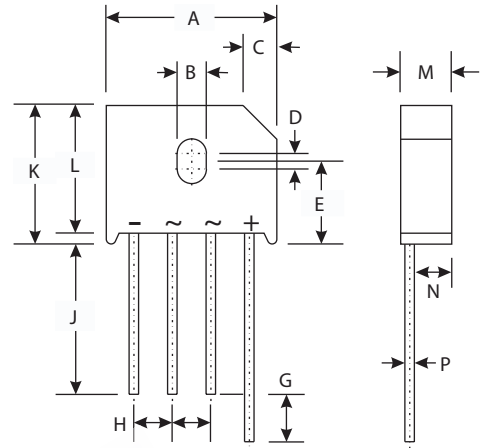


KBU10A THRU KBU10M

CURRENT 10.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 300A Peak
- Ideal for Printed Circuit Board Applications
- Case to Terminal Isolation Voltage 1500V
- Plastic Material - UL Flammability Classification Rating 94V-0



Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : As Marked on Case
- Mounting : Through Hole for #6 Screw
- Mounting Torque : 5.0 Inch-pounds Maximum
- Weight : 8.0 grams (approx.)
- Marking : Type Number

| KBU | | | | | |
|-----|-------|-------|-----|-------|-------|
| Dim | Min | Max | Dim | Min | Max |
| A | 22.70 | 23.70 | J | 25.40 | — |
| B | 3.80 | 4.10 | K | — | 19.30 |
| C | 4.20 | 4.70 | L | 16.80 | 17.80 |
| D | 1.70 | 2.20 | M | 6.60 | 7.10 |
| E | 10.30 | 11.30 | N | 4.70 | 5.20 |
| G | 4.50 | 6.80 | P | 1.20 | 1.30 |
| H | 4.80 | 5.80 | | | |

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 | KBU 10A | KBU 10B | KBU 10D | KBU 10G | KBU 10J | KBU 10K | KBU 10M | 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_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Average Rectified Output Current @ $T_c=100^\circ\text{C}$ | I_o | 10.0 | | | | | | | Amps |
| Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 300 | | | | | | | Amps |
| Forward voltage (per element) @ $I_F=5.0\text{ A}$ | V_{FM} | 1.0 | | | | | | | Volts |
| Peak Reverse Current at Rated DC Blocking voltage | @ $T_c=25^\circ\text{C}$ | 10 | | | | | | | μA |
| | @ $T_c=125^\circ\text{C}$ | 1.0 | | | | | | | mA |
| I^2t Rating for Fusing (Note 2) | I^2t | 373 | | | | | | | A^2s |
| Typical Thermal Resistance, Junction to Case (Note 1) | $R_{\theta JA}$ | 7.5 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating and Storage Temperature Range | T_j T_{STG} | -65 to +150 | | | | | | | $^\circ\text{C}$ |

Notes:

- (1) Thermal resistance junction to case mounted on heat sink.
- (2) Non-repetitive, for $t > 1.0\text{ms}$ and $t < 8.3\text{ms}$.

