

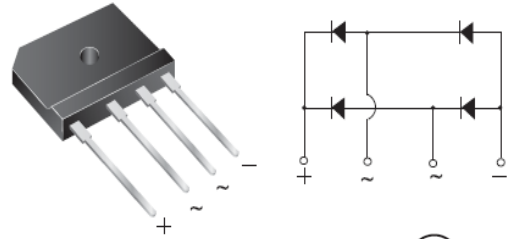


# GL1506B THRU GL1508B

Glass Passivated Single In-Line Bridge Rectifiers  
 Reverse voltage-600V to 800V  
 Forward current-15Amperes

## FEATURES

- Glass passivated chip junction
- Thin single in-line package
- Ideal for printed circuit boards
- High surge current capability
- High case dielectric strength of 2500 V<sub>RMS</sub>
- Low forward voltage drop
- Solder dip 260 °C, 10 s
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



## MECHANICAL DATA

- Case: GBJ(5S), molded epoxy body , Epoxy meets UL 94V-0 flammability rating
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22B-106
- Polarity: As marked on body
- Mounting Torque: 10cm-kg(8.8 inches-lbs)maximum
- Recommended Torque: 5.7cm-kg(5 inches-lbs)

PRIMARY CHARACTERISTICS	
I <sub>F(AV)</sub>	15 A
V <sub>R(RM)</sub>	600 V , 800V
I <sub>F(SM)</sub>	350A
V <sub>F</sub> at I <sub>F</sub> =7.5A, T <sub>A</sub> =125	0.83
I <sub>R</sub>	5μA
T <sub>J</sub> max.	150 °C

## TYPICAL APPLICATIONS

General purpose use in ac-to-dc full wave rectification for switching Power Supply.Home Appliances, Office Equipment, Industrial Automation applications

MAXIMUM RATINGS (T <sub>A</sub> = 25 °C unless otherwise noted)				
PARAMETER	SYMBOL	GL1506B	GL1508B	UNIT
Maximum repetitive peak reverse voltage	V <sub>R(RM)</sub>	600	800	V
Maximum RMS voltage	V <sub>R(MS)</sub>	420	560	V
Maximum DC blocking voltage	V <sub>DC</sub>	600	800	V
Maximum average forward rectified output current at	T <sub>C</sub> =110 <sup>(1)</sup>	I <sub>F(AV)</sub>	15	A
	T <sub>A</sub> =25 <sup>(2)</sup>	I <sub>F(AV)</sub>	3.7	
Peak forward surge current,8.3 ms single half sine-wave superimposed on rated load(JEDEC Method)	I <sub>F(SM)</sub>	280		A
Dielectric strength (Terminals to case, AC)	V <sub>ISO</sub>	2500		Volts
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150		°C

Notes: (1) Unit case mounted with heatsink  
 (2) Unit case mounted on PCB without heatsink



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ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)					
PARAMETER	TEST CONDITIONS	SYMBOL	GL1506B	GL1508B	UNIT
Maximum instantaneous forward voltage drop per leg at 7.5A	I <sub>F</sub> =7.5 A	TA=25	0.91		Volts
		TA=125	0.83		
Maximum DC reverse current at rated DC blocking voltage	TA=25		5		μA
	TA=125		250		
Typical reverse recovery time	I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1.0 A, I <sub>rr</sub> = 0.25 A		4		us

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)				
PARAMETER	SYMBOL	GL1506B	GL1508B	UNIT
Maximum thermal resistance	R <sub>θJC</sub> <sup>(1)</sup>	1.5		/W
	R <sub>θJA</sub> <sup>(2)</sup>	25		

Notes: (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

ORDERING INFORMATION (Example)			
PREFERRED P/N	UNIT WEIGHT (g)	BASE QUANTITY	DELIVERY MODE
GL1506B	7.141	20	Tube
GL1506B	7.141	40	Paper tray

## RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)

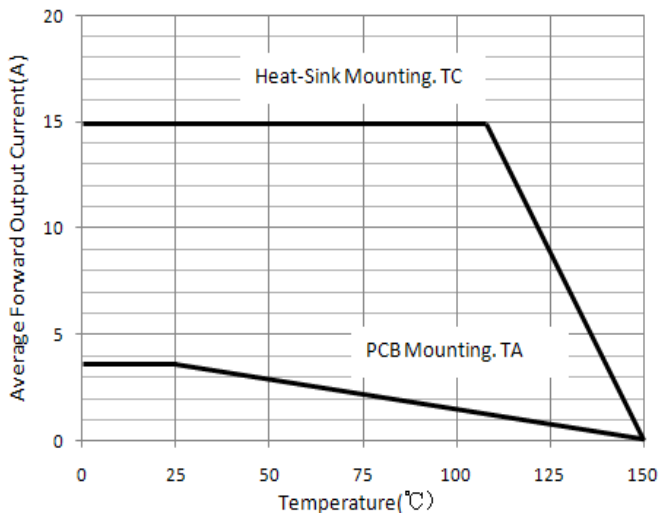


Figure 1. Derating Curve Output Rectified Current

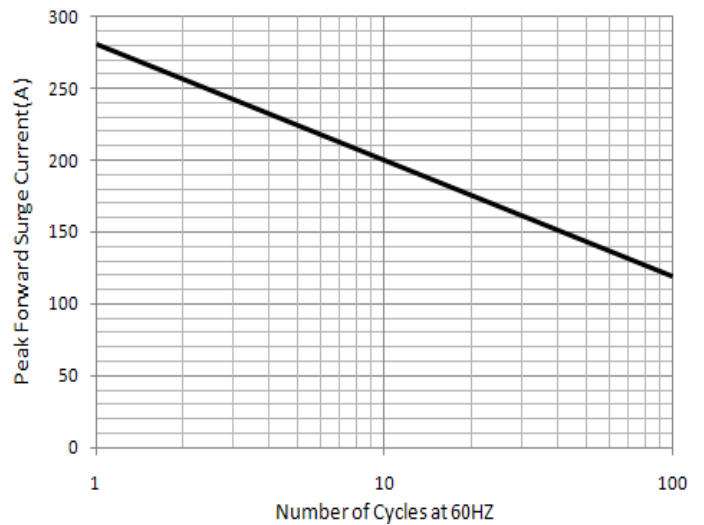


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg



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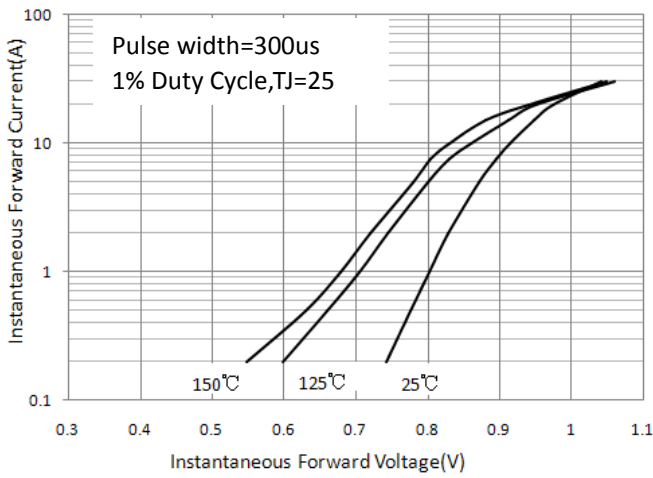


Figure 3. Typical Forward Characteristics Per Leg

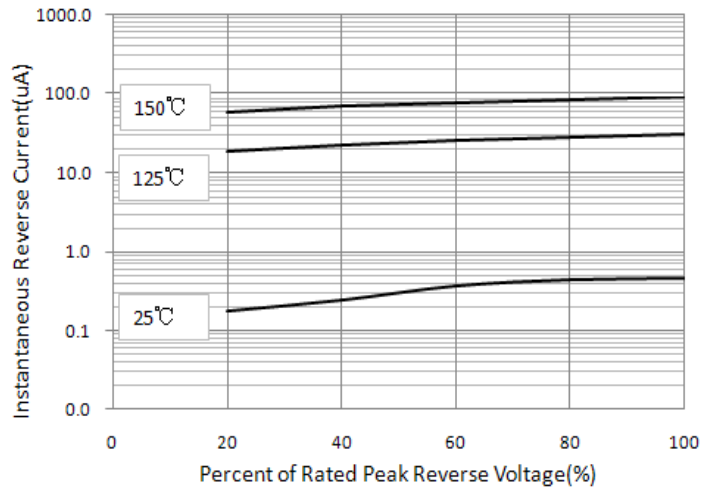


Figure 4. Typical Reverse Characteristics Per Leg

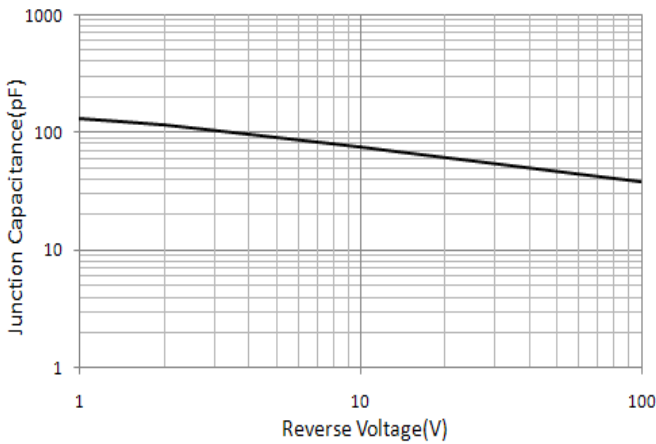


Figure 5. Typical Junction Capacitance Per Leg

## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

