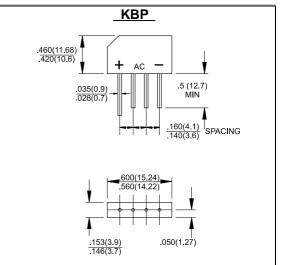


## KBP301 THRU KBP307

Voltage Range 50 to 1000 Volts Current 3.0 Amperes

## **Features**

- ♦ UL Recognized File # E-96005
- ♦ Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed: 250°C / 10 seconds at 5 lbs. ( 2.3 Kg ) tension
- Small size, simple installation Leads solderable per MIL-STD-202, Method 208



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	KBP 301	KBP 302	KBP 303	KBP 304	KBP 305	KBP 306	KBP 307	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> = 50°C	3.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	80							Α
Maximum Instantaneous Forward Voltage @ 3.14A	1.1							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C	10						uA	
at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C	500							uA
Typical Thermal Resistance (Note 1) R $\theta$ JA R $\theta$ JL	30.0							°C/w
	11							
Operating Temperature Range T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range T <sub>STG</sub>	-55 to +150							°C



## RATINGS AND CHARACTERISTIC CURVES (KBP301G THRU KBP307G)

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

80

40

40

20

20

4 6 10 20 40 60 100

NUMBER OF CYCLES AT 60Hz

CHARACTERISTICS PER BRIDGE ELEMENT

10.0

1.0

1.0

0.1

Tj=25°C PULSE WIDTH-300µS 1% DUTY CYCLE

INSTANTANEOUS FORWARD VOLTAGE. (V)

1.3

.9 1.0

.01

FIG.3- TYPICAL INSTANTANEOUS FORWARD

