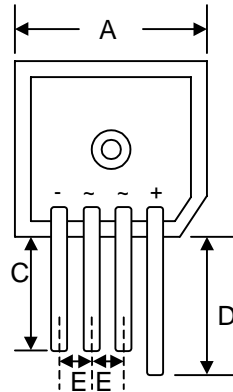


### Features

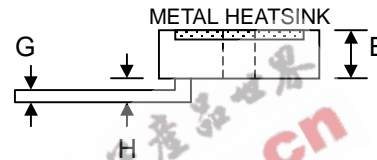
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Designed for Saving Mounting Space
- UL Recognized File # E157705

### Mechanical Data

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 30 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| KBPC-S               |                |       |
|----------------------|----------------|-------|
| Dim                  | Min            | Max   |
| A                    | 28.40          | 28.70 |
| B                    | 10.97          | 11.23 |
| C                    | 13.90          | —     |
| D                    | 19.10          | —     |
| E                    | 5.10           | —     |
| G                    | 1.20 Ø Typical |       |
| H                    | 3.05           | 3.60  |
| 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%.

| Characteristics  | Symbol          | -00S | -01S | -02S | -04S | -06S        | -08S | -10S | Unit |                  |
|--|-----------------|------|------|------|------|-------------|------|------|------|------------------|
| Peak Repetitive Reverse Voltage  | $V_{RRM}$       |      |      |      |      |             |      |      | V    |                  |
| Working Peak Reverse Voltage   | $V_{RWM}$       | 50   | 100  | 200  | 400  | 600         | 800  | 1000 |      |                  |
| DC Blocking Voltage  | $V_R$           |      |      |      |      |             |      |      |      |                  |
| RMS Reverse Voltage  | $V_{R(RMS)}$    | 35   | 70   | 140  | 280  | 420         | 560  | 700  | V    |                  |
| Average Rectified Output Current<br>@ $T_C = 55^\circ\text{C}$   | $I_O$           |      |      |      |      | 40          |      |      |      | A                |
| Non-Repetitive Peak Forward Surge Current,<br>8.3ms Single Half-sine-wave Superimposed<br>on Rated Load (JEDEC Method) | $I_{FSM}$       |      |      |      |      | 400         |      |      |      | A                |
| Forward Voltage Drop<br>(per element)  | $V_{FM}$        |      |      |      |      | 1.2         |      |      |      | V                |
| Peak Reverse Current at<br>Rated DC Blocking Voltage (per element)   | $I_R$           |      |      |      |      | 10          |      |      |      | $\mu\text{A}$    |
|  |                 |      |      |      |      | 1.0         |      |      |      | mA               |
| Typical Thermal Resistance (per element) (Note 1)  | $R_{\theta JC}$ |      |      |      |      | 1.5         |      |      |      | K/W              |
| RMS Isolation Voltage from Case to Lead  | $V_{ISO}$       |      |      |      |      | 2500        |      |      |      | V                |
| Operating and Storage Temperature Range  | $T_j, T_{STG}$  |      |      |      |      | -55 to +150 |      |      |      | $^\circ\text{C}$ |

Note: 1. Thermal resistance junction to case per element mounted on 8" x 8" x 25" thick AL plate.

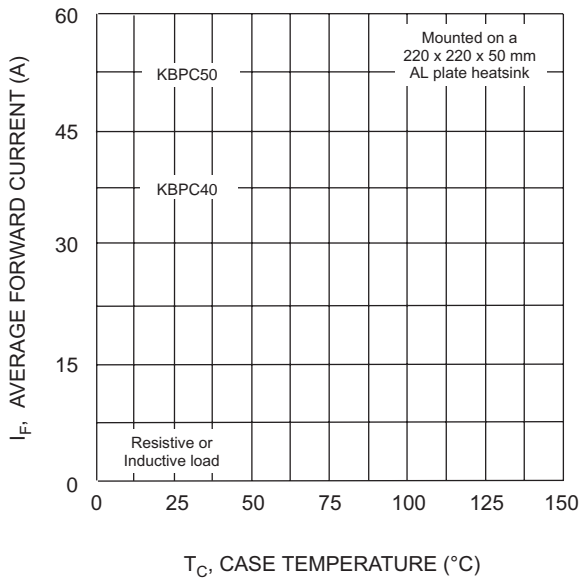


Fig. 1 Forward Current Derating Curve

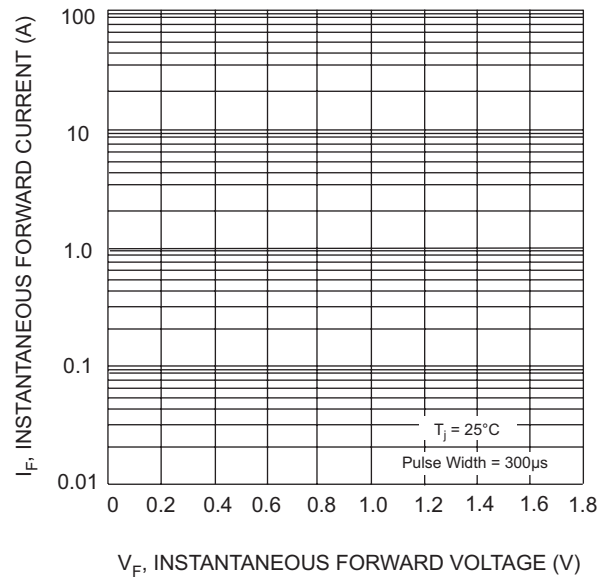


Fig. 2 Typical Forward Characteristics (per element)

