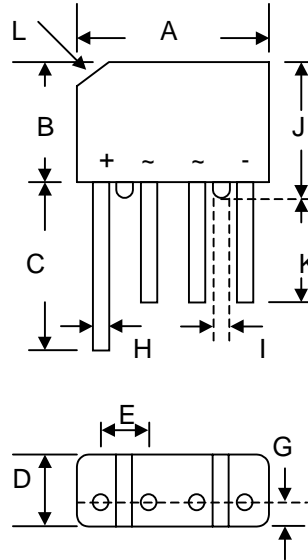


### Features

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



| KBP                  |                   |       |
|----------------------|-------------------|-------|
| Dim                  | Min               | Max   |
| A                    | 14.22             | 15.24 |
| B                    | 10.67             | 11.68 |
| C                    | 15.2              | —     |
| D                    | 4.57              | 5.08  |
| E                    | 3.60              | 4.10  |
| G                    | 2.16              | 2.67  |
| H                    | 0.76              | 0.86  |
| I                    | 1.52              | —     |
| J                    | 11.68             | 12.7  |
| K                    | 12.7              | —     |
| L                    | 3.2 x 45° Typical |       |
| 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: 1.7 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                          | KBP 200     | KBP 201 | KBP 202 | KBP 204 | KBP 206 | KBP 208 | KBP 2010 | Unit                 |
|--|---------------------------------|-------------|---------|---------|---------|---------|---------|----------|----------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                             | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 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<br>(Note 1) @ $T_A = 50^\circ\text{C}$  | $I_o$                           | 2.0         |         |         |         |         |         |          | A                    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$                       | 60          |         |         |         |         |         |          | A                    |
| Forward Voltage (per element) @ $I_F = 2.0\text{A}$  | $V_{FM}$                        | 1.1         |         |         |         |         |         |          | V                    |
| Peak Reverse Current<br>At Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$<br>@ $T_A = 100^\circ\text{C}$     | $I_{RM}$                        | 10<br>500   |         |         |         |         |         |          | $\mu\text{A}$        |
| Rating for Fusing ( $t < 8.3\text{ms}$ )   | $I^2t$                          | 15          |         |         |         |         |         |          | $\text{A}^2\text{s}$ |
| Typical Junction Capacitance per element (Note 2)  | $C_j$                           | 25          |         |         |         |         |         |          | pF                   |
| Typical Thermal Resistance (Note 3)  | $R_{\theta JA}$                 | 30          |         |         |         |         |         |          | K/W                  |
| Operating and Storage Temperature Range  | $T_j, T_{STG}$                  | -55 to +165 |         |         |         |         |         |          | $^\circ\text{C}$     |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 3. Thermal resistance junction to ambient mounted on PC board with 12mm<sup>2</sup> copper pad.

