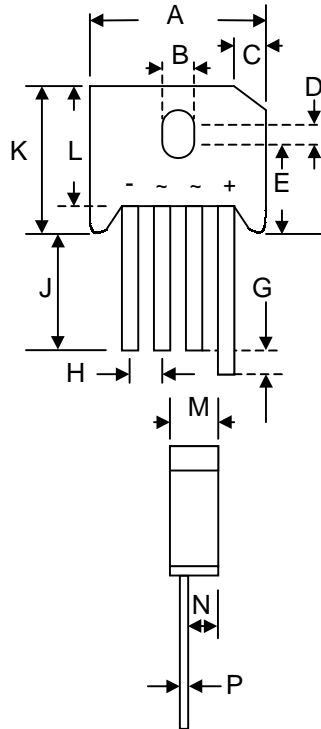




#### Features

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



| 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 |       |       |

#### 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

#### 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 600     | KBU 601 | KBU 602 | KBU 604 | KBU 606 | KBU 608 | KBU 610 | Unit                 |
|--|-----------------|-------------|---------|---------|---------|---------|---------|---------|----------------------|
| Peak Repetitive Reverse Voltage  | $V_{RRM}$       | 50          | 100     | 200     | 400     | 600     | 800     | 1000    | V                    |
| Working Peak Reverse Voltage   | $V_{RWM}$       |             |         |         |         |         |         |         |                      |
| DC Blocking Voltage  | $V_R$           |             |         |         |         |         |         |         |                      |
| RMS Reverse Voltage  | $V_{R(RMS)}$    | 35          | 70      | 140     | 280     | 420     | 560     | 700     | V                    |
| Average Rectified Output Current @ $T_C = 100^\circ\text{C}$   | $I_O$           | 6.0         |         |         |         |         |         |         | A                    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 250         |         |         |         |         |         |         | A                    |
| Forward Voltage (per element) @ $I_F = 3.0\text{A}$  | $V_{FM}$        | 1.0         |         |         |         |         |         |         | V                    |
| Peak Reverse Current @ $T_C = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$        | $I_R$           | 10<br>1.0   |         |         |         |         |         |         | $\mu\text{A}$<br>mA  |
| Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 1)  | $I^2t$          | 166         |         |         |         |         |         |         | $\text{A}^2\text{s}$ |
| Typical Thermal Resistance (Note 2)  | $R_{\theta JC}$ | 4.2         |         |         |         |         |         |         | 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.