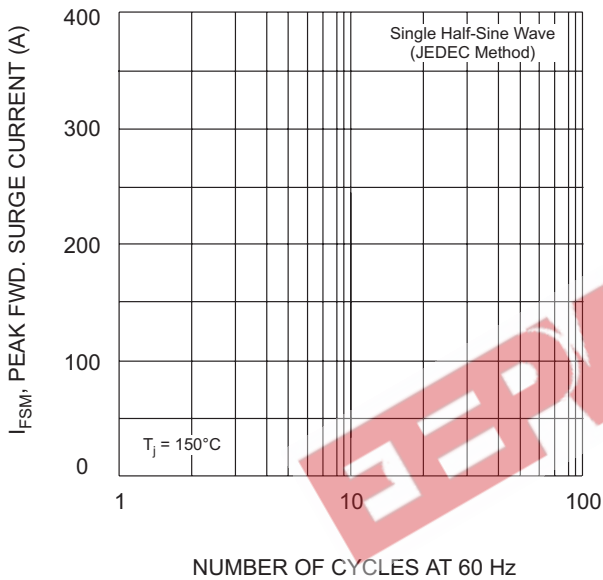


Fig. 3 Max Non-Repetitive Surge Current

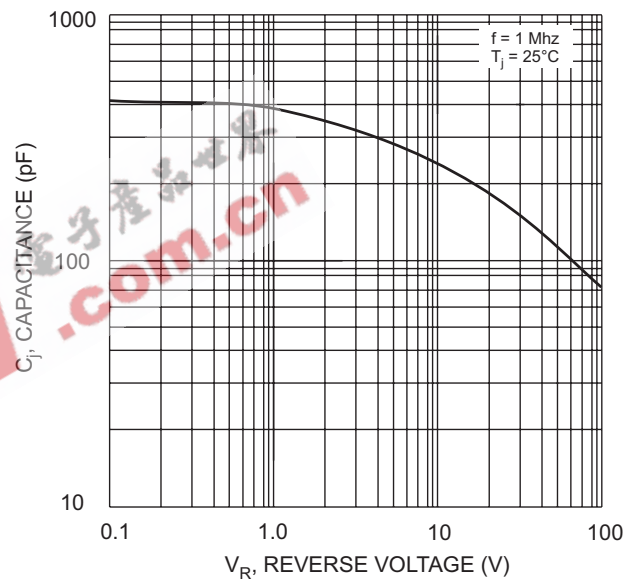


Fig. 4 Typical Junction Capacitance (per element)

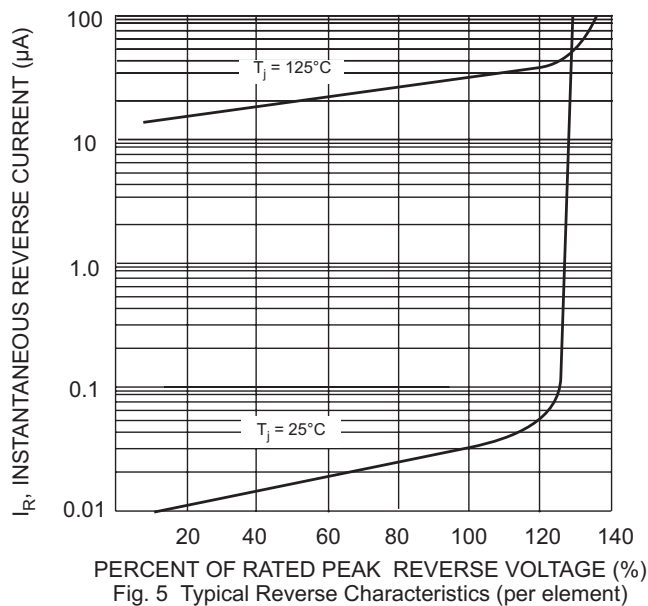


Fig. 5 Typical Reverse Characteristics (per element)

## ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBPCxx00S   | SIL Bridge   | 72 Units/Box      |
| KBPCxx01S   | SIL Bridge   | 72 Units/Box      |
| KBPCxx02S   | SIL Bridge   | 72 Units/Box      |
| KBPCxx04S   | SIL Bridge   | 72 Units/Box      |
| KBPCxx06S   | SIL Bridge   | 72 Units/Box      |
| KBPCxx08S   | SIL Bridge   | 72 Units/Box      |
| KBPCxx10S   | SIL Bridge   | 72 Units/Box      |

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

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**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

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