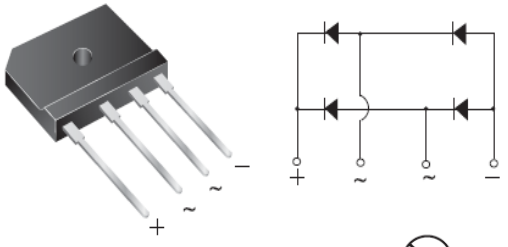
GL1506 THRU GL1508

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_{RMS}
- 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



RoHS COMPLIANT

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	
$I_{F(AV)}$	15 A
V_{RRM}	600 V，800V
I_{FSM}	350A
V_F at IF=7.5A,TA=125°C	0.82
I_R	5μA
T_J 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_A = 25 °C unless otherwise noted)					
PARAMETER		**SYMBOL**	**GL1506**	**GL1508**	**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=120°C(1)	$I_{F(AV)}$	15		A
	T_A=25°C(2)	$I_{F(AV)}$	3.7		
Peak forward surge current,8.3 ms single half sine-wave superimposed on rated load(JEDEC Method)		I_{FSM}	350		A
Dielectric strength (Terminals to case, AC)		V_{ISO}	2500		Volts
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

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ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)						
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**GL1506**	**GL1508**	**UNIT**
Maximum instantaneous forward voltage drop per leg at 7.5A	IF=7.5 A	TA=25°C	VF	0.9		Volts
		TA=125°C		0.82		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C		IR	5		μA
	TA=125°C			250		
Typical reverse recovery time	I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A		TRR	4.5		us

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)				
PARAMETER	**SYMBOL**	**GL1506**	**GL1508**	**UNIT**
Maximum thermal resistance	$R_{\theta JC}$(1)	1		°C/W
	$R_{\theta JA}$(2)	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**
GL1506	7.141	20	Tube
GL1506	7.141	40	Paper tray

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

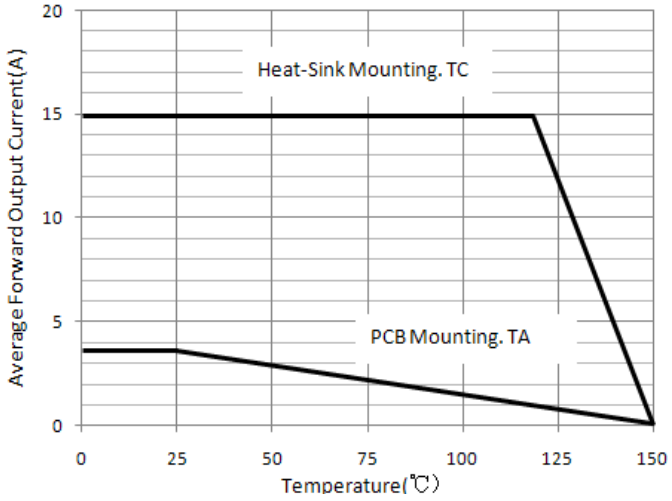

Figure 1. Derating Curve Output Rectified Current

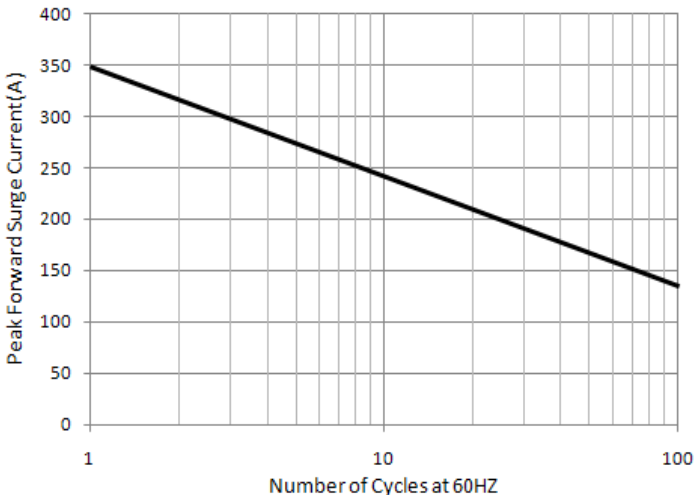

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

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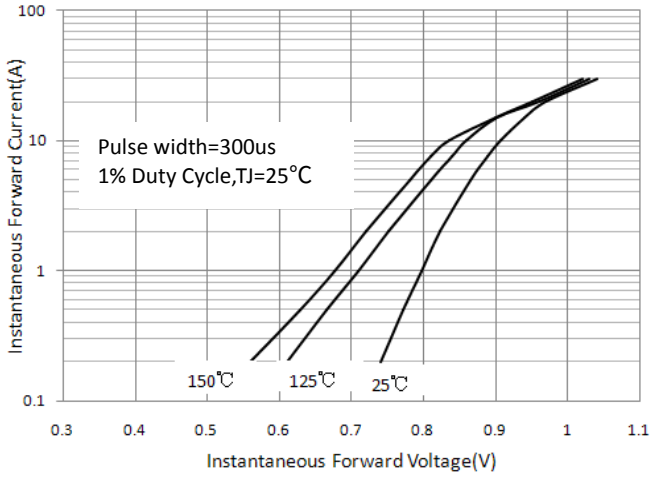

Figure 3. Typical Forward Characteristics Per Leg

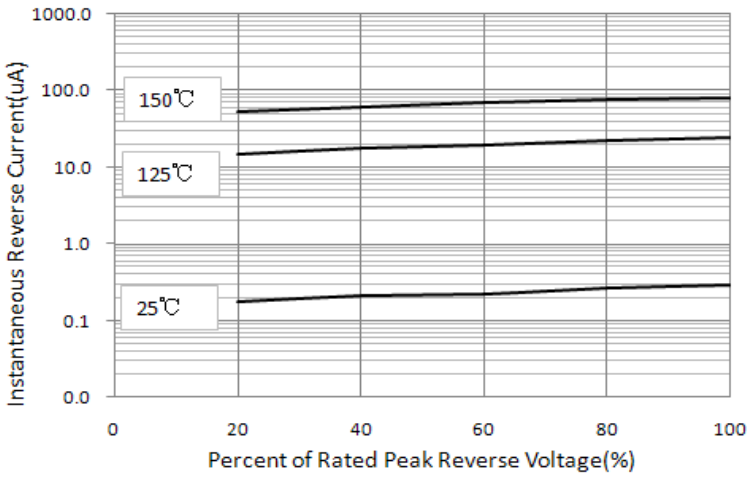

Figure 4. Typical Reverse Characteristics Per Leg

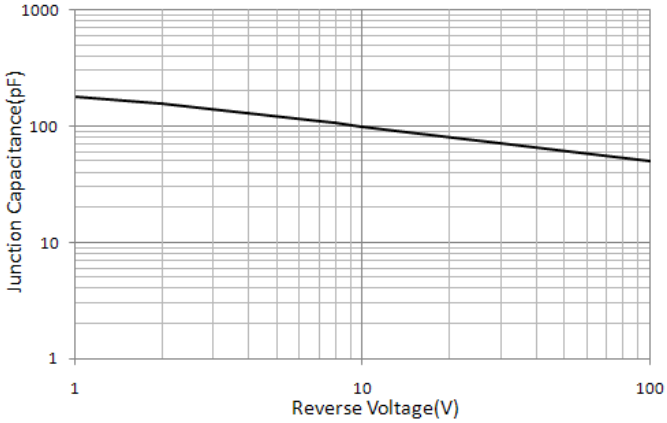

Figure 5. Typical Junction Capacitance Per Leg

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)