**TSC 9b** 

## KBP301G THRU KBP307G

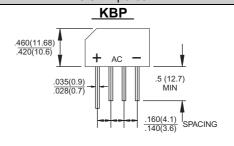
Single Phase 3.0 AMPS. Glass Passivated Bridge Rectifiers

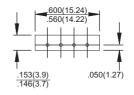


Voltage Range 50 to 1000 Volts Current 3.0 Amperes

## **Features**

- ♦ UL Recognized File # E-96005
- ♦ Glass passivated junction
- ♦ Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- ♦ High temperature soldering guaranteed: 260 °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%

1 of dapaditive load, defate earliest by 2070									
Type Number	Symbol	KBP 301G	KBP 302G	KBP 303G	KBP 304G	KBP 305G	KBP 306G	KBP 307G	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	<b>V</b>
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $@T_A = 50^{\circ}C$	I <sub>(AV)</sub>	3.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	80							А
Maximum Instantaneous Forward Voltage @ 3.0A	V <sub>F</sub>	1.1							V
$\label{eq:maximum} \begin{array}{ll} \mbox{Maximum DC Reverse Current @ $T_A$=$25^{\circ}C$} \\ \mbox{at Rated DC Blocking Voltage @ $T_A$=$125^{\circ}C$} \end{array}$	1-	10							uA
	I <sub>R</sub>	500							uA
Typical Thermal Resistance (Note)	$R\theta_{JA}$	30							<b>C</b> /W
	$R heta_{JL}$				11				C/VV
Operating Temperature Range	TJ	-55 to +150							Ç
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							Ç

Note : Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on PCB With 0.4" x 0.4" (10mm x 10mm) Copper Pads.



## RATINGS AND CHARACTERISTIC CURVES (KBP301G THRU KBP307G)

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

70

40

20

2 4 6 10 20 40 60 100

NUMBER OF CYCLES AT 60Hz

