

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

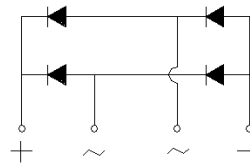
Case: Molded plastic body

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 $T_c = 25\text{ }^\circ\text{C}$, unless otherwise specified

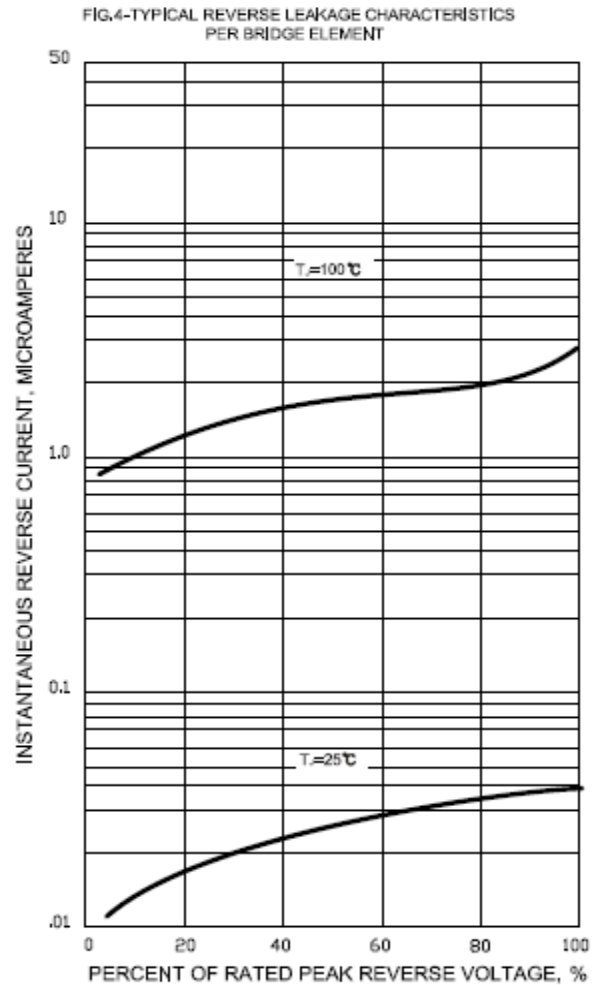
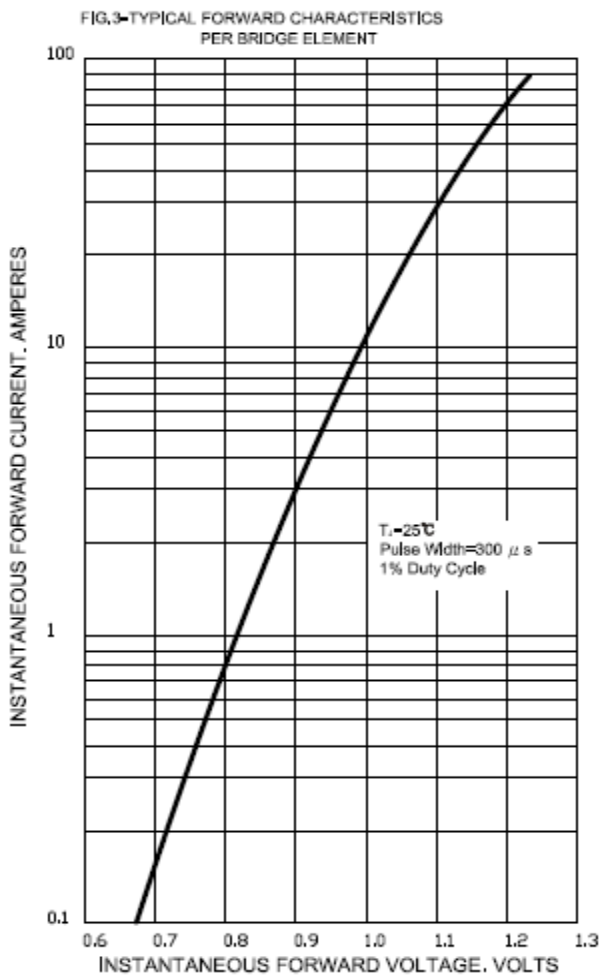
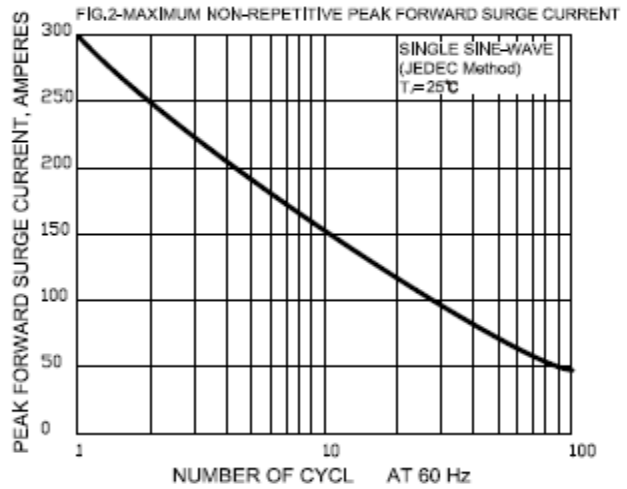
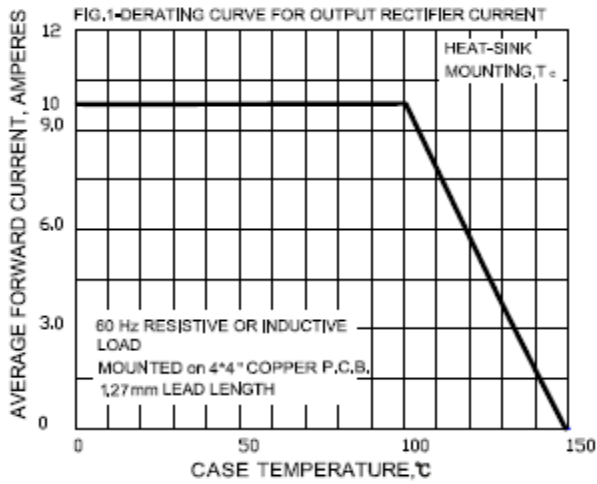
| Parameter | Symbol | Conditions | KBU10005 | KBU1001 | KBU1002 | KBU1004 | Unit |
|---------------------------------|-----------|------------|------------|------------|------------|------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 50 | 100 | 200 | 400 | V |
| RMS reverse 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 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |

