

## KBJ2A THRU KBJ2M

CURRENT 4.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength
- Low Reverse Leakage Current
- High surge current capability
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0

### Mechanical Data

Case: Molded plastic body over passivated junctions  
Terminals: Plated leads solderable per MIL-STD-750, Method 2026

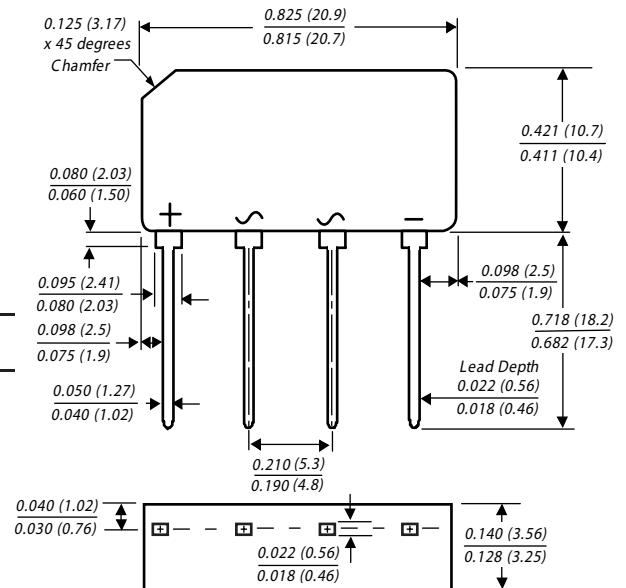
High temperature soldering guaranteed:  
260 °C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mounting Position: Any

Weight: 0.071 oz., 2.0 g

Packaging codes/options:

1/400 E.A. per Bulk Tray S stack



Polarity shown on front side of case, positive lead beveled corner.  
Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	KBJ 2A	KBJ 2B	KBJ 2C	KBJ 2G	KBJ 2J	KBJ 2K	KBJ 2M	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RMM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Maximum average forward Rectified output current at @ $T_C=50^\circ C$ @ $T_A=40^\circ C$	$I_o$	4.0 3.0							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load per element (JEDEC method)	$I_{FSM}$	150							Amps
Forward Voltage (per element) @ $I_F=4.0 A$	$V_{FM}$	1.0							Volts
Peak Reverse Current at Rated DC Blocking Voltage	@ $T_C=25^\circ C$	5.0							$\mu A$
	@ $T_C=125^\circ C$	500							
Typical Junction Capacitance (Note 1)	$C_j$	40							pF
Typical Thermal Resistance, Junction to Case (Note 2)	$R_{\theta JC}$	22							$^\circ C/W$
Operating and Storage Temperature Range	$T_j$ $T_{STG}$	-55 to +150							$^\circ C$

#### Notes:

- (1) Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 16mm aluminum plate heat sink.
- (2) Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.

