

## Single Phase Silicon Bridge Rectifier

$V_{RRM} = 50 \text{ V} - 400 \text{ V}$

$I_O = 10 \text{ A}$

### Features

- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/ 10 seconds, 0.375 (9.5mm) lead length, 5 lbs. (2.3 kg) tension
- Types from 50 V up to 400 V  $V_{RRM}$
- Not ESD Sensitive

### Mechanical Data

Case: Molded plastic body

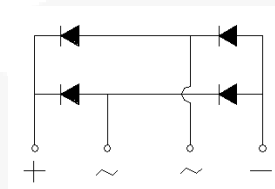
Terminals: Plated leads, solderable per MIL-STD-750, Method 2026

Mounting position: Any

Mounting torque: 5 inch-lbs max

Weight: 0.268 ounces, 7.6 grams

KBU Package



### Maximum ratings at $T_c = 25^\circ\text{C}$ , unless otherwise specified

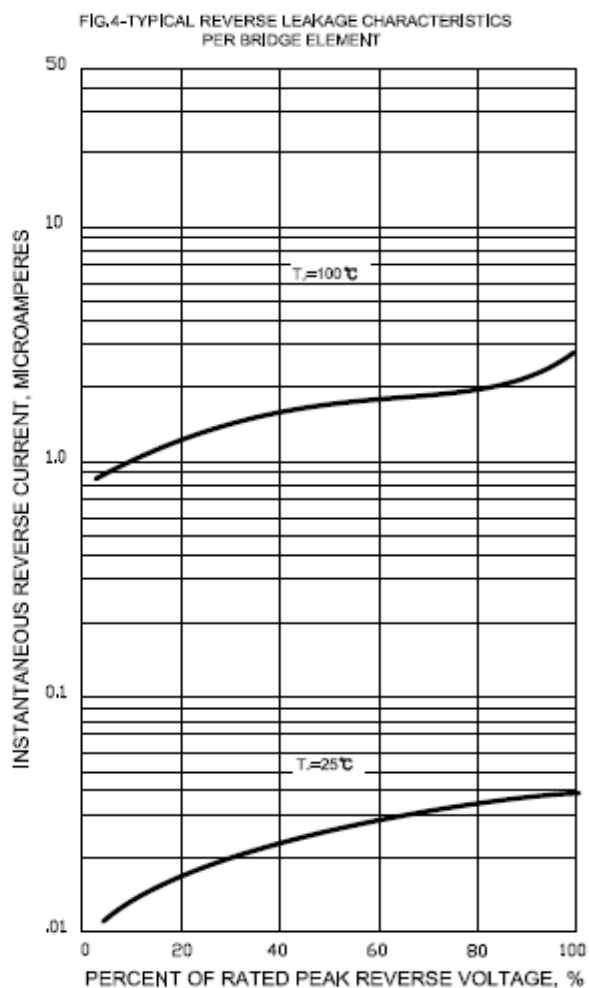
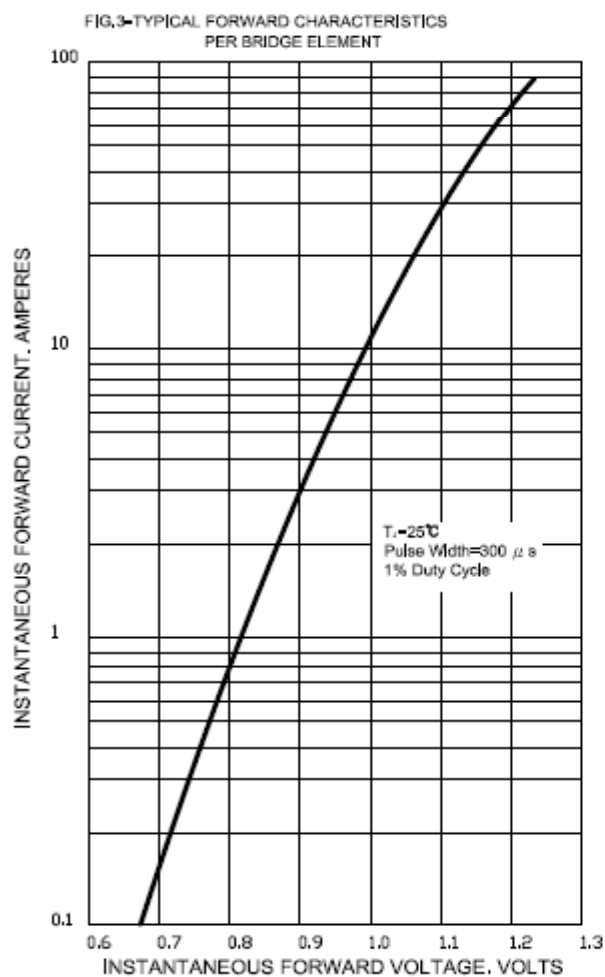
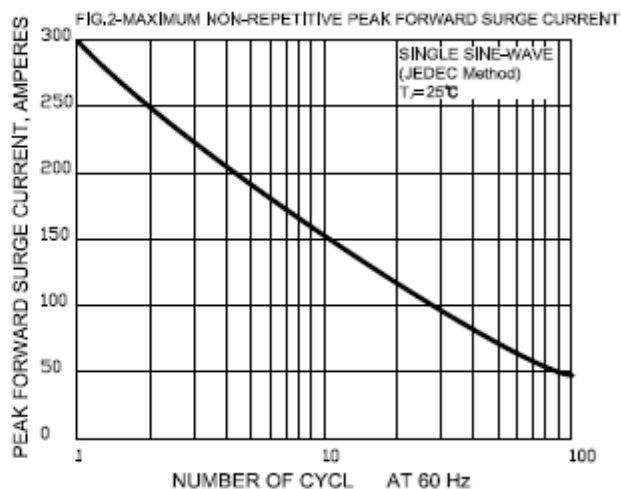
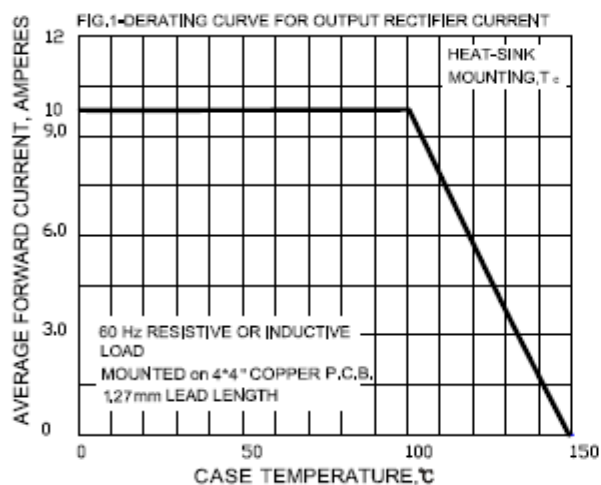
| Parameter                       | Symbol    | Conditions | KBU10005   | KBU1001    | KBU1002    | KBU1004    | Unit |
|---------------------------------|-----------|------------|------------|------------|------------|------------|------|
| Repetitive peak reverse voltage | $V_{RRM}$ |            | 50         | 100        | 200        | 400        | V    |
| RMS reverse voltage             | $V_{RMS}$ |            | 35         | 70         | 140        | 280        | V    |
| DC blocking voltage             | $V_{DC}$  |            | 50         | 100        | 200        | 400        | V    |
| Operating temperature           | $T_j$     |            | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | °C   |
| Storage temperature             | $T_{stg}$ |            | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | °C   |