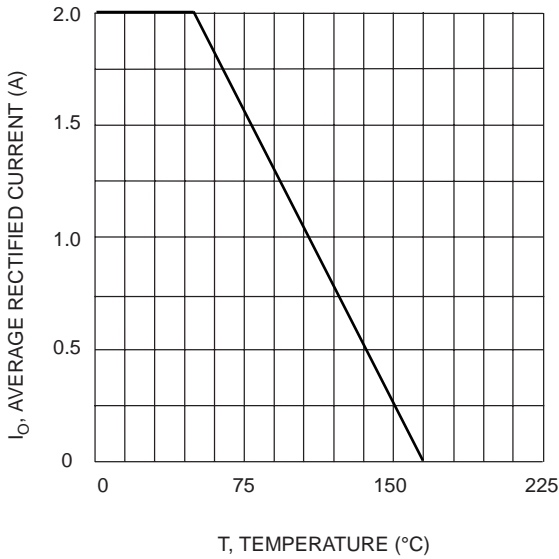


Fig. 1 Forward Current Derating Curve

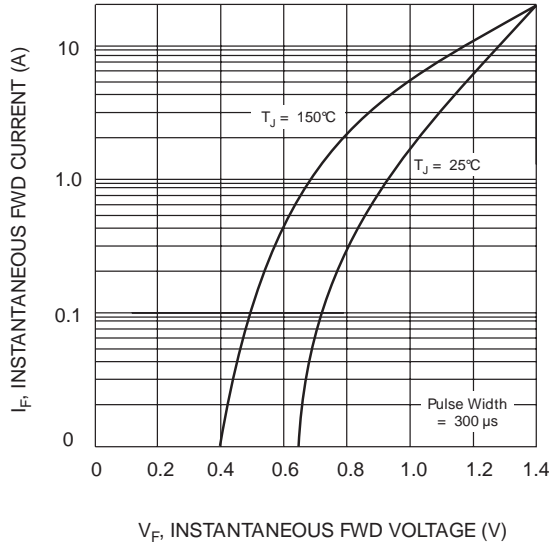


Fig. 2 Typical Fwd Characteristics

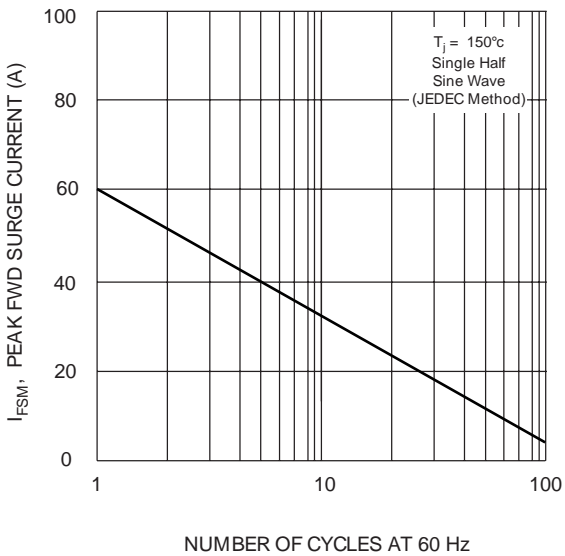


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

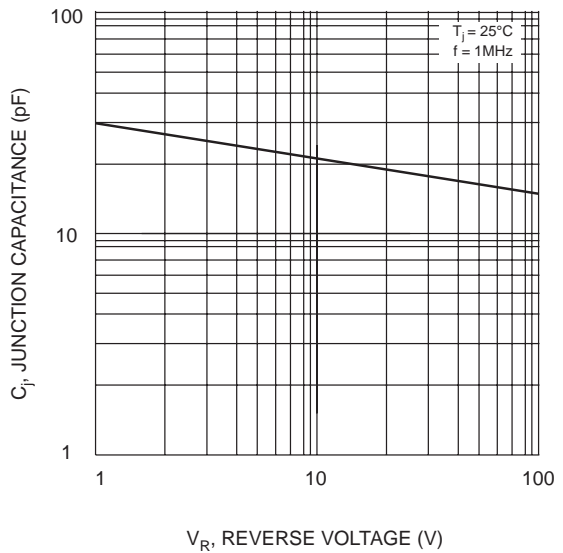


Fig. 4 Typical Junction Capacitance

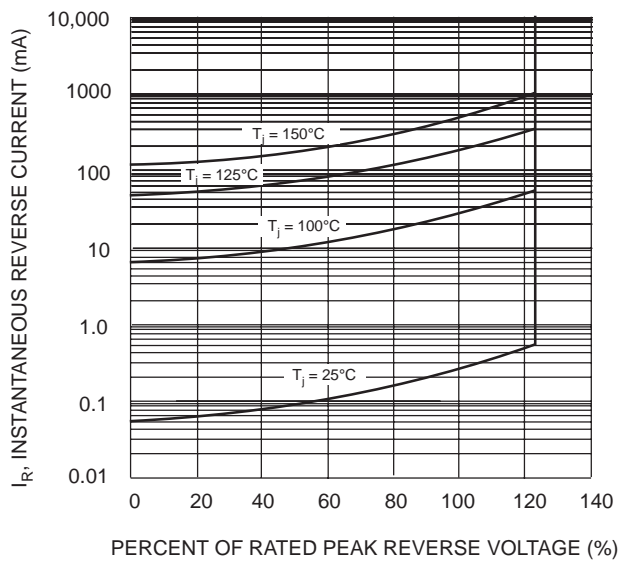


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBP200      | SIL Bridge   | 1000 Units/Box    |
| KBP201      | SIL Bridge   | 1000 Units/Box    |
| KBP202      | SIL Bridge   | 1000 Units/Box    |
| KBP204      | SIL Bridge   | 1000 Units/Box    |
| KBP206      | SIL Bridge   | 1000 Units/Box    |
| KBP208      | SIL Bridge   | 1000 Units/Box    |
| KBP2010     | SIL Bridge   | 1000 Units/Box    |

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

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