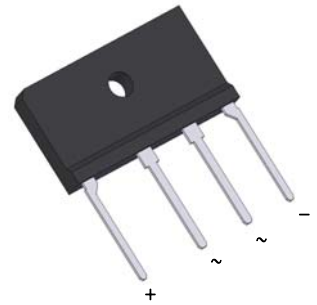


GBJL20J thru GBJL20M

Glass Passivated Bridge Rectifiers
 Reverse Voltage 600 to 1000V Forward Current 20A

Features

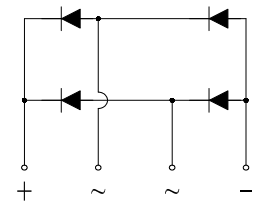
- Thin single In-line package
- Ideal for printed circuit boards
- Glass passivated chip junction
- Low profile package
- High surge current capability
- High case dielectric strength of 2500 VRMS
- Plastic package has Underwrites Laboratory



Package: GBJL

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 Torque: 10cm-kg (8.8inches-lbs) max
- Recommend Torque: 5.7cm-kg (5inches-lbs)



Schematic Diagram

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbol	GBJL20J	GBJL20K	GBJL20M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	V
Maximum Average Forward Rectified Output Current at $T_C=110^\circ\text{C}$ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	20 ⁽¹⁾ 3.5 ⁽²⁾			A
Peak Forward Surge Current (8.3 ms single sine-wave superimposed on rated load, JEDEC method)	I_{FSM}	280			A
Rating for Fusing ($t<8.3\text{ms}$)	I^2t	325			A ² sec
Maximum Instantaneous Forward Voltage Drop per Leg at 10A	V_F	1.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Leg $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5 150			μA
Typical Thermal Resistance per Leg	$R_{\theta JA}$ $R_{\theta JC}$	22 ⁽²⁾ 2.5 ⁽¹⁾			$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150			$^\circ\text{C}$

Notes:

- 1). Unit case mounted on Al plate heatsink
- 2). Units mounted on PCB without heatsink

Typical Characteristic Curves

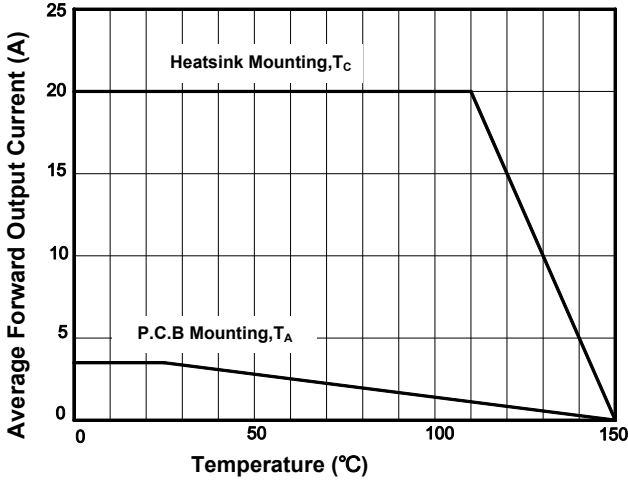


Figure 1. Derating Curve Output Rectified Current

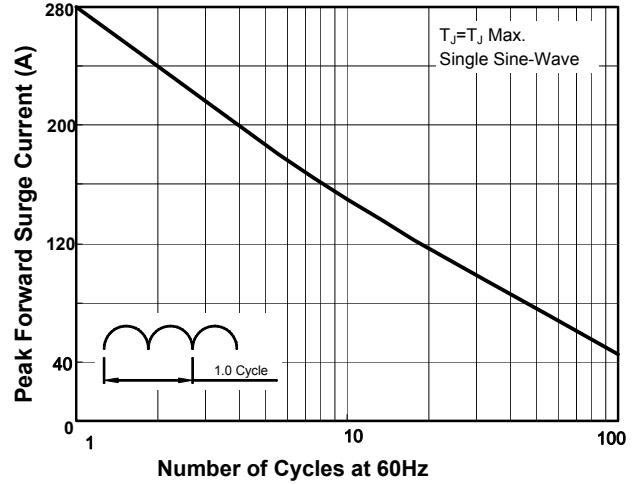


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

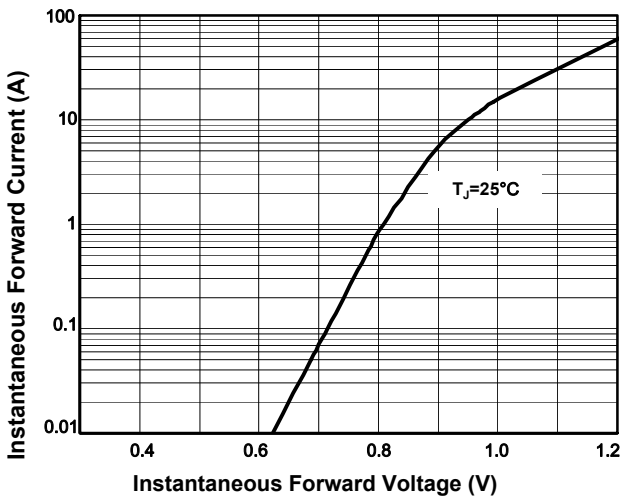


Figure 3. Typical Forward Characteristics Per Diode

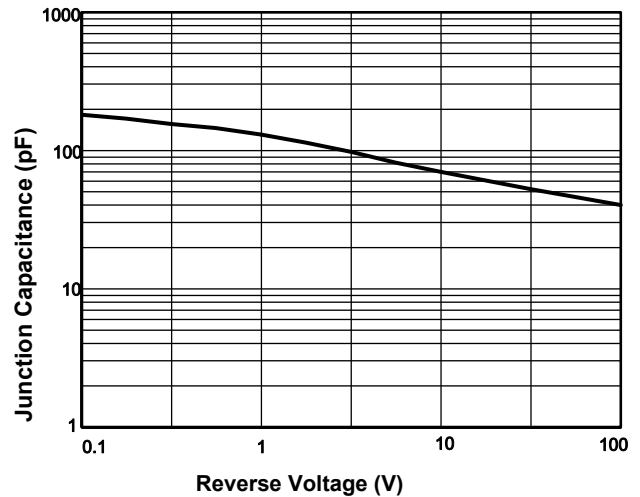


Figure 4. Typical Junction Capacitance Per Diode

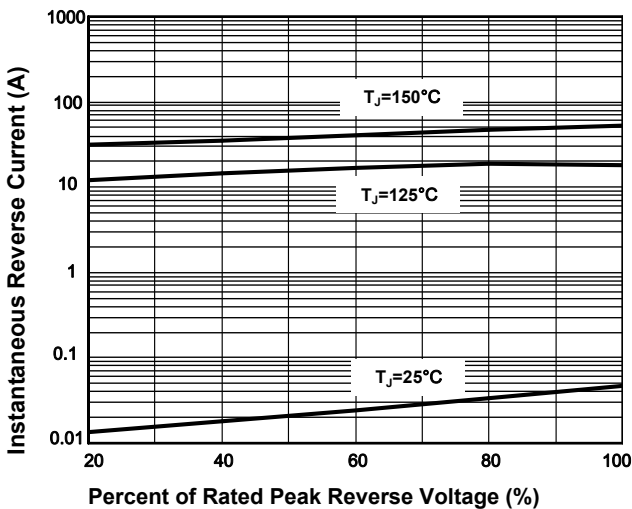


Figure 5. Typical Reverse Characteristics Per Diode

Product Outline Dimensions

GBJL

in mm

