

## KBU801G THRU KBU807G

Single Phase 8.0 AMPS. Glass Passivated Bridge Rectifiers

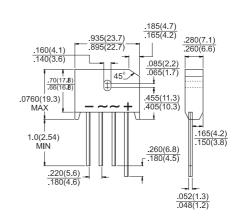


Voltage Range 50 to 1000 Volts Current 8.0 Amperes

KBU

## Features

- ♦ UL Recognized File # E-96005
- ♦ Glass passivated junction
- ♦ Ideal for printed circuit board
- Reliable low cost construction
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Surge overload rating to 200 amperes peak
- High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths.
- ♦ Weight: 0. 3 ounce, 8.0 grams
- ♦ Mounting torque: 5 in. lb. Max.



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

| Type Number   | Symbol            | KBU<br>801G  | KBU<br>802G | KBU<br>803G | KBU<br>804G | KBU<br>805G | KBU<br>806G | KBU<br>807G | Units                  |
|---|-------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$         | 50           | 100         | 200         | 400         | 600         | 800         | 1000        | V                      |
| Maximum RMS Voltage   | V <sub>RMS</sub>  | 35           | 70          | 140         | 280         | 420         | 560         | 700         | V                      |
| Maximum DC Blocking Voltage   | $V_{DC}$          | 50           | 100         | 200         | 400         | 600         | 800         | 1000        | V                      |
| Maximum Average Forward Rectified Current $@T_A = 65^{\circ}C$  | I <sub>(AV)</sub> | 8.0          |             |             |             |             |             |             | Α                      |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated<br>Load (JEDEC method ) | I <sub>FSM</sub>  | 200          |             |             |             |             |             |             | Α                      |
| Maximum Instantaneous Forward Voltage @ 8.0A  | $V_{F}$           | 1.0          |             |             |             |             |             |             | V                      |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C   | I <sub>R</sub>    |              |             |             | 5.0         |             |             |             | uA                     |
| at Rated DC Blocking Voltage @ T <sub>A</sub> =125℃   |                   |              |             |             | 500         |             |             |             | uA                     |
| Typical Thermal Resistance Per Leg (Note 1)   | RθJA              | 18.0         |             |             |             |             |             |             | $^{\circ}$ C/W         |
| (Note 2)  | RθJC              |              |             |             | 3.0         |             |             |             |                        |
| Operating Temperature Range   | TJ                | -55 to +150  |             |             |             |             |             |             | $^{\circ}\mathbb{C}$   |
| Storage Temperature Range   | T <sub>STG</sub>  | -55 to + 150 |             |             |             |             |             |             | $^{\circ}\!\mathbb{C}$ |

Notes 1: Units Mounted In Free Air No Heat Sink On PCB 0.5x0.5 " (12x12mm) Copper Pads, 0.375"(9.5mm) Lead Length.

2: Units Case Mounted On 3.2x3.2 x 0.12" Thick (8.2x8.2x0.3cm) AL. Plate Heat Sink.

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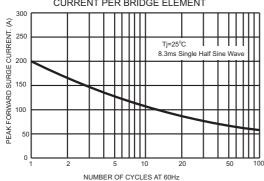


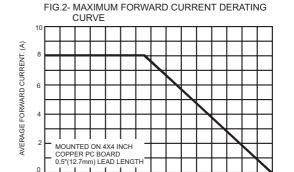
150

## RATINGS AND CHARACTERISTIC CURVES (KBU801G THRU KBU807G)

0

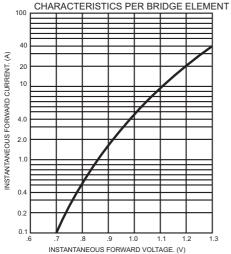
FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

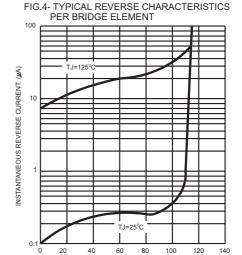




AMBIENT TEMPERATURE. (°C)

FIG.3- TYPICAL INSTANTANEOUS FORWARD





PERCENT OF RATED PEAK REVERSE VOLTAGE. (%)

50