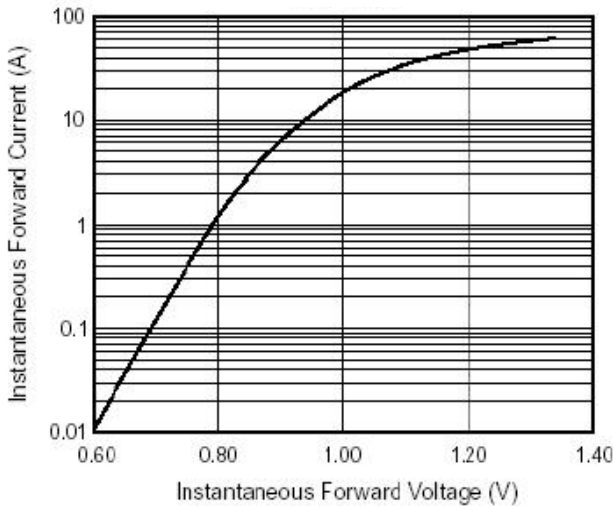
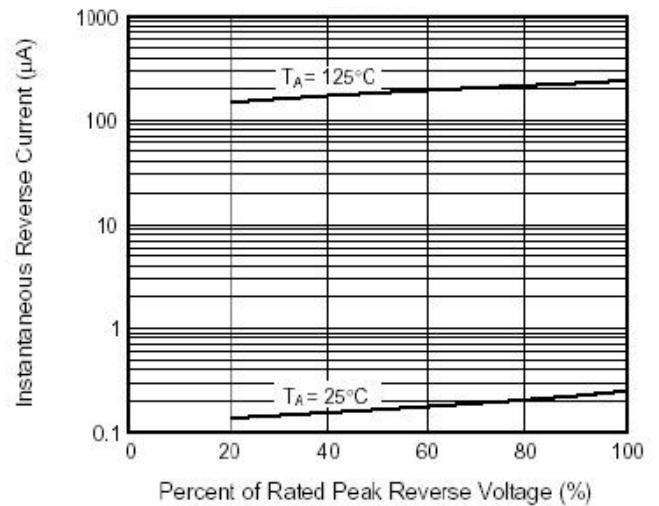


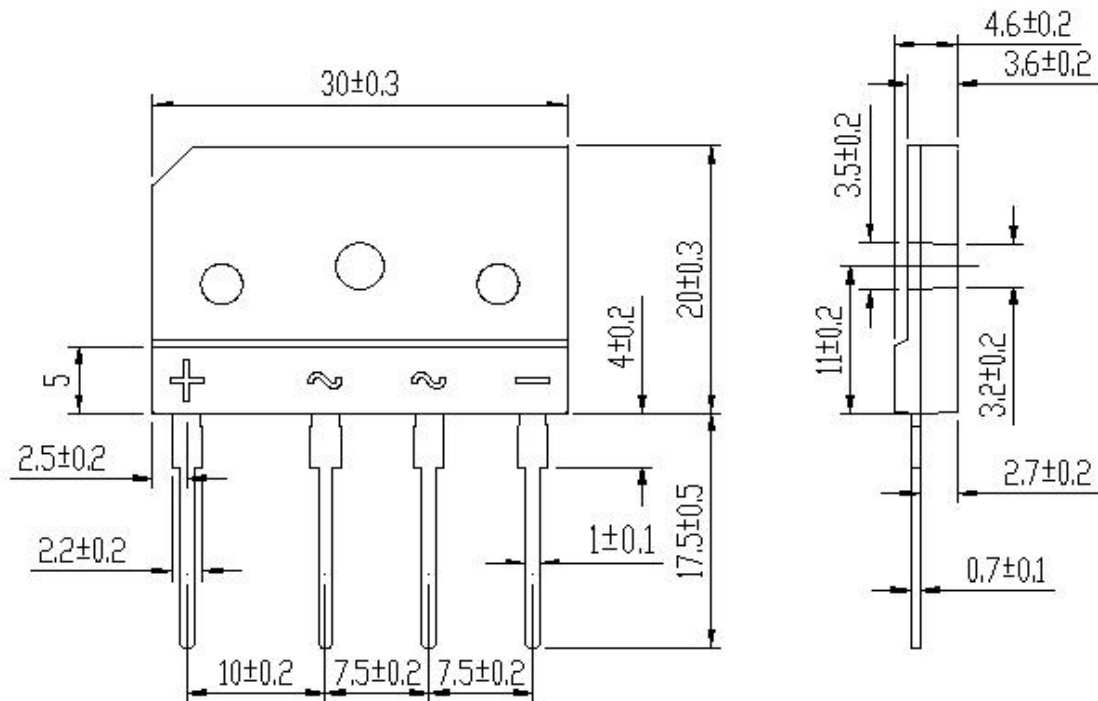
FIG.4-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS



Package Outline Dimensions

in millimeters

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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