



KBU801 - KBU807

Single Phase 8.0AMPS. Bridge Rectifiers

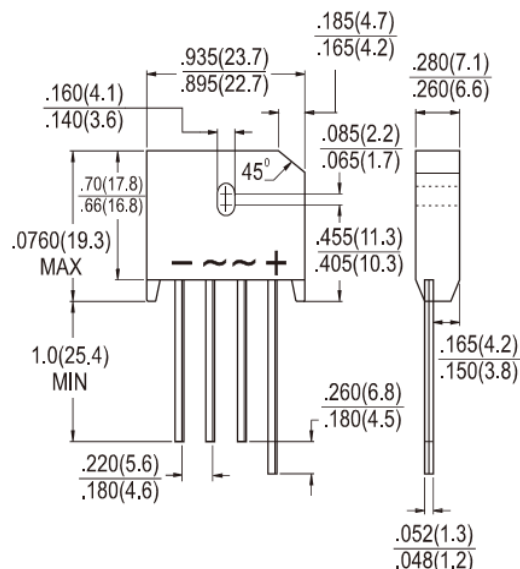
KBU

Features

- ✦ UL Recognized File #E-326243
- ✦ Ideal for printed circuit board
- ✦ High case dielectric strength
- ✦ Plastic material has Underwriters Laboratory flammability Classification 94V-0
- ✦ Typical IR less than 0.1uA
- ✦ High surge current capability
- ✦ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs.,(2.3kg) tension
- ✦ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

- ✦ Case: Molded plastic body
- ✦ Terminals: Pure tin plated, lead free, leads solderable per MIL-STD-202, Method 208
- ✦ Weight: 8.0 grams
- ✦ Mounting Torque: 5 in lbs max.



Dimensions in inches and (millimeters)

Marking Diagram



- KBU80X = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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 801 | KBU 802 | KBU 803 | KBU 804 | KBU 805 | KBU 806 | KBU 807 | Units |
|--|------------------------------------|---------------|---------|---------|---------|---------|---------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 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 @ $T_A=65^\circ C$ | $I_{F(AV)}$ | 8 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 300 | | | | | | | A |
| Rating of fusing (t<8.3mS) | I^2t | 373 | | | | | | | A ² S |
| Maximum Instantaneous Forward Voltage (Note 1) @ 4 A @ 8 A | V_F | 1.0 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$ | I_R | 10 500 | | | | | | | uA |
| Typical Junction Capacitance per leg (Note 2) | Cj | 400 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta JA}$ $R_{\theta JC}$ | 18 3 | | | | | | | °C/W |
| Operating Temperature Range | T_J | - 55 to + 125 | | | | | | | °C |
| Storage Temperature Range | T_{STG} | - 55 to + 150 | | | | | | | °C |

Note 1 : Pulse Test with PW=300u sec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse bias of 4.0V D.C.

Note 3 : Unit case mounted on 4" x 6" x 0.25" Al plate heat sink.

RATINGS AND CHARACTERISTIC CURVES (KBU801 THRU KBU807)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

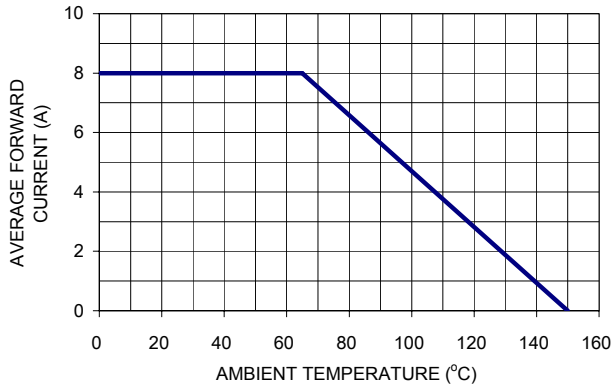


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

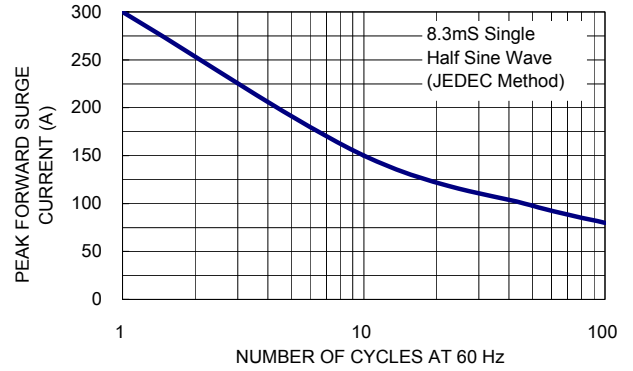


FIG. 3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

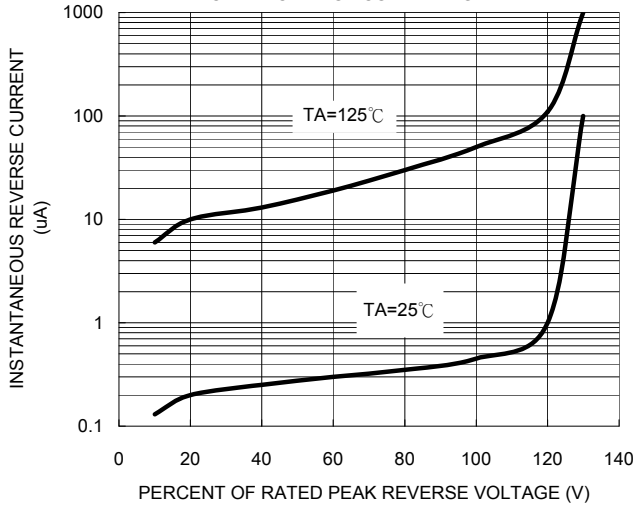


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

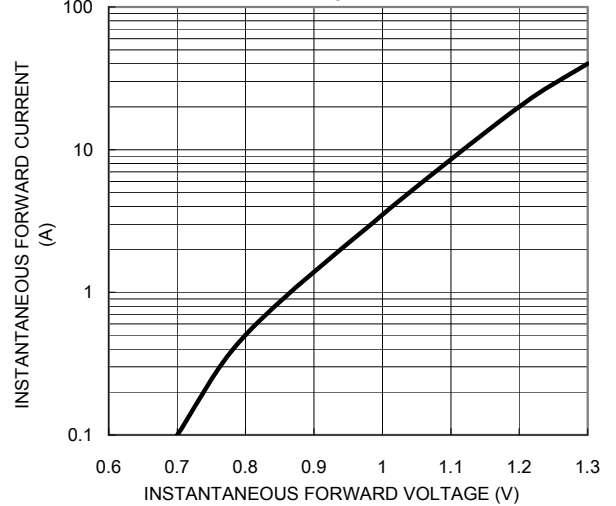


FIG. 5 TYPICAL JUNCTION CAPACITANCE

