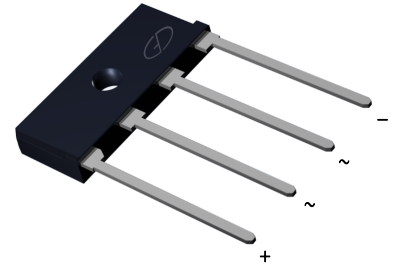


## Features

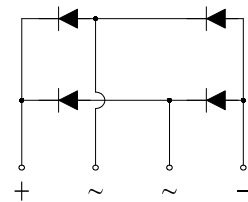
- Thin single In-line package
- Ideal for printed circuit boards
- Glass passivated chip junction
- Low profile package
- High surge current capability
- High case dielectric strength of 2000 VRMS
- Plastic package has Underwrites Laboratory



Package: KBJL

## Mechanical Data

- Case: KBJL
- 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 275°C, 40seconds
- Polarity: As marked on body
- Mounting Torque: 5.7cm·kg (5.0inches·lbs) max
- Recommend Torque: 5.7cm·kg (5inches·lbs)



Schematic Diagram



**RoHS**  
COMPLIANT

## Maximum Ratings and Electrical Characteristics

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

Parameter	Symbol	KBJL10J	KBJL10K	KBJL10M	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 $T_C=110^\circ\text{C}$ $T_A=25^\circ\text{C}$	$I_{F(AV)}$		10 <sup>(1)</sup> 3.1 <sup>(2)</sup>		A
Peak Forward Surge Current (8.3 ms single sine-wave superimposed on rated load, JEDEC method)	$I_{FSM}$		180		A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$		134		A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop per Leg at 5A	$V_F$		0.98		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		$\mu\text{A}$
Typical Thermal Resistance per Leg	$R_{\theta JA}$ $R_{\theta JC}$		25 <sup>(2)</sup> 1.8 <sup>(1)</sup>		$^\circ\text{C/W}$
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**

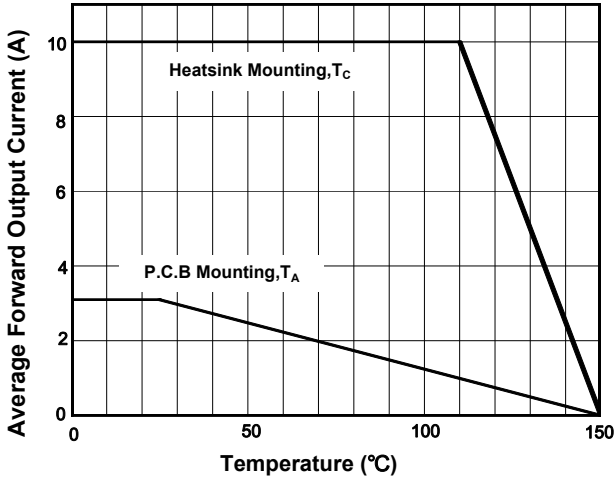


Figure 1. Derating Curve Output Rectified Current

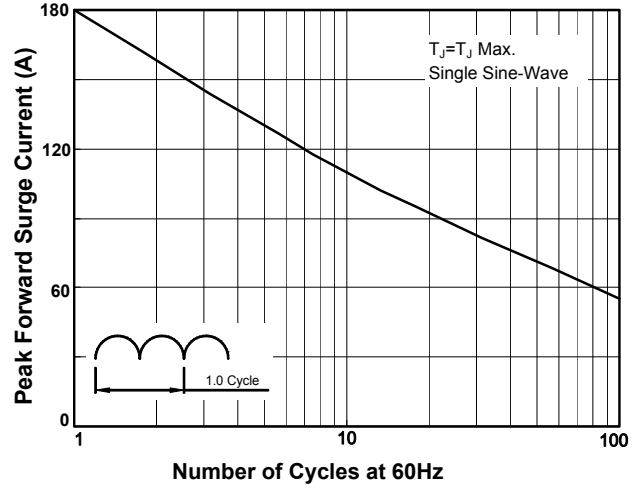


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

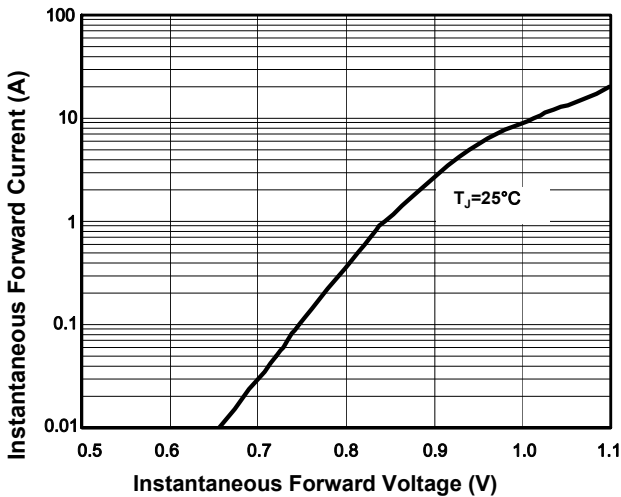


Figure 3. Typical Forward Characteristics Per Diode

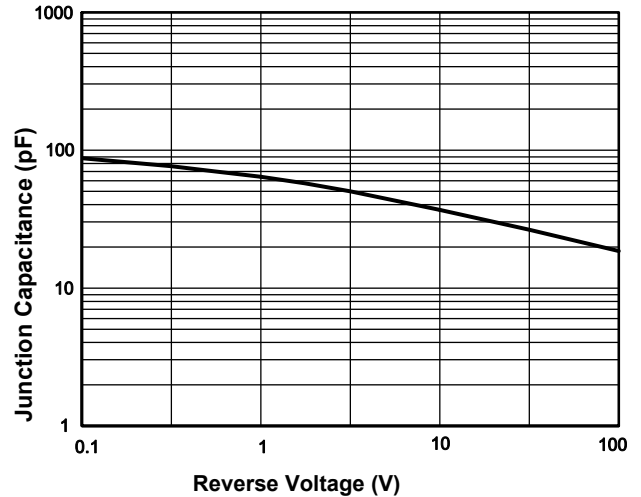


Figure 4. Typical Junction Capacitance Per Diode

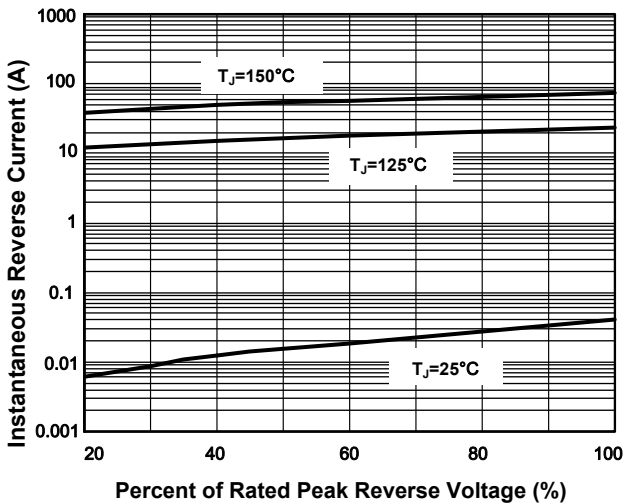


Figure 5. Typical Reverse Characteristics Per Diode

# **KBJL10J thru KBJL10M**

Glass Passivated Bridge Rectifiers  
Reverse Voltage 600 to 1000V Forward Current 10A

## **Product Outline Dimensions**

in mm

**KBJL**

