

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

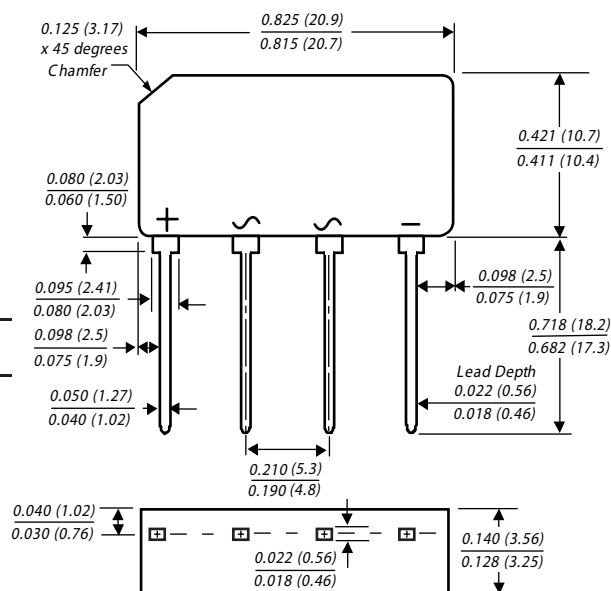
High temperature soldering guaranteed:
260 °C/10 seconds, 0.375" (9.5mm) lead length,
5lbs. (2.3kg) tension

Mounting Position: Any

Weight: 0.071 oz., 2.0 g

Packaging codes/options:

1/400 E.A. per Bulk Tray 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 @ T _C =50 °C Rectified output current at @ T _A =40 °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 °C	5.0							μ A
	@ T _C =125 °C	500							
Typical Junction Capacitance (Note 1)	C _J	40							pF
Typical Thermal Resistance, Junction to Case (Note 2)	R θ _{JC}	22							°C/W
Operating and Storage Temperature Range	T _J T _{STG}	-55 to +150							°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

