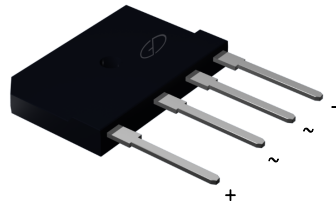


GL1506A thru GL1508A

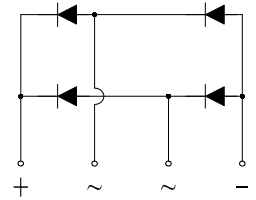
Glass Passivated Bridge Rectifiers
 Reverse Voltage 600 to 800V Forward Current 15A

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_{RMS}
- Low forward voltage drop
- Solder dip 260 °C, 10s
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



Package: GBJ(5S)



Schematic Diagram

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)



Applications

General purpose used in AC-DC full wave rectification for switching power supplies, home appliances, office equipment and industrial automotive applications.

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

Parameter	Symbol	GL1506A	GL1508A	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 Rectified Output Current at	T _C =110°C ⁽¹⁾	I _{F(AV)1}	15	A
	T _A =25°C ⁽²⁾	I _{F(AV)2}	3.7	
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load, JEDEC Method)	I _{FSM}	240		A
Dielectric Strength (terminals to case, AC)	V _{ISO}	2500		V
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150		°C

Notes: (1) Unit case mounted with heatsink

(2) Unit case mounted on PCB without heatsink

Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	GL1506A	GL1508A	Unit
Maximum Thermal Resistance	R _{θJC} ⁽¹⁾	1.5		°C/W
	R _{θJA} ⁽²⁾	20		

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

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	GL1506A	GL1508A	Unit
Maximum Instantaneous Forward Voltage Drop per Leg	$I_F = 7.5\text{ A}$	$T_A = 25^\circ\text{C}$	0.93		V
		$T_A = 125^\circ\text{C}$	0.85		
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	I_R	5		μA
	$T_A = 125^\circ\text{C}$		250		
Typical Reverse Recovery Time	$I_F = 0.5\text{ A}, I_{RR} = 1.0\text{ A}, I_{rr} = 0.25\text{ A}$	T_{RR}	3.7		μs

