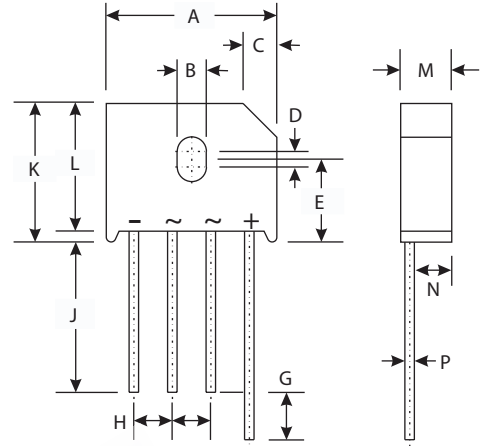


## KBU10A THRU KBU10M

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<br>Working Peak Reverse voltage<br>DC Blocking voltage                           | $V_{RMM}$<br>$V_{RWM}$<br>$V_R$ | 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          |         |         |         |         |         |         | $\mu\text{A}$             |
|  | @ $T_c=125^\circ\text{C}$       | 1.0         |         |         |         |         |         |         | mA                        |
| $I^2t$ Rating for Fusing (Note 2)  | $I^2t$                          | 373         |         |         |         |         |         |         | $\text{A}^2\text{s}$      |
| Typical Thermal Resistance, Junction to Case (Note 1)  | $R_{\theta JA}$                 | 7.5         |         |         |         |         |         |         | $^\circ\text{C}/\text{W}$ |
| Operating and Storage Temperature Range  | $T_j$<br>$T_{STG}$              | -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

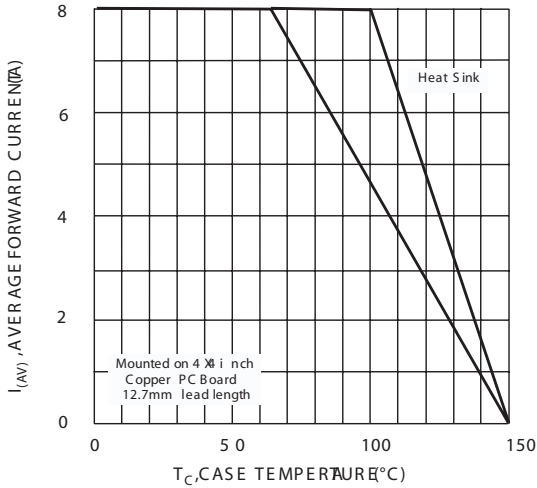


Fig. 1 Forward Current Derating Curve

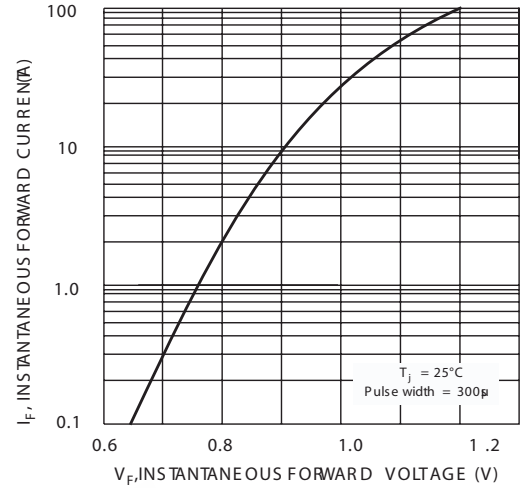


Fig. 2 Typical Forward Characteristics

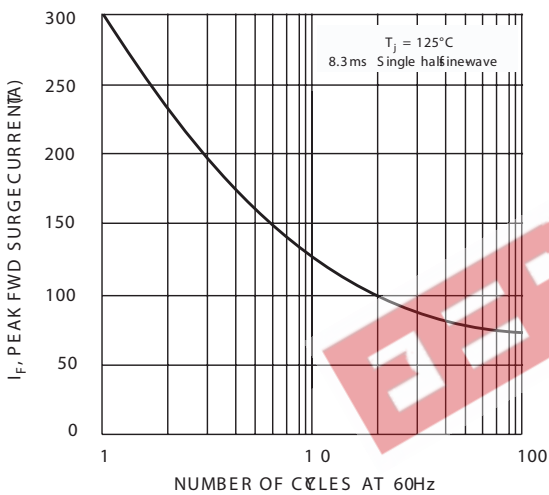


Fig. 3 Max NonRepetitive Forward Surge Current

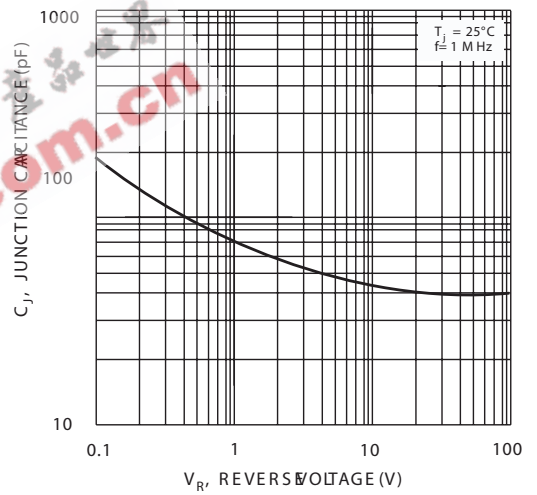


Fig. 4 Typical Junction Capacitance per element

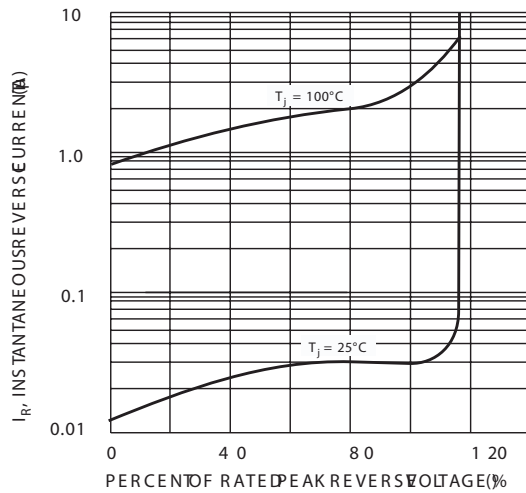


Fig. 5 Typical Reverse Characteristics