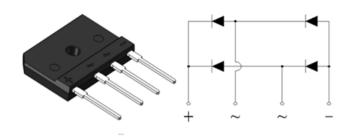


Glass passivated Single Phase Bridge Rectifiers Reverse Voltage50V~1000V Output Current 25A

#### **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 V<sub>RMS</sub>;
- ◆ Low forward voltage drop
- ◆ Plastic package has Underwrites Laboratory Flammability Classification 94V-0;



**GBJ** 

## **Typical Applications**

◆ General purpose use in AC-to-DC bridge full wave rectification for Switching Power Supply, Home 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 Torgue: 10cm-kg (8.8 inches-lbs) max;
- ◆ Recommend Torgue: Mounting Torgue: 5.7cm-kg (5inches-lbs);

Maximum Ratings (TA = 25 °C unless otherwise noted)						
Parameter		Symbol	GL2506	GL2508	Unit	
Maximum repetitive peak reverse voltage		$V_{RRM}$	600	800	V	
Maximum RMS voltage		$V_{RMS}$	420	560	V	
Maximum DC blocking voltage		$V_{DC}$	600	800	V	
Maximum average forward	TC=120°C		25 <sup>(1)</sup>		Α	
rectified output current at	TA=25°C	I <sub>F(AV)</sub>		4 <sup>(2)</sup>	A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	450		А	
Rating for fusing(t<8.3ms)		l <sup>2</sup> t	844		A <sup>2</sup> sec	
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150		°C	

Electrical Characteristics (TA = 25 °C unless otherwise noted)						
Parameter		Symbol	GL2506 GL2508		Unit	
Maximum instantaneous forward voltage drop per leg at 12.5A	TA=25°C	V <sub>F</sub>	0.93		Volts	
	TA=125°C	V <sub>F</sub>		0.80	VOILS	
Maximum DC reverse at rated DC blocking voltage per leg	TA=25°C	1	10.00			
	TA=125°C	I IR		250.00	μA	

Thermal Characteristics						
Parameter	Symbol	GL2506	GL2508	Unit		
Typical thermal resistance per leg	$R_{\theta JA}^{(2)}$	22.0		°C W		
	R <sub>0,JC</sub> (3)	0.8		C /VV		

NOTE:(1)Thermal resistance from junction to case, Unit case mounted with heatsink

(2) Thermal resistance from junction to ambient, Unit case mounted on PCB without heatsink



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## **Ratings and Characteristics Curves**

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

30

(Y)

25

Heat-Sink Mounting. TC

20

15

PCB Mounting. TA

0

0

25

50

75

Temperature (℃)

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



FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

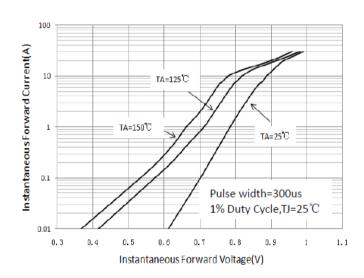
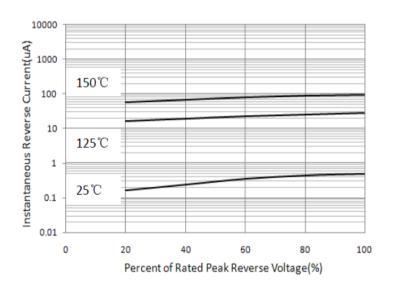


FIG.4-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

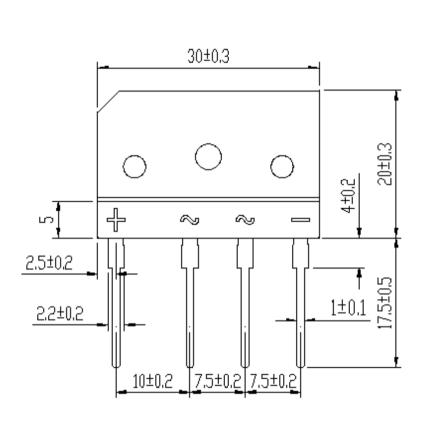


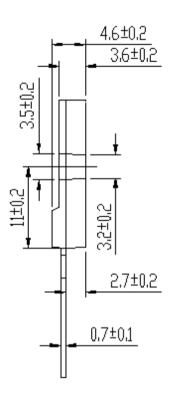
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## **Package Outline Dimensions**

in inches (millimeters)

### First angle projection





elevation view

right elevation

Version	Revision content		
А	Initial version release	Mar-21	



Glass passivated Single Phase Bridge Rectifiers Reverse Voltage50V~1000V Output Current 25A

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