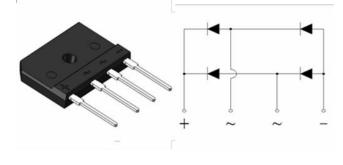


# Reverse Voltage50V~1000V Output Current 15A

#### **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;
- 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	GL1506B	GL1508B	Unit		
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	600	800	V		
Maximum RMS voltage		V <sub>RMS</sub>	420	560	V		
Maximum DC blocking voltage		V <sub>DC</sub>	600	800	V		
Maximum average forward rectified output current at	TC=110°C		15 <sup>(1)</sup>				
	TA=25°C	I <sub>F(AV)</sub>	3.7 <sup>(2)</sup>		А		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	280		А		
Rating for fusing(t<8.3ms)		l <sup>2</sup> t	327		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	GL1506B	GL1508B	Unit			
Maximum instantaneous forward voltage drop per leg at 7.5A	TA=25°C		0.93		Volts			
	TA=125°C	V <sub>F</sub>	0.85					
Maximum DC reverse at rated DC blocking voltage per leg	TA=25°C	I <sub>R</sub>	5.00		μА			
	TA=125°C		250.00					
Typical thermal resistance per leg		R <sub>0JA</sub> <sup>(2)</sup>	20 <sup>2)</sup>					
		R <sub>eJC</sub> <sup>(3)</sup>		1.5 <sup>(1)</sup>	°C /W			

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

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



## Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

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

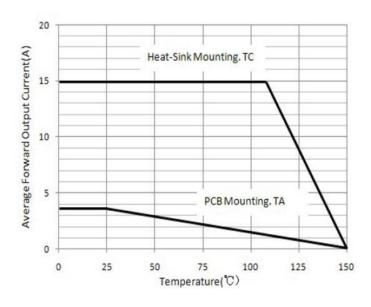


FIG.2-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT

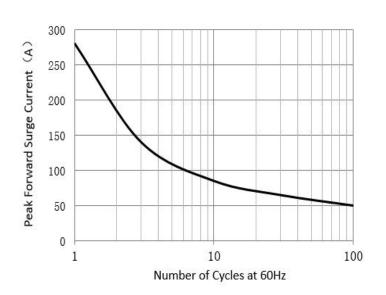
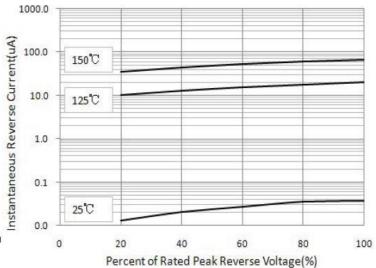


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

50 Instantaneous Forward Current(A) 0.5 0.05 Pulse width=300us 1% Duty Cycle,TJ=25°C 125°C 25°C 0.005 0.500 0.700 0.900 1.100 1.300 0.300 Instantaneous Forward Voltage(V)

FIG.4-TYPICAL REAK REVERSE **VOLTAGE CHARACTERISTICS** 

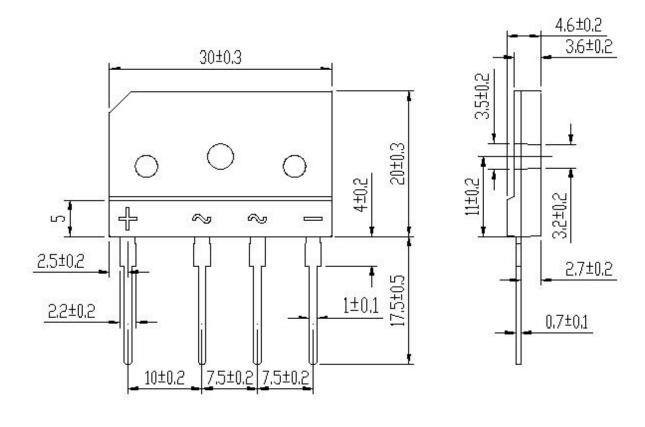




## **Package Outline Dimensions**

in millimeters

### First angle projection



elevation view

right elevation

## **Revision History**

Document Version	Date of release	Discroption of changes	
Rev.A	2021/3/1	Released Datasheet	
Rev.B	2023/12/22	Modify document format	



**GOOD-ARK Electronics** 

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