RATINGS AND CHARACTERISTIC CURVES KBU10A THRU KBU10M

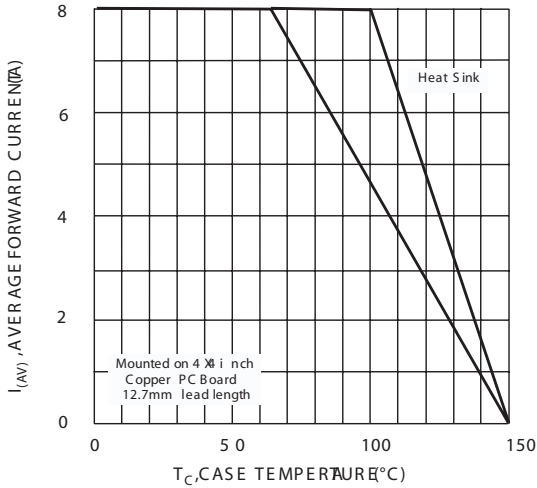


Fig. 1 Forward Current Derating Curve

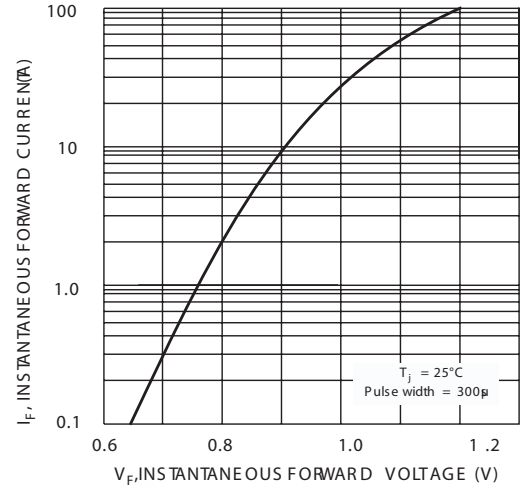


Fig. 2 Typical Forward Characteristics

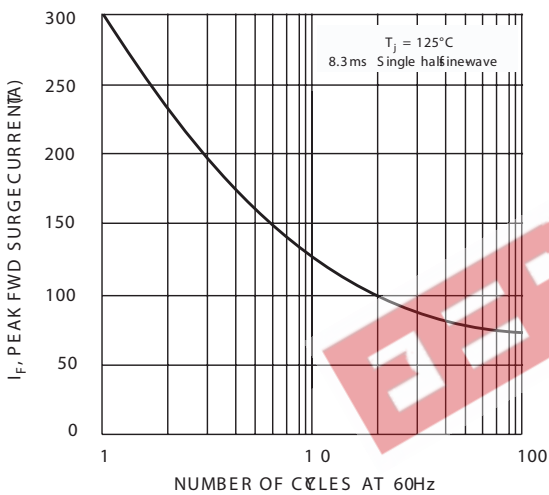


Fig. 3 Max NonRepetitive Forward Surge Current

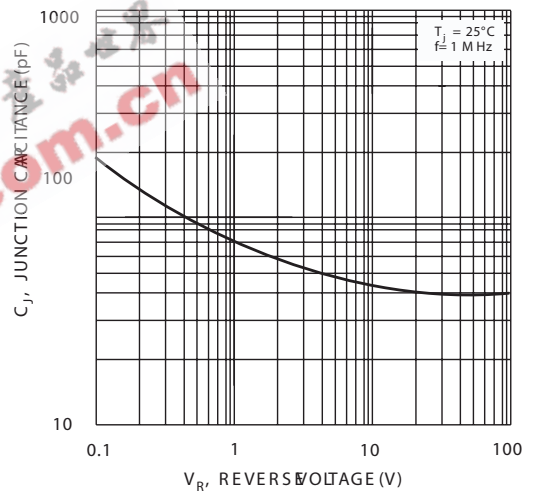


Fig. 4 Typical Junction Capacitance per element

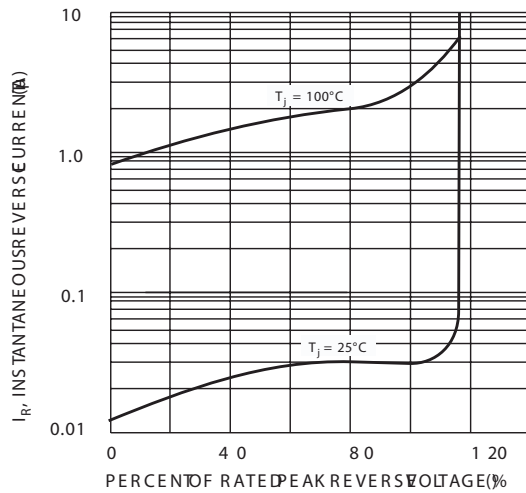


Fig. 5 Typical Reverse Characteristics