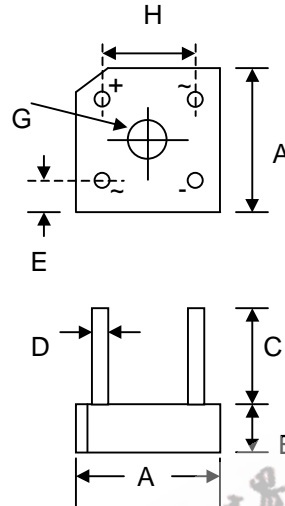


### Features

- Diffused Junction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has Underwriters Laboratory Flammability Classification 94V-O
- UL Recognized File # E157705



| KBPC-3               |                   |       |
|----------------------|-------------------|-------|
| Dim                  | Min               | Max   |
| A                    | 14.73             | 15.75 |
| B                    | 5.84              | 6.86  |
| C                    | 19.00             | —     |
| D                    | 0.70 Ø Typical    |       |
| E                    | 1.70              | 2.72  |
| G                    | Hole for #6 screw |       |
|                      | 3.60              | 4.00  |
| H                    | 10.30             | 11.30 |
| All Dimensions in mm |                   |       |

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Weight: 3.8 grams (approx.)
- Mounting Position: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- 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          | KBPC 300    | KBPC 301 | KBPC 302 | KBPC 304 | KBPC 306 | KBPC 308 | KBPC 310 | Unit                 |
|---|-----------------|-------------|----------|----------|----------|----------|----------|----------|----------------------|
| Peak Repetitive Reverse Voltage   | $V_{RRM}$       |             |          |          |          |          |          |          |                      |
| Working Peak Reverse Voltage  | $V_{RWM}$       | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V                    |
| DC Blocking Voltage   | $V_R$           |             |          |          |          |          |          |          |                      |
| RMS Reverse Voltage   | $V_{R(RMS)}$    | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V                    |
| Average Rectified Output Current (Note 1) @ $T_C = 50^\circ\text{C}$  | $I_O$           | 3.0         |          |          |          |          |          |          | A                    |
| Non-Repetitive Peak Forward Surge Current 8.3ms<br>Single half sine-wave superimposed on rated load<br>(JEDEC Method) | $I_{FSM}$       | 50          |          |          |          |          |          |          | A                    |
| Forward Voltage (per element) @ $I_F = 1.5\text{A}$   | $V_{FM}$        | 1.2         |          |          |          |          |          |          | V                    |
| Peak Reverse Current @ $T_C = 25^\circ\text{C}$   | $I_R$           | 10          |          |          |          |          |          |          | $\mu\text{A}$        |
| At Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$  |                 | 1.0         |          |          |          |          |          |          | mA                   |
| $I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 2)  | $I^2t$          | 10          |          |          |          |          |          |          | $\text{A}^2\text{s}$ |
| Typical Junction Capacitance (Note 3)   | $C_j$           | 55          |          |          |          |          |          |          | pF                   |
| Typical Thermal Resistance (Note 4)   | $R_{\theta JC}$ | 25          |          |          |          |          |          |          | K/W                  |
| Operating and Storage Temperature Range   | $T_j, T_{STG}$  | -65 to +125 |          |          |          |          |          |          | $^\circ\text{C}$     |

- Note: 1. Mounted on metal chassis.  
 2. Non-repetitive, for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 4. Thermal resistance junction to case per element.

