



# KBP301G THRU KBP307G

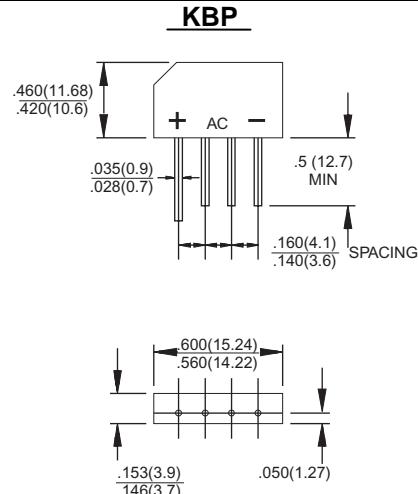
Single Phase 3.0 AMPS. Glass Passivated Bridge Rectifiers



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%

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	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 50^\circ\text{C}$	$I_{(AV)}$	3.0						A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	80						A	
Maximum Instantaneous Forward Voltage @ 3.0A	$V_F$	1.1						V	
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500						uA uA	
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	30 11						°C/W	
Operating Temperature Range	$T_J$	-55 to +150						°C	
Storage Temperature Range	$T_{STG}$	-55 to +150						°C	

Note 1. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on PCB  
With 0.47 x 0.47" (12 x 12mm) Copper Pads.

## RATINGS AND CHARACTERISTIC CURVES (KBP301G THRU KBP307G)

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

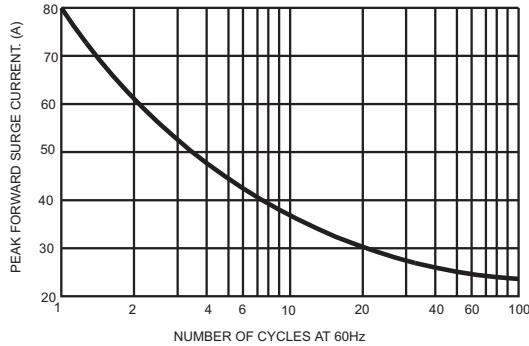


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

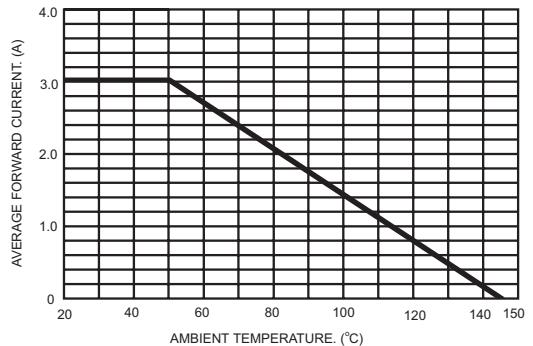


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

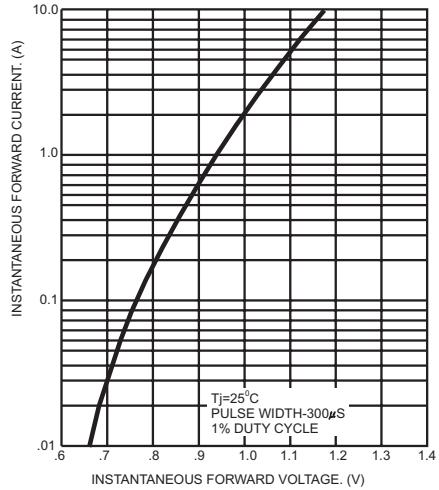


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

