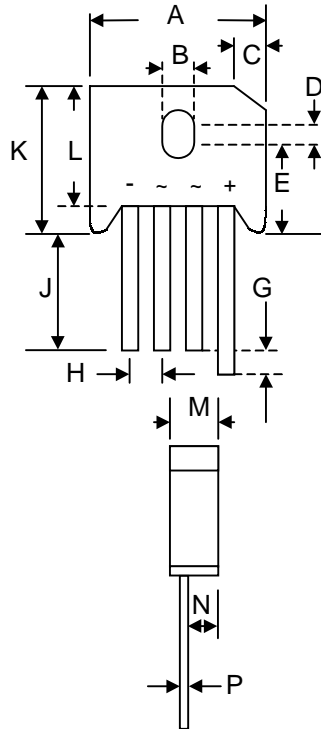


Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E157705

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 8.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| KBU | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 22.70 | 23.70 |
| B | 3.80 | 4.10 |
| C | 4.20 | 4.70 |
| D | 1.70 | 2.20 |
| E | 10.30 | 11.30 |
| G | 4.50 | 6.80 |
| H | 4.60 | 5.60 |
| J | 25.40 | — |
| K | — | 19.30 |
| L | 16.80 | 17.80 |
| M | 6.60 | 7.10 |
| N | 4.70 | 5.20 |
| P | 1.20 | 1.30 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | KBU 400 | KBU 401 | KBU 402 | KBU 404 | KBU 406 | KBU 408 | KBU 410 | Unit |
|--|---------------------------------|-------------|---------|---------|---------|---------|---------|---------|----------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ $T_C = 100^\circ\text{C}$ | I_O | 4.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 200 | | | | | | | A |
| Forward Voltage (per element) @ $I_F = 2.0\text{A}$ | V_{FM} | 1.0 | | | | | | | V |
| Peak Reverse Current @ $T_C = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$ | I_R | 10 1.0 | | | | | | | μA mA |
| Rating for Fusing ($t < 8.3\text{ms}$) (Note 1) | I^2t | 166 | | | | | | | A^2s |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 6.3 | | | | | | | K/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +150 | | | | | | | $^\circ\text{C}$ |

Note: 1. Non-repetitive for $t > 1\text{ms}$ and $< 8.3\text{ms}$.

