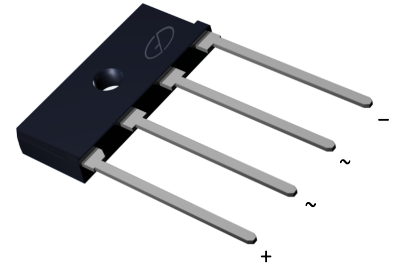


# KBJL10JA thru KBJL10MA

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

## Features

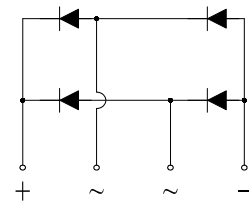
- Thin single In-line package
- Ideal for printed circuit boards
- Glass passivated chip junction
- Low profile package
- High surge current capability
- High case dielectric strength of 2000 VRMS
- Plastic package has Underwrites Laboratory



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	KBJL10JA	KBJL10KA	KBJL10MA	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> 2.4 <sup>(2)</sup>		A
Peak Forward Surge Current (8.3 ms single sine-wave superimposed on rated load, JEDEC method)	$I_{FSM}$		120		A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$		60		A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop per Leg at 5A	$V_F$		1.05		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	$R_{\theta JA}$ $R_{\theta JC}$		23 <sup>(2)</sup> 2.2 <sup>(1)</sup>		$^{\circ}\text{C}/\text{W}$
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

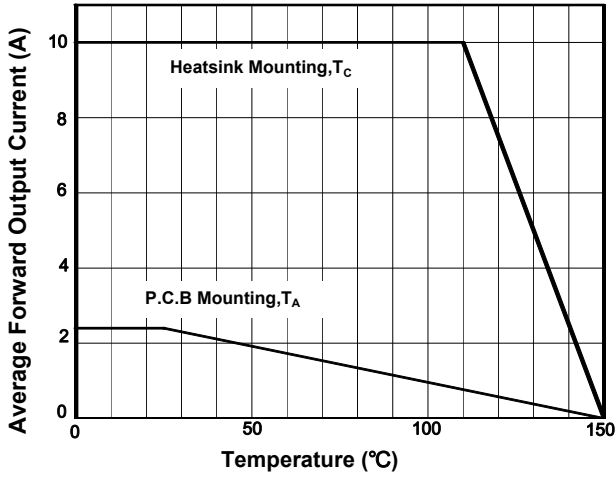


Figure 1. Derating Curve Output Rectified Current

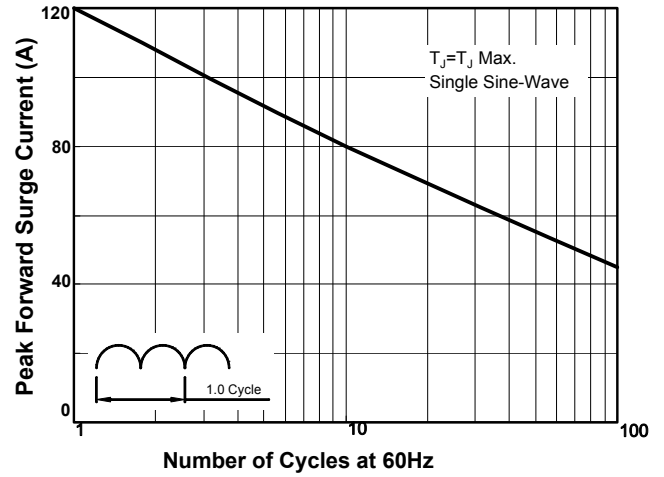


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

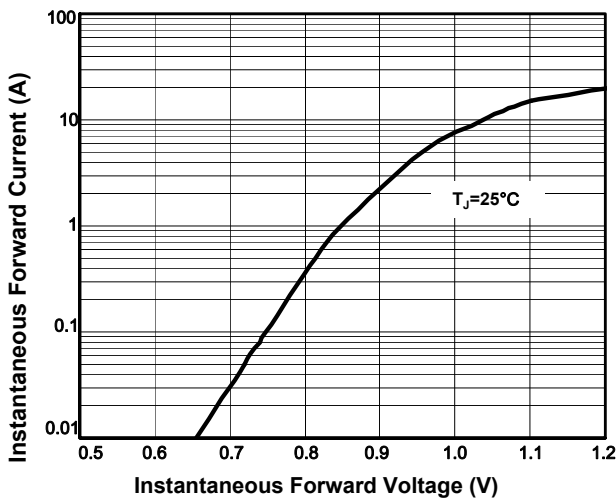


Figure 3. Typical Forward Characteristics Per Diode

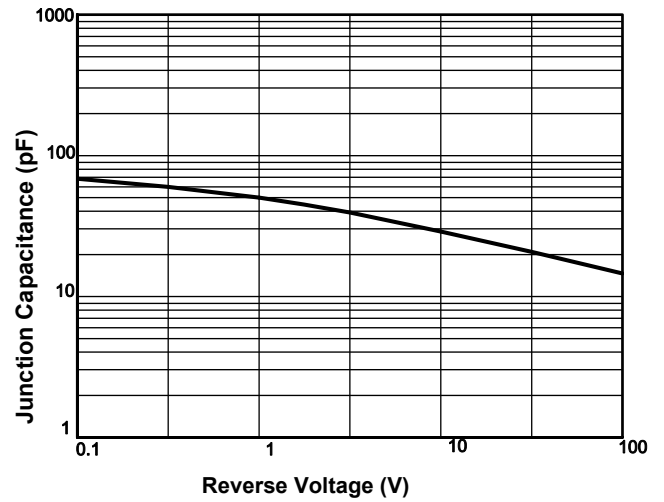


Figure 4. Typical Junction Capacitance Per Diode

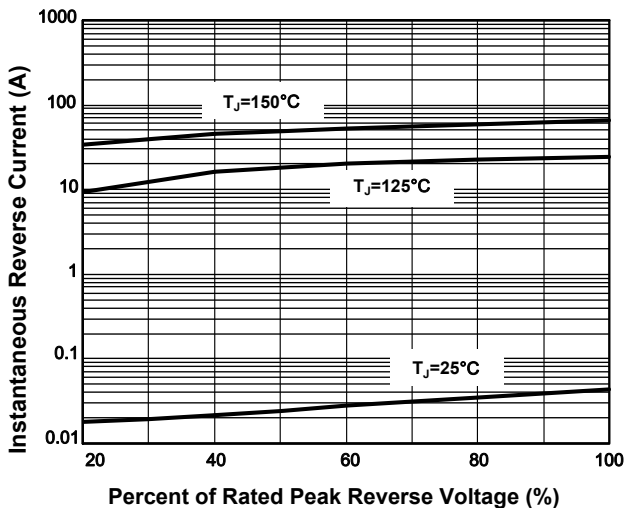


Figure 5. Typical Reverse Characteristics Per Diode

# **KBJL10JA thru KBJL10MA**

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Reverse Voltage 600 to 1000V Forward Current 10A

## **Product Outline Dimensions**

in mm

**KBJL**

