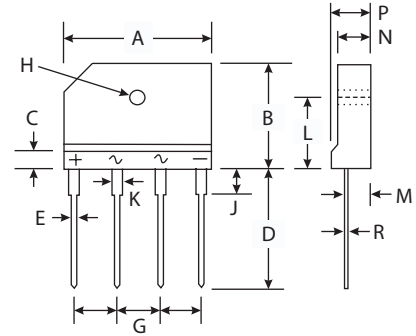


KBJ4A THRU KBJ4M

CURRENT 4.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 120A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0



Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity : Molded on Body
- Mounting : Through Hole for #6 Screw
- Mounting Torque : 5.0 in-lbs Maximum
- Approx. Weight : 4.6 grams
- Marking : Type Number

| KBJ | | | | | |
|----------------------|--------------------|--------------------|-----|------|------|
| Dim | Min | Max | Dim | Min | Max |
| A | 24.80 | 25.20 | J | 3.30 | 3.70 |
| B | 14.70 | 15.30 | K | 1.50 | 1.90 |
| C | 4.00 Nominal | | L | 9.30 | 9.70 |
| D | 17.20 | 17.80 | M | 2.50 | 2.90 |
| E | 0.90 | 1.10 | N | 3.40 | 3.80 |
| G | 7.30 | 7.70 | P | 4.40 | 4.80 |
| H | 3.10 \varnothing | 3.40 \varnothing | R | 0.60 | 0.80 |
| All Dimensions in mm | | | | | |

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 4A | KBJ 4B | KBJ 4D | KBJ 4G | KBJ 4J | KBJ 4K | KBJ 4M | Units |
|--|---|-------------|--------|--------|--------|--------|--------|--------|---------|
| Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage | V _{RMM} V _{VRWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| RMS Reverse voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Average Rectified Output Current @ T _C =115 °C | I _o | 4.0 | | | | | | | Amps |
| Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 120 | | | | | | | Amps |
| Forward voltage per element @ I _F =2.0 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 per element (Note 1) | C _j | 40 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | R θ JA | 5.5 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j T _{STG} | -65 to +150 | | | | | | | °C |

Notes:

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 1.6mm aluminum plate heat sink.

RATINGS AND CHARACTERISTIC CURVES KBJ4A THRU KBJ4M

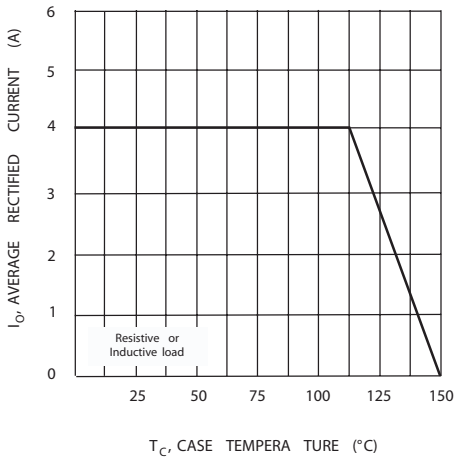


Fig. 1 Forward Current Derating Curve

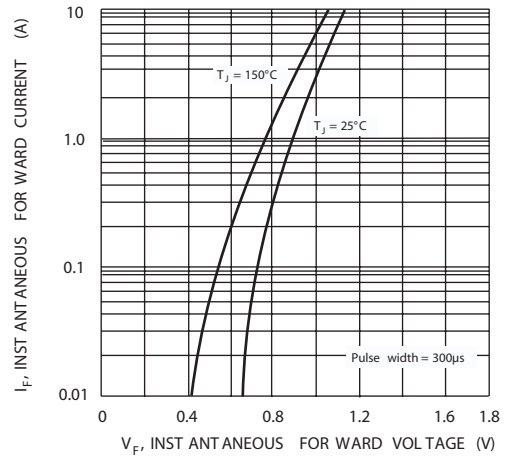


Fig. 2 Typical Forward Characteristics

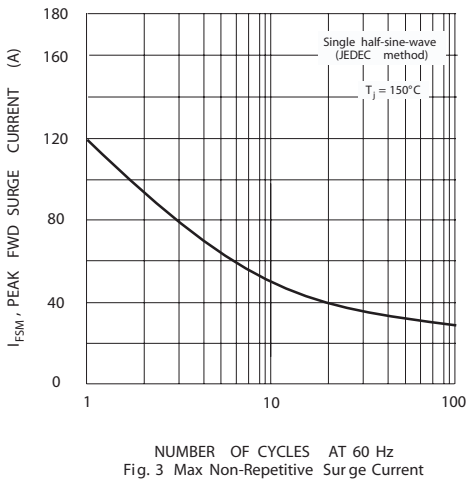


Fig. 3 Max Non-Repetitive Surge Current

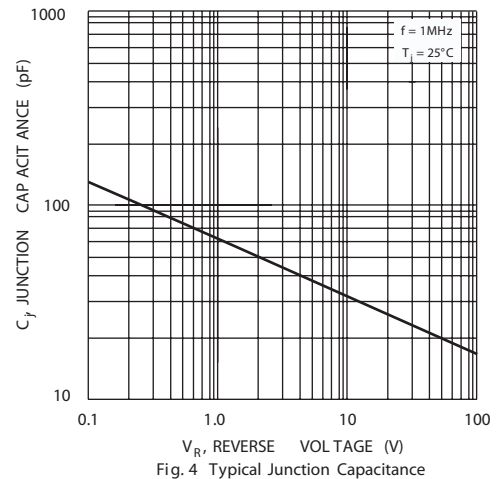


Fig. 4 Typical Junction Capacitance

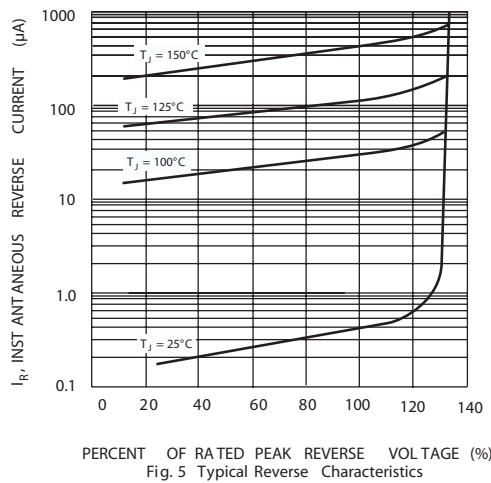


Fig. 5 Typical Reverse Characteristics