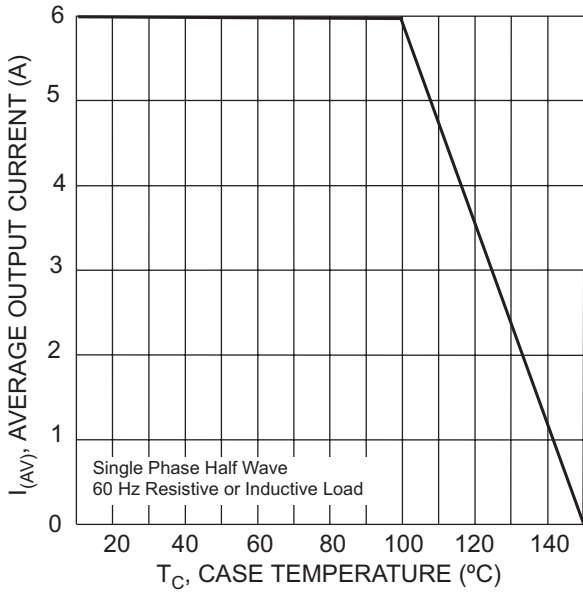


Fig. 1 Forward Current Derating Curve

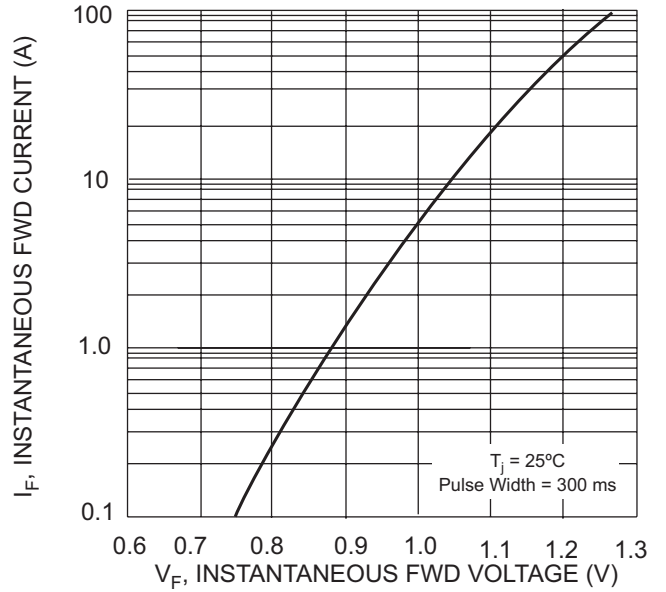


Fig. 2 Typical Forward Characteristics, per element

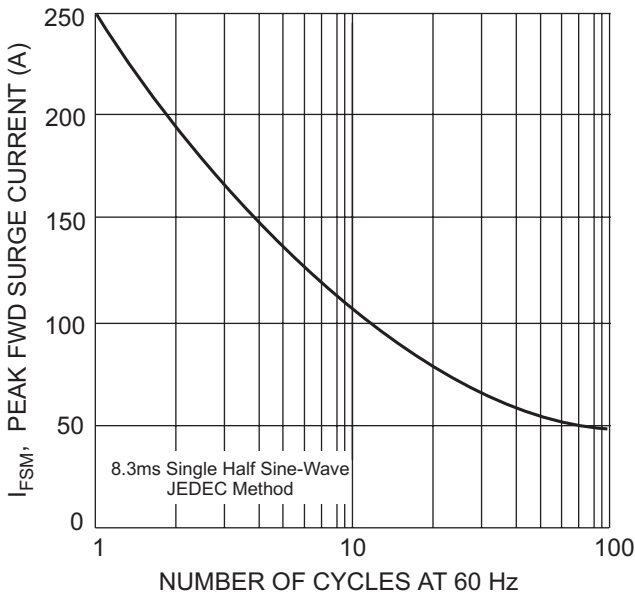


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

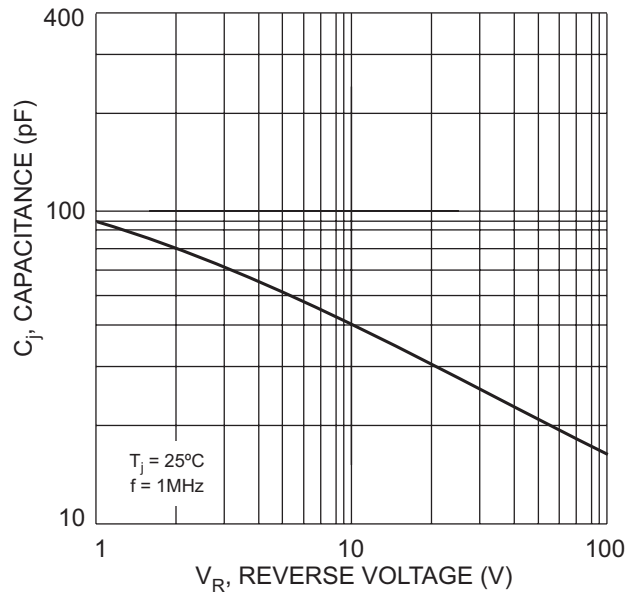


Fig. 4 Typical Junction Capacitance Per Element

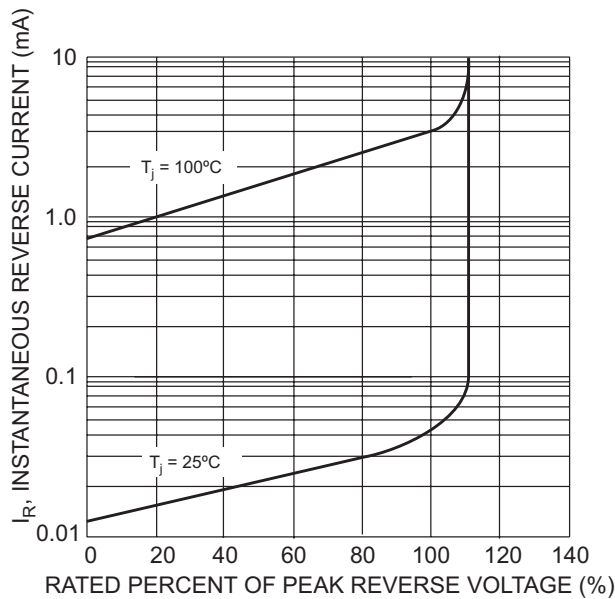


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBU600      | SIL Bridge   | 400 Units/Box     |
| KBU601      | SIL Bridge   | 400 Units/Box     |
| KBU602      | SIL Bridge   | 400 Units/Box     |
| KBU604      | SIL Bridge   | 400 Units/Box     |
| KBU606      | SIL Bridge   | 400 Units/Box     |
| KBU608      | SIL Bridge   | 400 Units/Box     |
| KBU610      | SIL Bridge   | 400 Units/Box     |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.