## RATING AND CHARACTERISTIC CURVES KBJ2A THRU KBJ2M

Fig. 1 -- Derating Curves Output Rectified Current

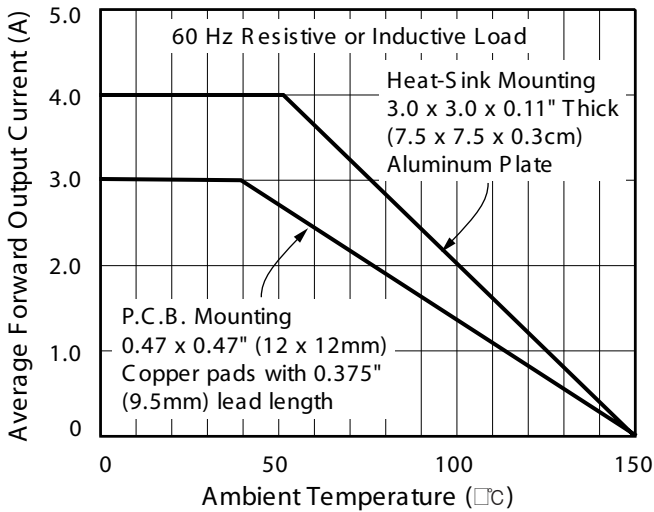


Fig. 2 -- Maximum Non-Repetitive Peak Forward Surge Current Per Leg

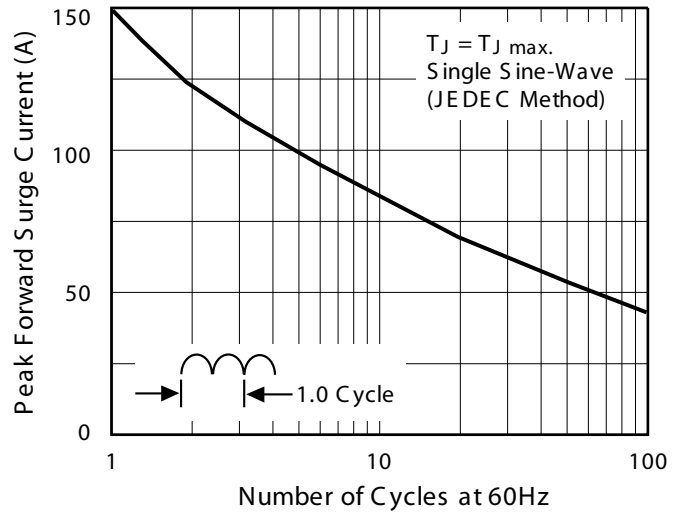


Fig. 3 -- Typical Forward Voltage Characteristics Per Leg

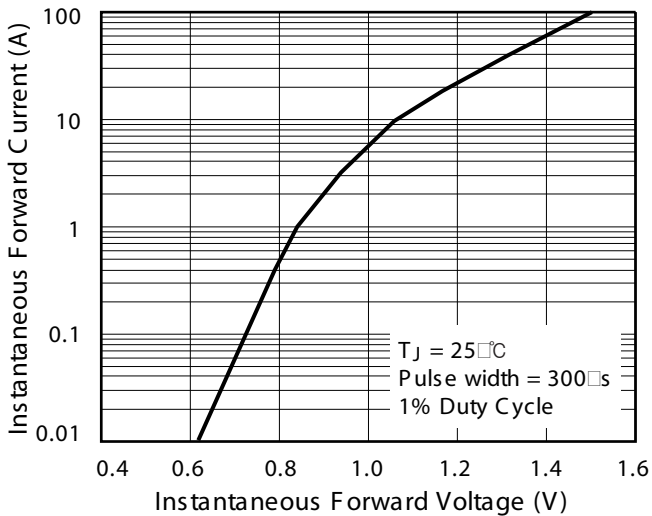


Fig. 4 -- Typical Reverse Leakage Characteristics Per Leg

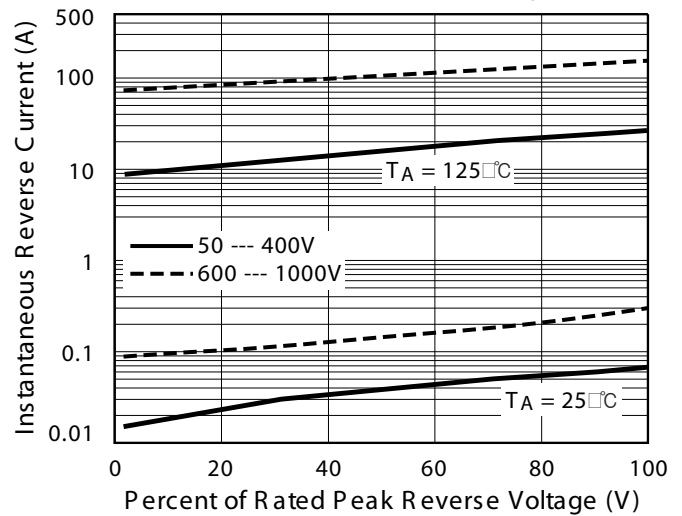


Fig. 5 -- Typical Junction Capacitance Per Leg

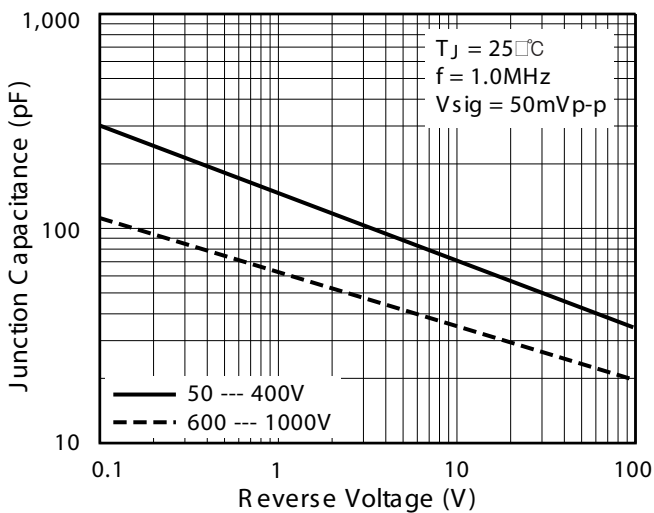


Fig. 6 -- Typical Transient Thermal Impedance Per Leg

