



# KBU601 THRU KBU607

## Single Phase 6.0 AMPS. Silicon Bridge Rectifiers

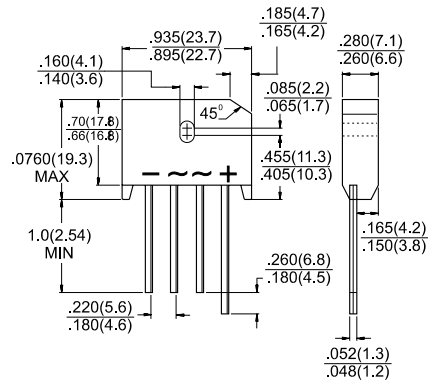


Voltage Range  
50 to 1000 Volts  
Current  
6.0 Amperes

### 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

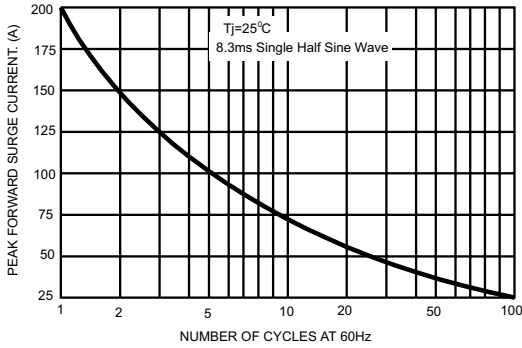
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	KBU 601	KBU 602	KBU 603	KBU 604	KBU 605	KBU 606	KBU 607	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 <sub>A</sub> = 65°C	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	200							A
Maximum Instantaneous Forward Voltage @ 6.0A	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	10 500							uA uA
Typical Thermal resistance (Note 1) R <sub>θJA</sub> (Note 2) R <sub>θJC</sub>	8.6 3.1							°C/W
Operating Temperature Range T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range T <sub>STG</sub>	-55 to +150							°C

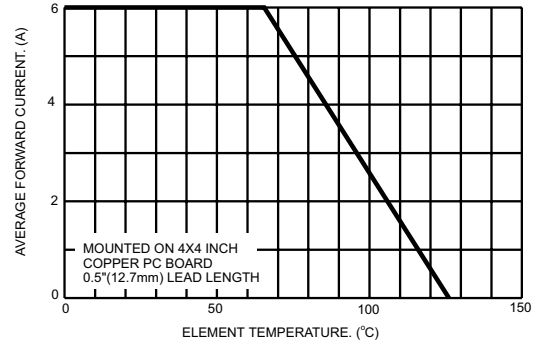
Note: 1. Thermal resistance from Junction to Ambient with units in Free Air, P.C.B. Mounted on 0.5 x 0.5" (12 x 12mm) Copper Pads, 0.375" (9.5mm) Lead Length.  
2. Thermal resistance from Junction to Case with units Mounted on 2.6 x 1.4 x 0.06" Thick (6.5 x 3.5 x 15cm) Al. Plate

## RATINGS AND CHARACTERISTIC CURVES (KBU601 THRU KBU607)

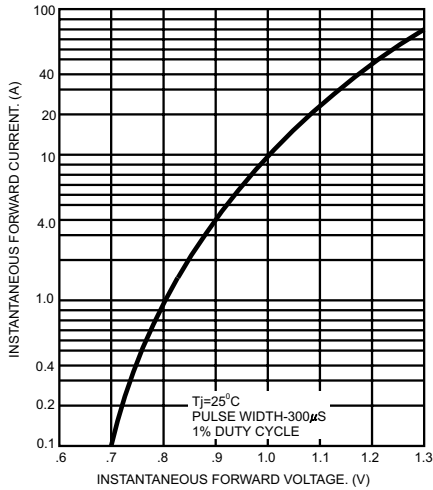
**FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT**



**FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**



**FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**