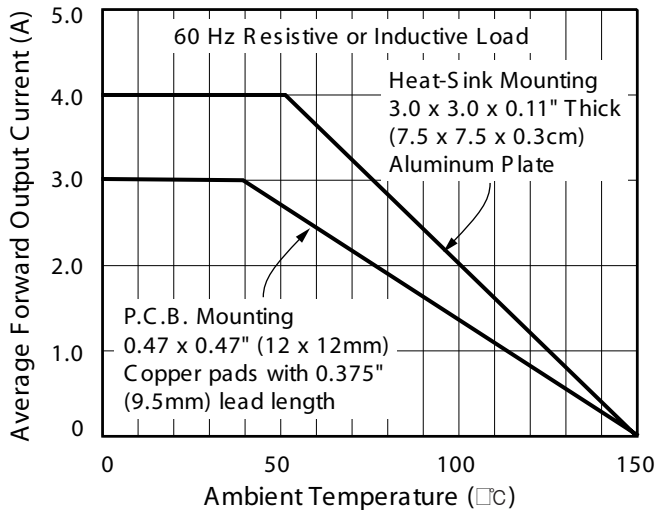


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

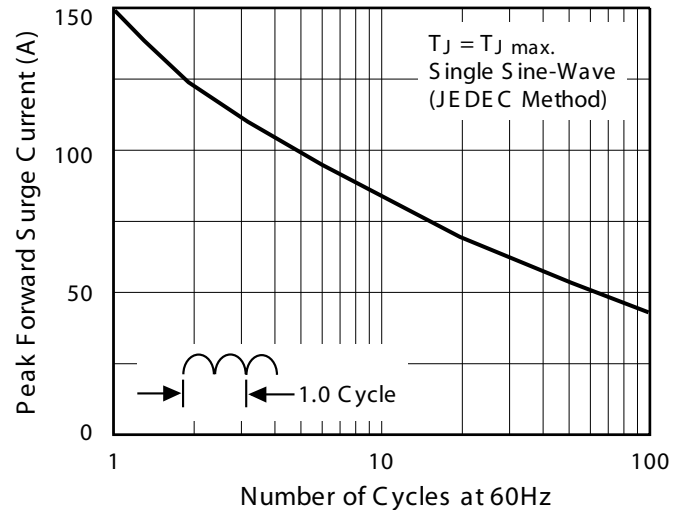


Fig. 3 – Typical Forward Voltage Characteristics Per Leg

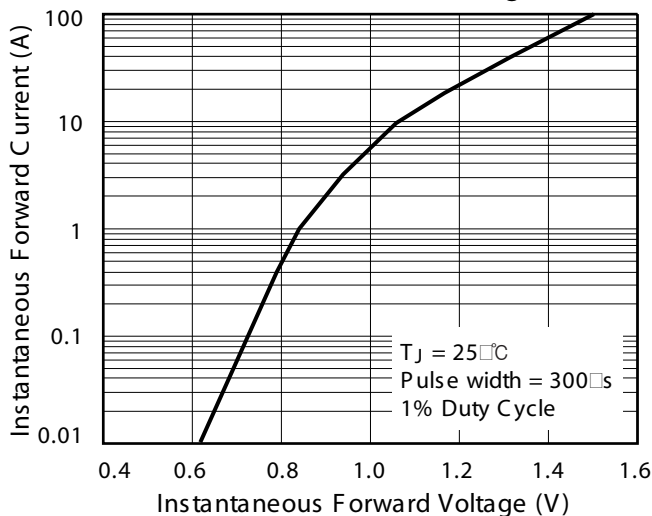


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

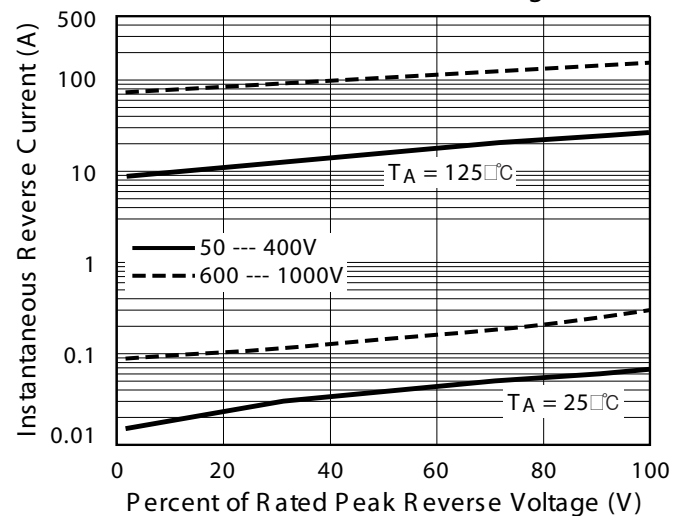


Fig. 5 – Typical Junction Capacitance Per Leg

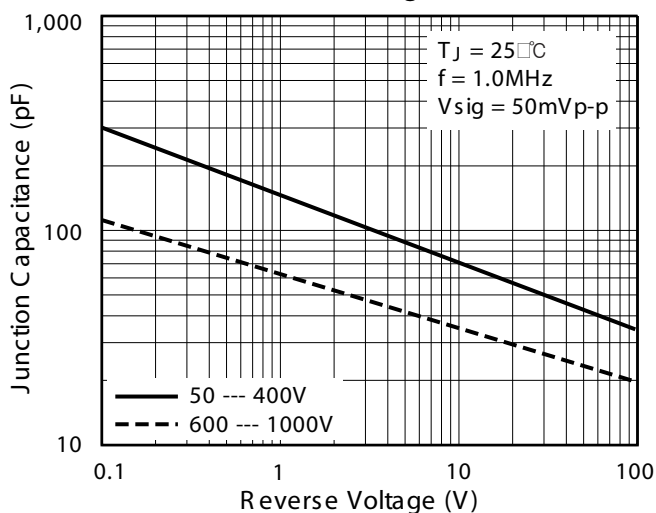


Fig. 6 – Typical Transient Thermal Impedance Per Leg

