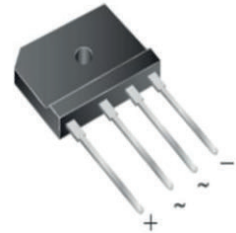


# GKBJ10A thru GKBJ10M

Surface Mount Glass Passivated Standard Rectifiers  
 Reverse Voltage 50 to 1000V Forward Current 10A

## Features

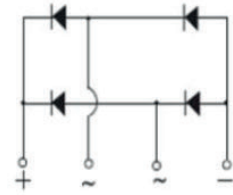
- Plastic package has underwriters laboratory flammability classification 94V-0
- High case dielectric strength of 2500 V<sub>RMS</sub>
- Ideal for printed circuit boards
- Glass passivated chip junction
- Ultra surge current capability



KBJ

## Mechanical Data

- Case: KBJ (3S) Molded plastic body  
 Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- High temperature soldering guaranteed:  
 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs (2.3kg) tension
- Polarity: As marked on body
- Mounting torque: 10cm·kg (8.8 inches·lbs) max
- Recommended torque: 5.7cm·kg (5 inches·lbs)



Schematic Diagram

## Applications

- General purpose use in ac-to-dc bridge full wave rectification for monitor, TV, printer, switching mode power supply, adapter, audio equipment and home appliances applications.

## Absolute Maximum Ratings and Electrical Characteristics

(T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	GKBJ 10A	GKBJ 10B	GKBJ 10D	GKBJ 10G	GKBJ 10J	GKBJ 10K	GKBJ 10M	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current at 60Hz, Sine Wave R-load <sup>1</sup> (T <sub>C</sub> =110°C)	I <sub>F(AV)</sub>	10.0							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	180							A
Rating for Fusig (t<8.3ms)	I <sup>2</sup> t	120							A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop Per Leg at 5.0A	V <sub>F</sub>	1.00							V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Leg (T <sub>A</sub> =25°C)	I <sub>R</sub>	5							μA
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Leg (T <sub>A</sub> =125°C)		250							
Junction-to-Ambient <sup>2</sup>	R <sub>θJA</sub>	26							°C/W
Junction-to-Case <sup>1</sup>	R <sub>θJC</sub>	2.3							
Dielectric Strength (Terminals to Case, AC 1 minute)	V <sub>ISO</sub>	2000							V
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note:

1. Unit case mounted on AL plate heatsink.
2. Unit mounted on P.C.B with 0.5×0.5" (12×12mm) copper pads and 0.375" (9.5mm) lead length without heatsink.

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## Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

