

# KBU401 THRU KBU407

Single Phase 4.0 AMPS. Silicon Bridge Rectifiers

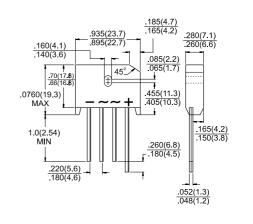


Voltage Range 50 to 1000 Volts Current 4.0 Amperes

### KBU

#### **Features**

- ♦ UL Recognized File # E-96005
- High surge current capability
- ♦ Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- ✦ High temperature soldering guaranteed: 250°C / 10 seconds / 0.375" ( 9.5mm ) lead length at 5 lbs., ( 2.3 kg ) tension
- ♦ Weight: 8 grams



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%

if of capacitive load, defate current by 20%								
Type Number	KBU 401	KBU 402	KBU 403	KBU 404	KBU 405	KBU 406	KBU 407	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $@T_A = 65^{\circ}C$	4.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	200							А
Maximum Instantaneous Forward Voltage @ 4.0A	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C	10							uA
at Rated DC Blocking Voltage @ T <sub>A</sub> =100°C				500				uA
Typical Thermal resistance (Note 1) $R\theta$ JA				19				.C\M
(Note 2) R <i>θ</i> JL				4.0				
Operating Temperature Range T <sub>J</sub>	-55 to +125							${\mathbb C}$
Storage Temperature Range T <sub>STG</sub>	-55 to +150							${\mathbb C}$

Note: 1. Units Mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) Copper Pads and 0.375" (9.5mm) Lead Length.

2. Units Mounted on a 2.0 x 1.6 x 0.3" Thick (5 x 4 x 0.8cm) Al. Plate.



#### RATINGS AND CHARACTERISTIC CURVES (KBU401 THRU KBU407)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT PEAK FORWARD SURGE CURRENT. (A) Tj=25°C 175 8.3ms Single Half Sine Wave 150 125 100 75 50 25 20 100 5 NUMBER OF CYCLES AT 60Hz

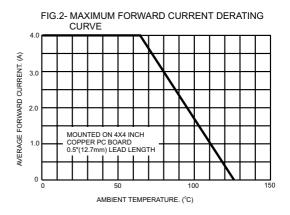


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT 40 20 NSTANTANEOUS FORWARD CURRENT. (A) 4.0 2.0 1.0 0.4 Tj=25°C 8.3ms Single Half Sine Wave 0.1 0.6 0.7 0.8 0.9 1.0 1.1 1.3 INSTANTANEOUS FORWARD VOLTAGE. (V)