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

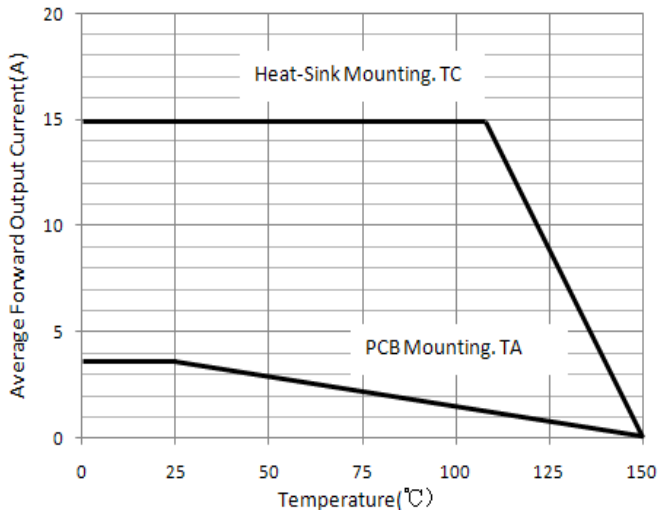


Figure 1. Derating Curve Output Rectified Current

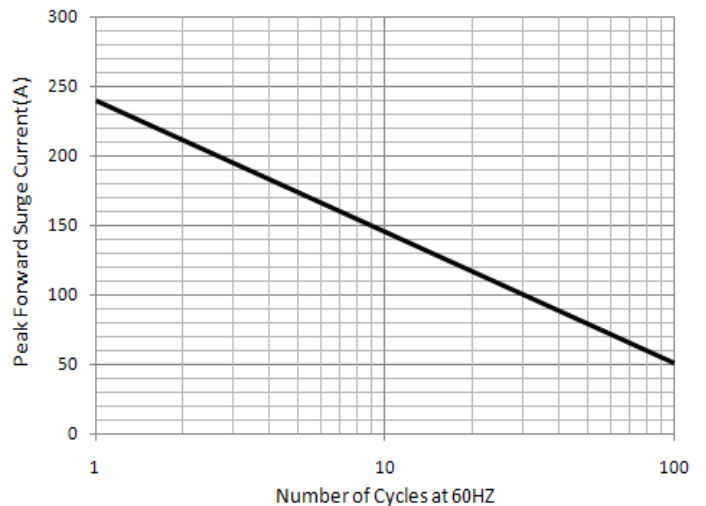


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

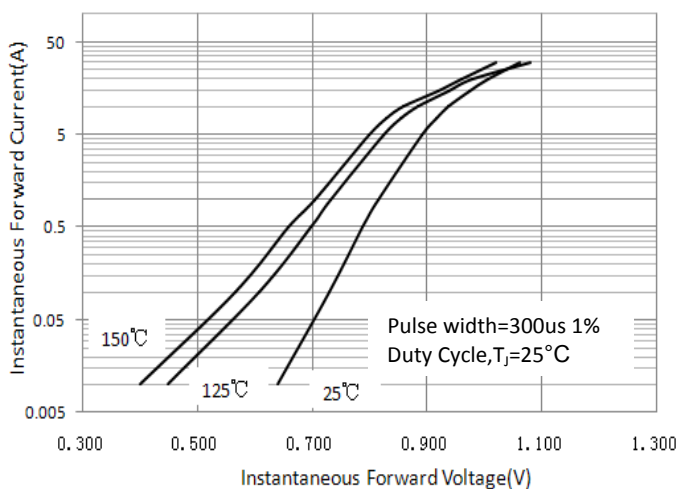


Figure 3. Typical Forward Characteristics Per Leg

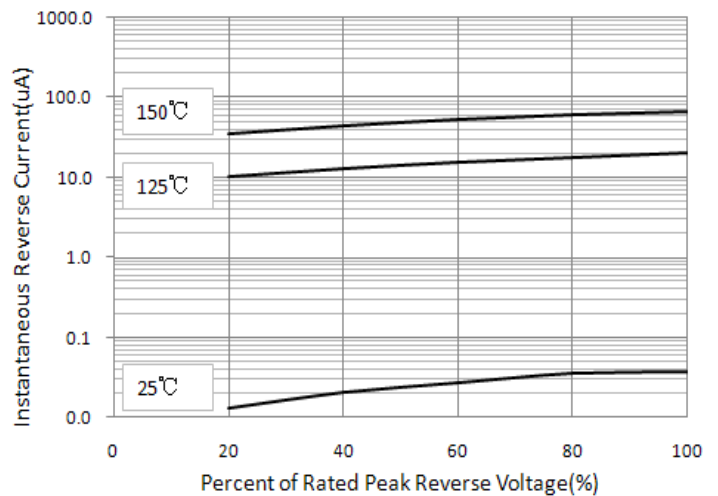


Figure 4. Typical Reverse Characteristics Per Leg

GL1506A thru GL1508A

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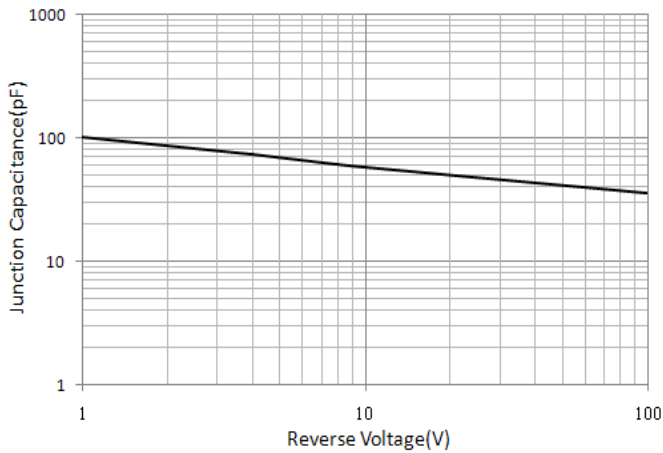
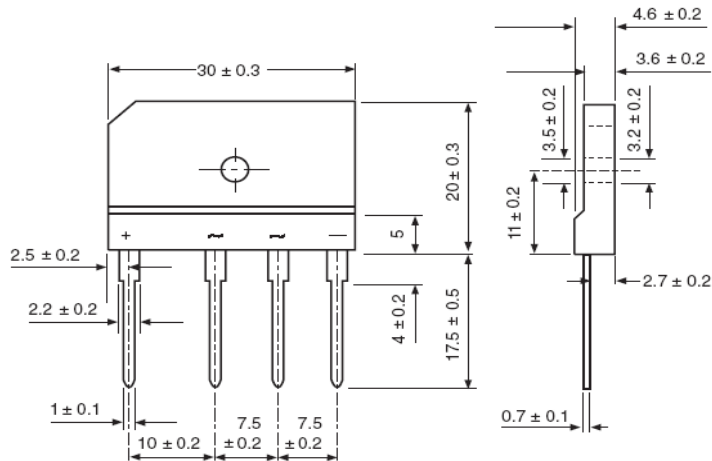


Figure 5. Typical Junction Capacitance Per Leg

Package Outline Dimensions

in millimeters

GBJ(5S)



Ordering Information (example)

P/N	Unit Weight (g)	Base Quantity	Delivery Mode
GL1506A	7.141	20	Tube
GL1506A	7.141	40	Paper tray