### Electrical characteristics at $T_c = 25^\circ\text{C}$ , unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load

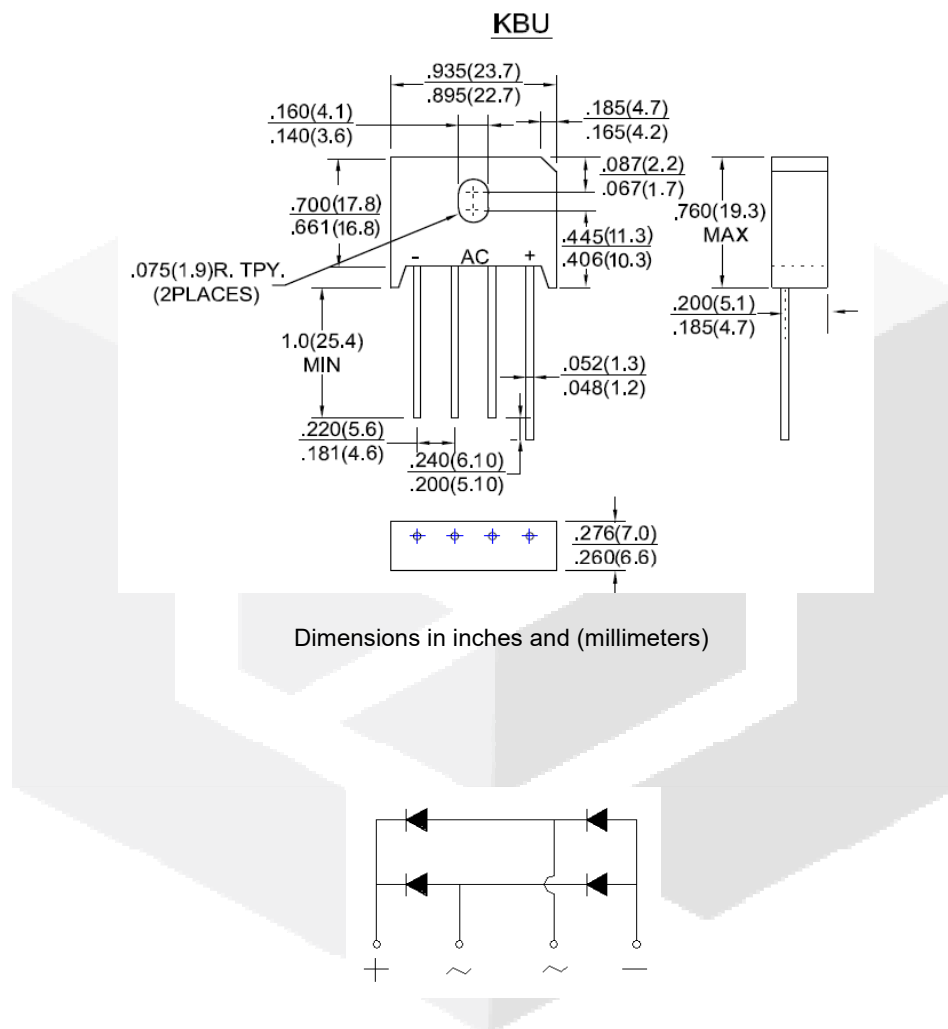
For capacitive load derate current by 20%

| Parameter                                               | Symbol    | Conditions                         | KBU10005 | KBU1001 | KBU1002 | KBU1004 | Unit          |
|---------------------------------------------------------|-----------|------------------------------------|----------|---------|---------|---------|---------------|
| Maximum average forward rectified current               | $I_O$     | $T_c = 100^\circ\text{C}$          | 10       | 10      | 10      | 10      | A             |
| Peak forward surge current                              | $I_{FSM}$ | $t_p = 8.3 \text{ ms}$ , half sine | 300      | 300     | 300     | 300     | A             |
| Maximum instantaneous forward voltage drop per leg      | $V_F$     | $I_F = 10 \text{ A}$               | 1.05     | 1.05    | 1.05    | 1.05    | V             |
| Maximum DC reverse current at rated DC blocking voltage | $I_R$     | $T_a = 25^\circ\text{C}$           | 10       | 10      | 10      | 10      | $\mu\text{A}$ |
|                                                         |           | $T_a = 100^\circ\text{C}$          | 500      | 500     | 500     | 500     |               |



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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