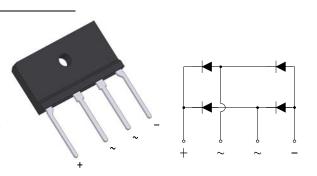


GBJL15JA THRU GBJL15MA

Glass Passivated Single-Phase Bridge Rectifier Reverse Voltage - 600V to 1000V Forward Current - 15.0 Amperes

Features

- ◆ Thin Single In-Line package;
- ◆ Ideal for printed circuit boards;
- ◆ Glass Passivated chip junction;
- Low profile package;
- High Surge current capability;
- ◆ High case dielectric strength of 2500 V_{RMS};
- ◆ Plastic package has Underwrites Laboratory Flammability Classification 94V-0;
- Same footprint V.S GBJ package;



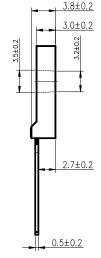


RoHS

Mechanical Data

- ◆ Case: GBJL;
 - Epoxy meets UL-94V-0 Flammability rating;
- ◆ Terminals:Matte tin plated leads, solderable per J-STD-002 and JESD22-B102;
 - E3 suffix for customer grade, meet JESD 201;
- ◆ High temperature soldering guaranteed: Solder Dip 270°C,10seconds;
- ◆ Polarity: As marked on body;
- ◆ Mounting Torgue: 10cm-kg (8.8inches-lbs) max;
- Recommend Torgue: Mounting Torgue:
 5.7cm-kg (5inches-lbs);

27.4±0.3 27.4±0.3 27.4±0.3 27.4±0.2 2.0±0.2 1.0±0.1 1.0±0.1 27.5±0.2 7.5±0.2 7.5±0.2



Typical Applications

General purpose use in AC-to-DC bridge full wave rectification for Switching Power Supply, Home Appliances, Office Equipment, Industrial Automation applications.

Package Dimensions in mm

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GBJL15JA	GBJL15KA	GBJL15MA	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	600	800	1000	٧
Maximum RMS voltage	V _{RMS}	420	560	700	V
Maximum DC blocking voltage	V _{DC}	600	800	1000	V
Maximum average forward T_c =110 $^{\circ}$ Crectified output current at T_A =25 $^{\circ}$ C	I _{F(AV)}	15 ⁽¹⁾ 3.0 ⁽²⁾			Amps
Peak forward surge current 8.3 ms single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	180			Amps
Rating for fusing (t<8.3ms)	l ² t	135			A ² sec
Maximum Instantaneous forward voltage drop per leg at 7.5A	V _F	1.05			Volt
Maximum DC Reverse Current at Rated T _A =25℃ DC Blocking Voltage per leg T _A =125℃	I _R	5 150			μΑ
Typical thermal resistance per leg	R _{eJA} R _{eJC}	22 ⁽²⁾ 2.5 ⁽¹⁾			°C/ W
Operating junction and Storage Temperature Range	T _J ,T _{STG}		-55 to +150		${\mathfrak C}$

Notes:

- 1). Unit case mounted on Al plate heatsink;
- 2). Units mounted on PCB without heatsink;
- 3). Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.



GBJL15JA THRU GBJL15MA

Glass Passivated Single-Phase Bridge Rectifier Reverse Voltage - 600V to 1000V Forward Current - 15.0 Amperes

RATINGS AND CHARACTERISTICS CURVES

(T_A =25°C unless otherwise noted)

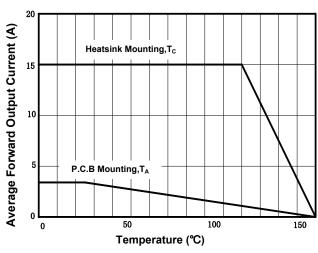


Figure 1. Derating Curve Output Rectified Current

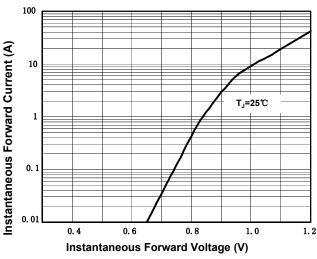


Figure 3. Typical Forward Characteristics Per Diode

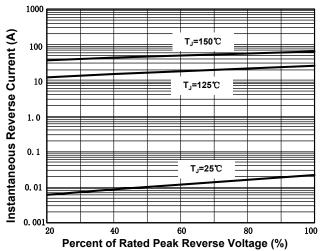


Figure 5. Typical Reverse Characteristics Per Diode

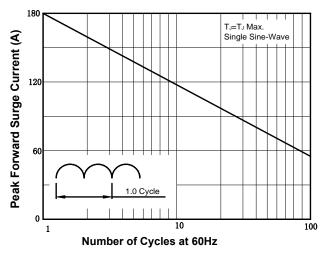


Figure 2. Maximum Non-Repetitive Peak Forward
Surge Current per Diode

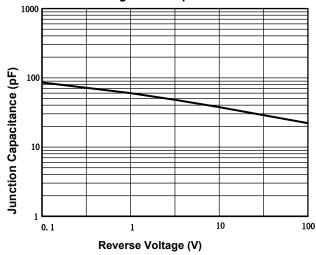


Figure 4. Typical Junction Capacitance Per Diode