


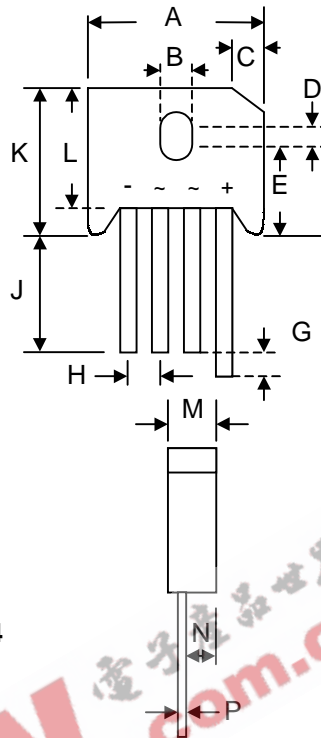
## 8.0A SINGLE-PHASE BRIDGE RECTIFIER

### Features

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

### Mechanical Data

- Case: KBU, 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
- Mounting Torque: 10 cm·kg (8.8 in·lbs) Max.
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



| KBU                  |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 22.70 | 23.70 |
| B                    | 3.60  | 4.10  |
| C                    | 4.20  | 4.70  |
| D                    | 1.70  | 2.20  |
| E                    | 10.30 | 11.30 |
| G                    | 4.50  | 5.60  |
| H                    | 4.60  | 5.60  |
| J                    | 25.40 | —     |
| K                    | —     | 19.30 |
| L                    | 16.80 | 17.80 |
| M                    | 6.60  | 7.10  |
| N                    | 4.10  | 4.60  |
| 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 800     | KBU 801 | KBU 802 | KBU 804 | KBU 806 | KBU 808 | KBU 810 | 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 @ $T_C = 100^\circ\text{C}$ (Note 1)  | $I_O$           | 8.0         |         |         |         |         |         |         | A                   |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 300         |         |         |         |         |         |         | A                   |
| Forward Voltage per leg @ $I_F = 4.0\text{A}$  | $V_{FM}$        | 1.0         |         |         |         |         |         |         | V                   |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$        | $I_R$           | 10<br>1.0   |         |         |         |         |         |         | $\mu\text{A}$<br>mA |
| Typical Thermal Resistance per leg (Note 2)  | $R_{\theta JA}$ | 18          |         |         |         |         |         |         | $^\circ\text{C/W}$  |
| Typical Thermal Resistance per leg (Note 1)  | $R_{\theta JC}$ | 3.0         |         |         |         |         |         |         | $^\circ\text{C/W}$  |
| Operating and Storage Temperature Range  | $T_j, T_{STG}$  | -65 to +150 |         |         |         |         |         |         | $^\circ\text{C}$    |

Note: 1. Mounted on 75 x 75 x 3.0mm Al. plate.  
2. Mounted on PCB at 9.5mm lead length with 12mm<sup>2</sup> copper pad.