2. Thermal resistance junction to case per element mounted on PC board with 13.0x13.0x0.03mm thick land areas.

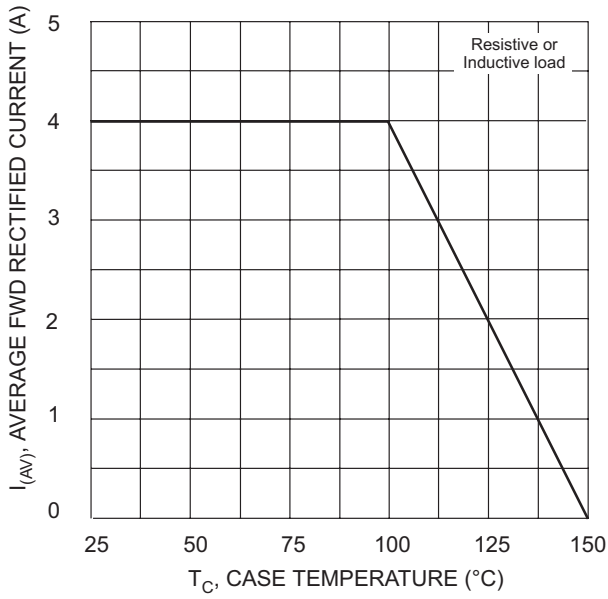


Fig. 1 Forward Current Derating Curve

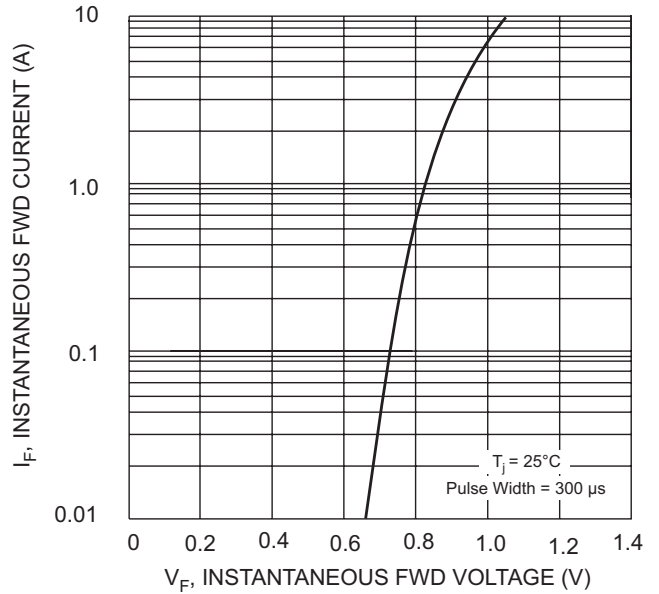


Fig. 2 Typical Forward Characteristics, per element

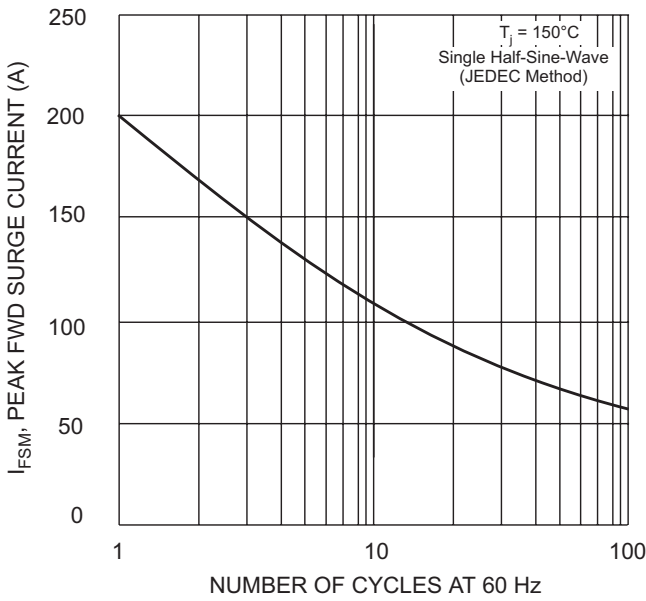


Fig. 3 Max Non-Repetitive Surge Current

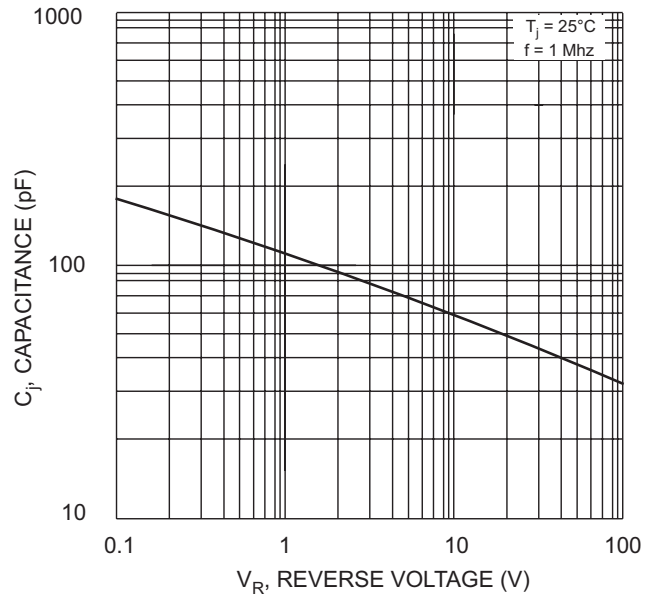


Fig. 4 Typical Junction Capacitance

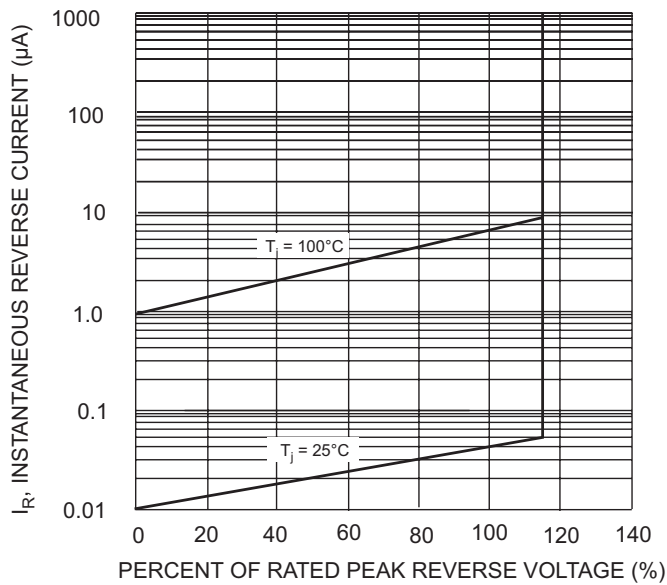


Fig. 5 Typical Reverse Characteristics