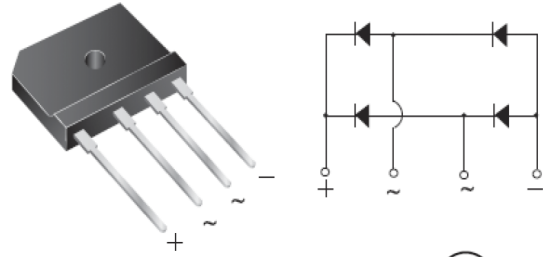


FEATURES

- 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



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 I _F =7.5A, T _A =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

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℃	VF	0.9		Volts
		TA=125℃		0.82		
Maximum DC reverse current at rated DC blocking voltage	TA=25℃		IR	5		μA
	TA=125℃			250		
Typical reverse recovery time	IF = 0.5 A, IR = 1.0 A, Irr = 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 _{θJC} ⁽¹⁾	1		°C/W
	R _{θJA} ⁽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)

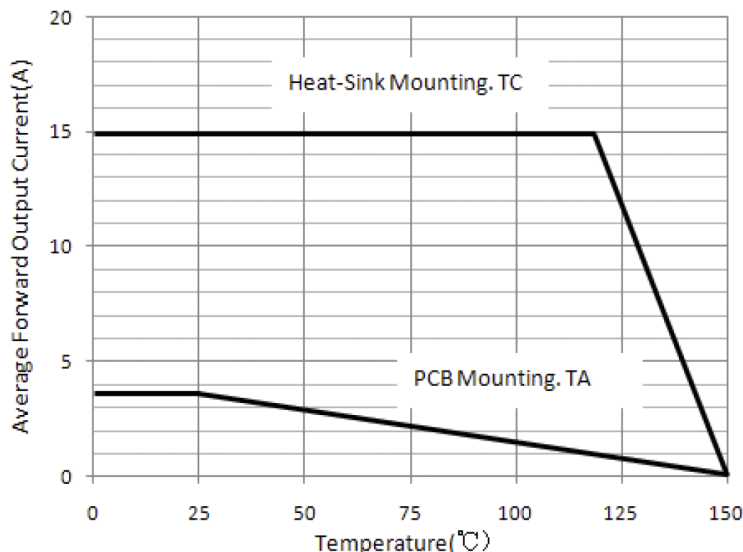


Figure 1. Derating Curve Output Rectified Current

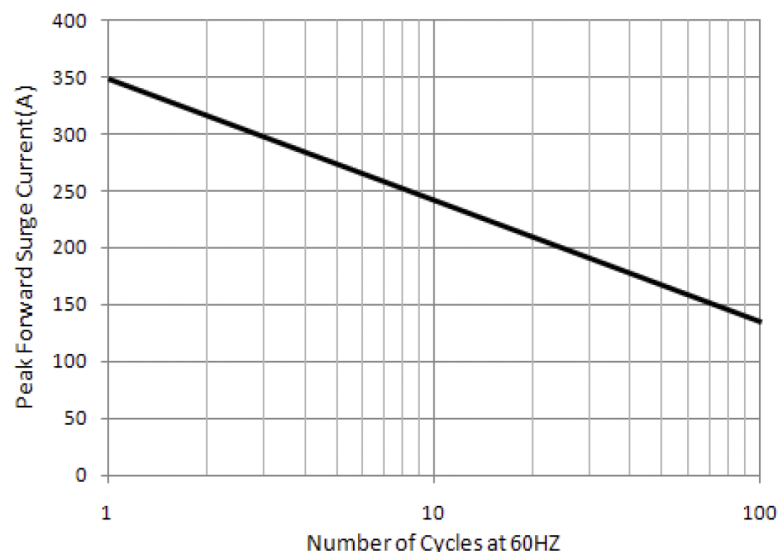


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

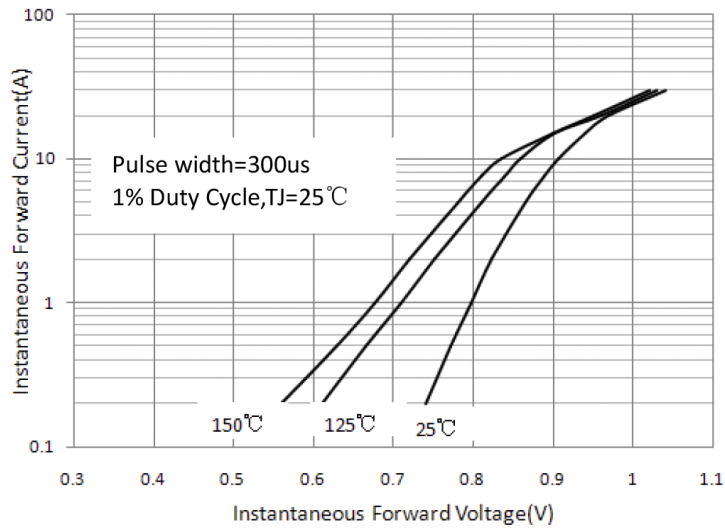


Figure 3. Typical Forward Characteristics Per Leg

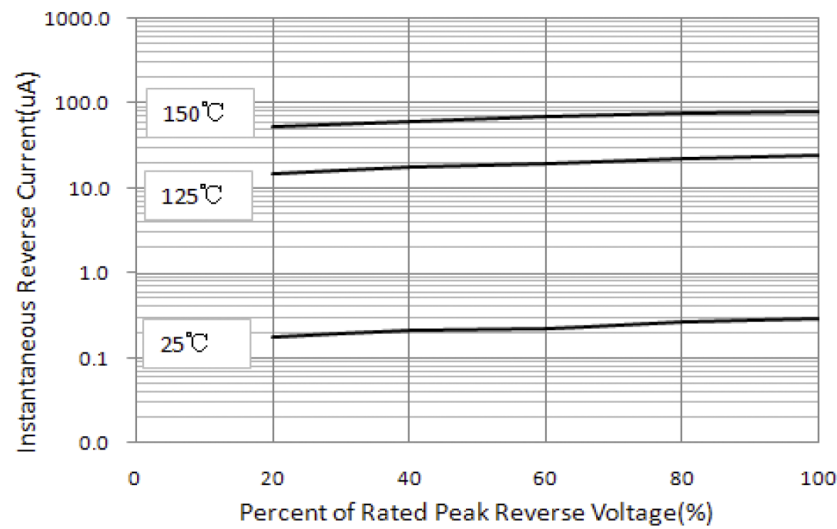


Figure 4. Typical Reverse Characteristics Per Leg

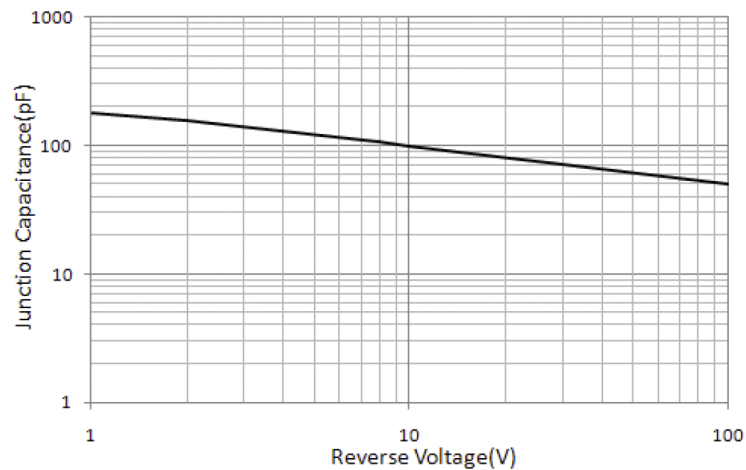


Figure 5. Typical Junction Capacitance Per Leg

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