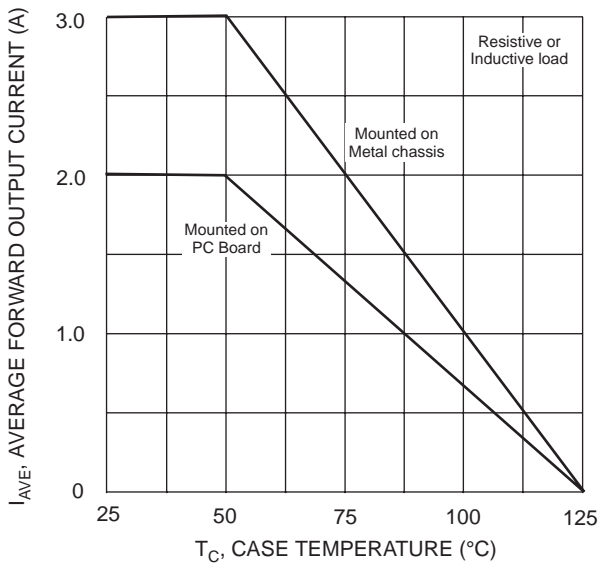


Fig. 1 Forward Current Derating Curve

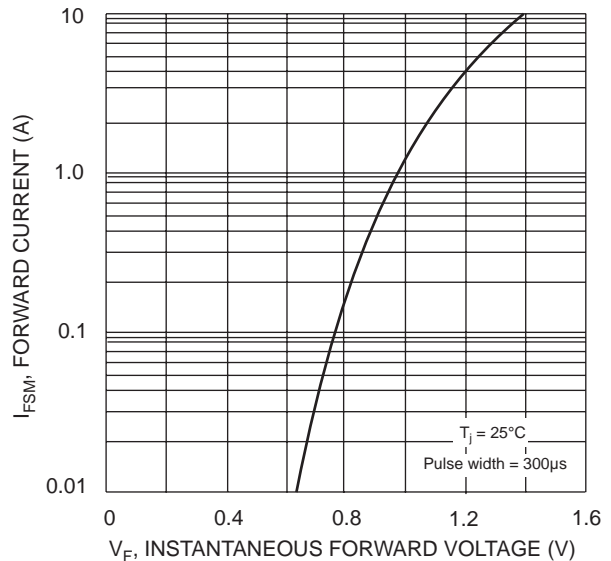


Fig. 2 Typical Forward Characteristics, per element

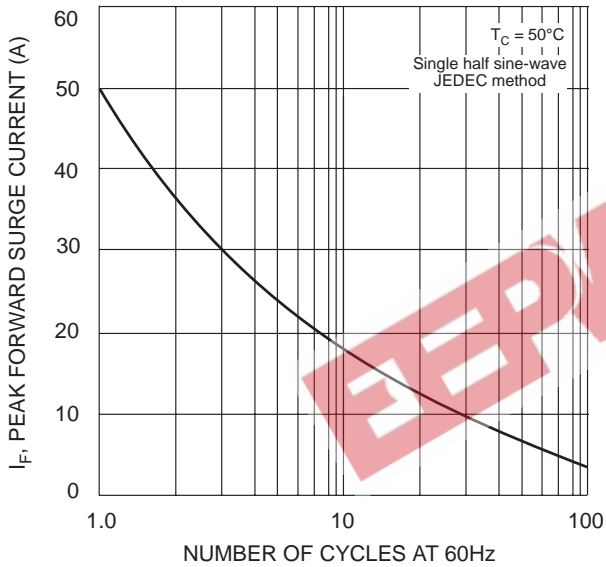


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

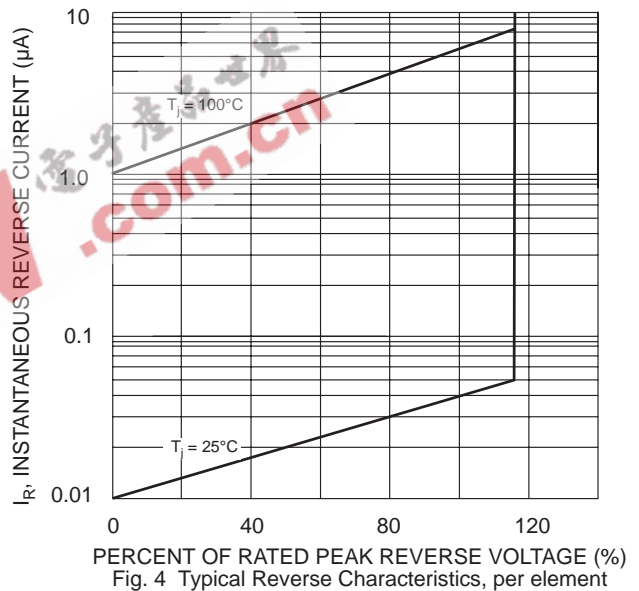


Fig. 4 Typical Reverse Characteristics, per element

## ORDERING INFORMATION

| Product No. | Package Type  | Shipping Quantity |
|-------------|---------------|-------------------|
| KBPC300     | Square Bridge | 200 Units/Box     |
| KBPC301     | Square Bridge | 200 Units/Box     |
| KBPC302     | Square Bridge | 200 Units/Box     |
| KBPC304     | Square Bridge | 200 Units/Box     |
| KBPC306     | Square Bridge | 200 Units/Box     |
| KBPC308     | Square Bridge | 200 Units/Box     |
| KBPC310     | Square Bridge | 200 Units/Box     |

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

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