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

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

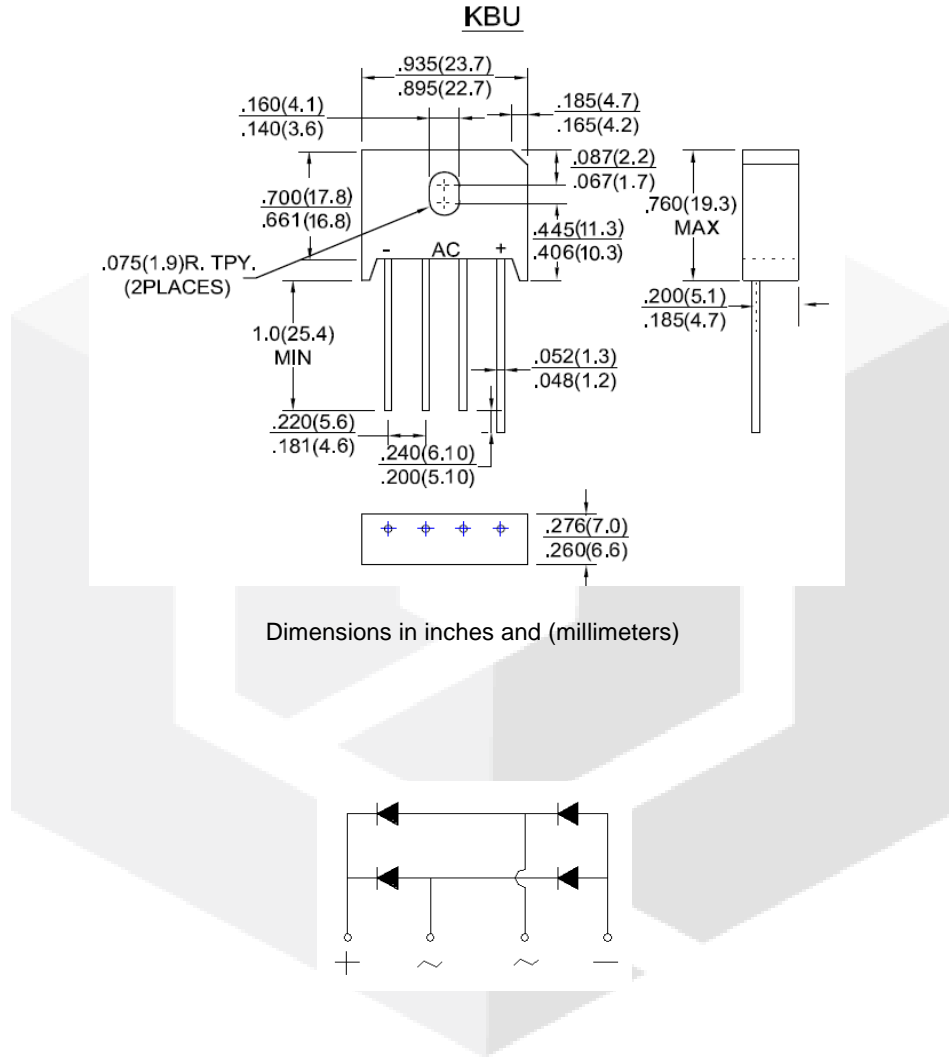
For capacitive load derate current by 20%

| Parameter | Symbol | Conditions | KBU10005 | KBU1001 | KBU1002 | KBU1004 | Unit |
|---|-----------|-----------------------------------|----------|---------|---------|---------|---------------|
| Maximum average forward rectified current | I_O | $T_c = 100\text{ }^\circ\text{C}$ | 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 | $T_a = 25\text{ }^\circ\text{C}$ | 10 | 10 | 10 | 10 | μA |
| | | $T_a = 100\text{ }^\circ\text{C}$ | 500 | 500 | 500 | 500 | |



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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