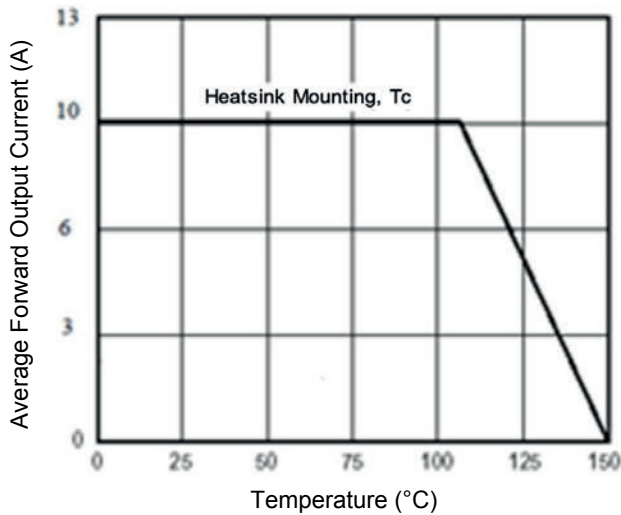


Figure 1. Maximum Forward Current Derating Curve

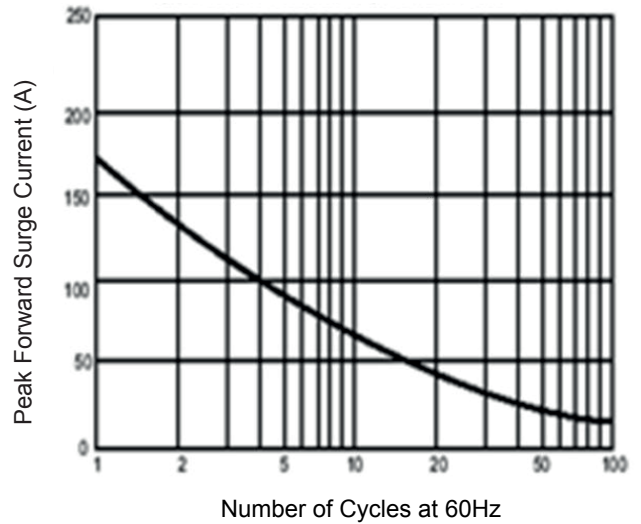


Figure 2. Maximum Non-Repetitive Forward Surge Current Per Bridge Element

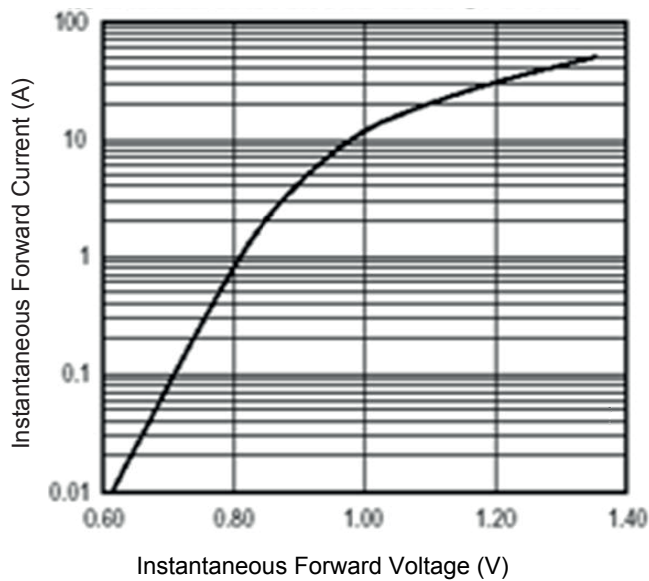


Figure 3. Typical Instantaneous Forward Characteristics Per Bridge Element

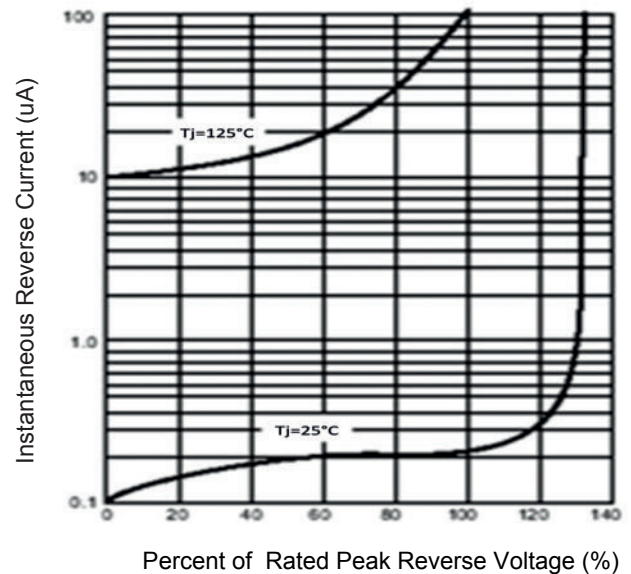
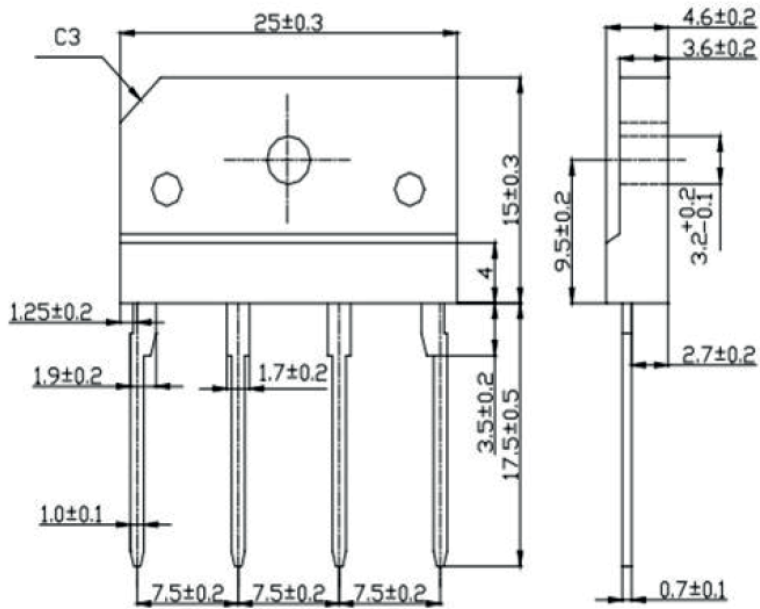


Figure 4. Typical Reverse Characteristics Per Bridge Element

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## Package Outline Dimensions (KBJ)



Unit: mm