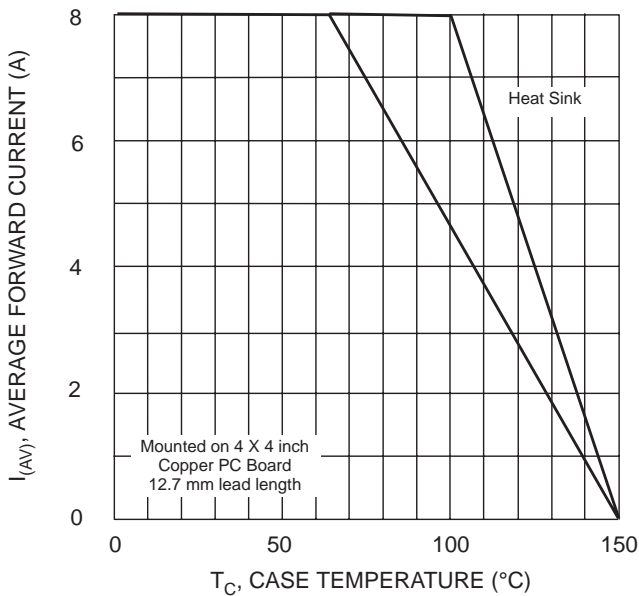


Fig. 1 Forward Current Derating Curve

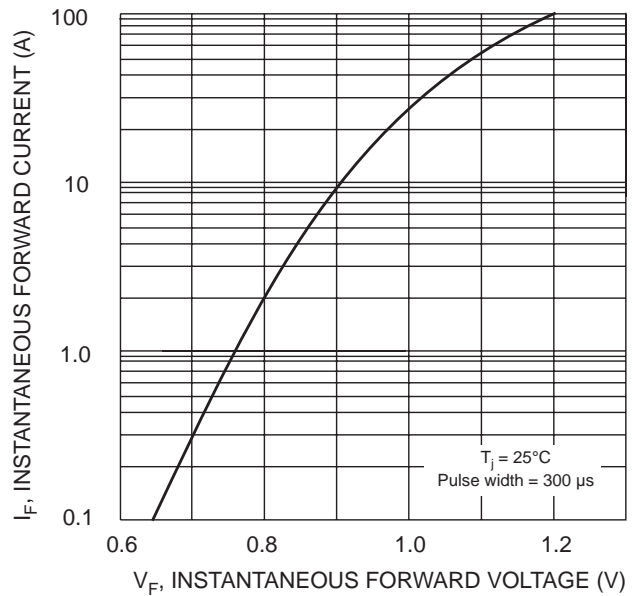


Fig. 2 Typical Forward Characteristics, per element

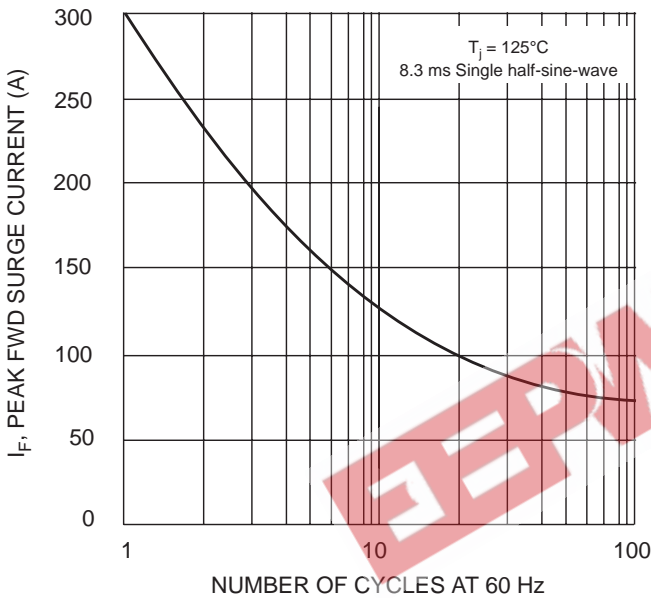


Fig. 3 Max Non-Repetitive Forward Surge Current

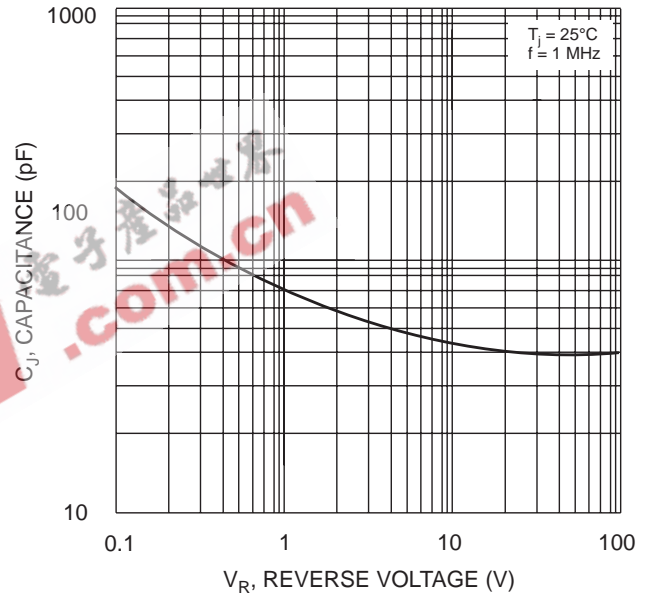


Fig. 4 Typ Junction Capacitance per element

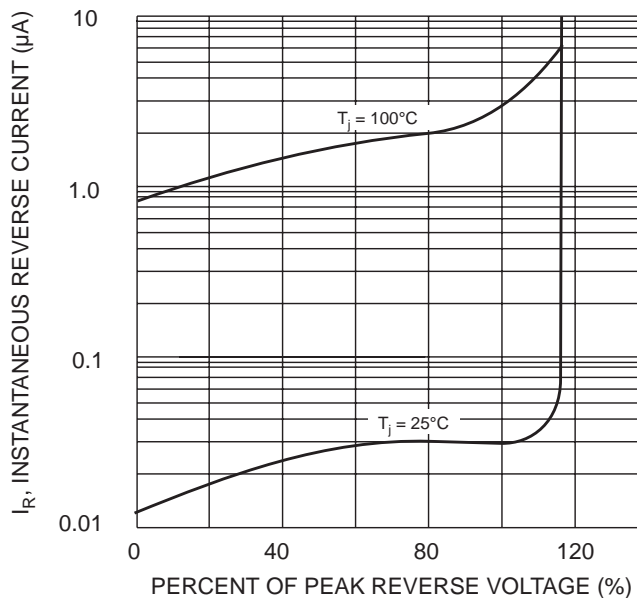
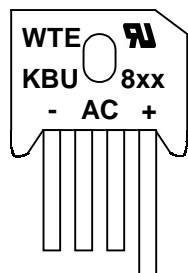


Fig. 5 Typical Reverse Characteristics

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 KBU8xx = Device Number  
 xx = 00, 01, 02, 04, 06, 08 or 10  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

| Inner Box Size<br>L x W x H (mm) | Quantity<br>(PCS) | Carton Size<br>L x W x H (mm) | Quantity<br>(PCS) | Approx. Gross Weight<br>(KG) |
|----------------------------------|-------------------|-------------------------------|-------------------|------------------------------|
| 268 x 227 x 51                   | 400               | 463 x 283 x 185               | 2,400             | 20.5                         |

**Note:** 1. Paper box, white or brown color.

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## ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| KBU800      | SIL Bridge   | 400 Units/Box     |
| KBU801      | SIL Bridge   | 400 Units/Box     |
| KBU802      | SIL Bridge   | 400 Units/Box     |
| KBU804      | SIL Bridge   | 400 Units/Box     |
| KBU806      | SIL Bridge   | 400 Units/Box     |
| KBU808      | SIL Bridge   | 400 Units/Box     |
| KBU810      | SIL Bridge   | 400 Units/Box     |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBU800-LF.**

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