



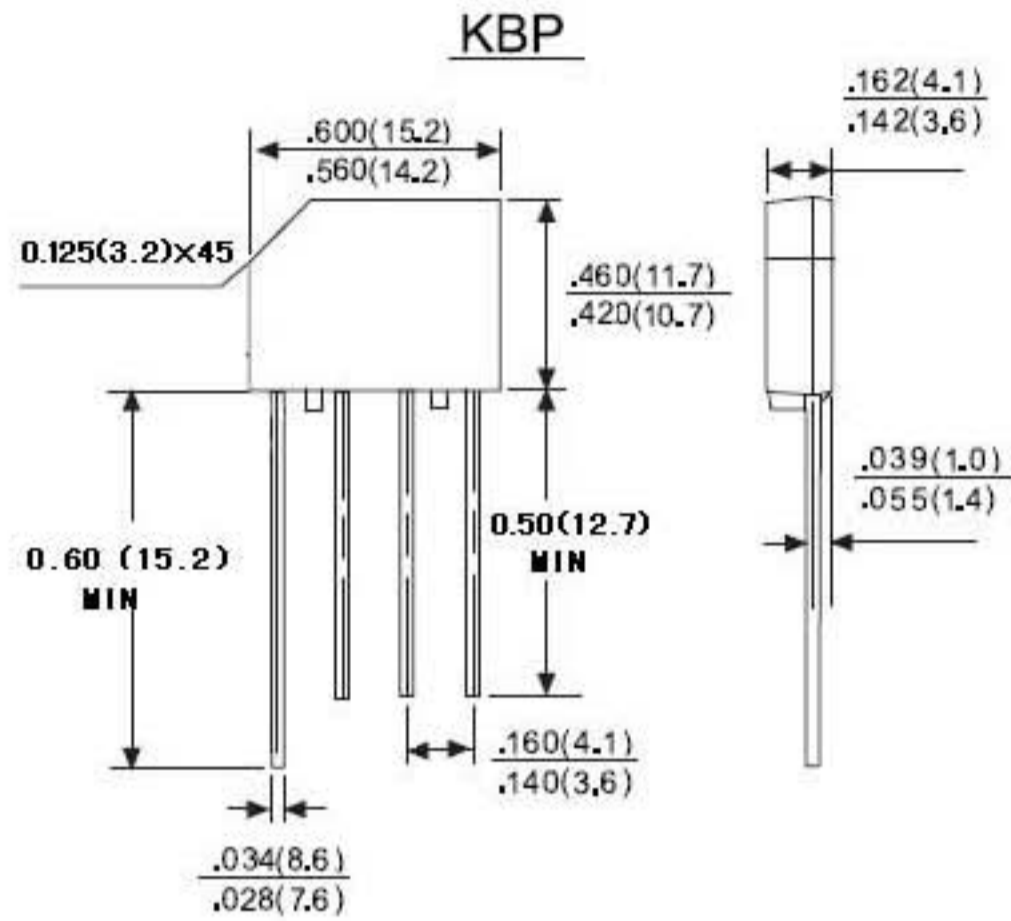
# KBP3005 THRU KBP310

**SINGLE PHASE 3.0 AMPS.  
GLASS PASSIVATED  
BRIDGE RECTIFIERS**

**Voltage Range  
50 to 1000 Volts  
Current  
3.0 Amperes**

**FEATURES**

- UL Recognized File # E-230084
- 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.(2.3kg) 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, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number		KBP 3005	KBP 301	KBP 302	KBP 304	KBP 306	KBP 308	KBP 310	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> = 50°C	I <sub>F(AV)</sub>	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated load (JEDEC method)	I <sub>FSM</sub>	80							A
Maximum Instantaneous Forward Voltage Drop Per leg @ 3.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>A</sub> = 25°C @ T <sub>A</sub> = 125°C	I <sub>R</sub>	5 100							uA uA
Typical Thermal Resistance	R <sub>θJA</sub> R <sub>θJC</sub>	30.0 11							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to + 150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C

NOTES: 1, Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on PCB with 0.47 x 0.47"(12 x12mm) Copper Pads.

# RATING AND CHARACTERISTIC CURVES KBP3005 THRU KBP310



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

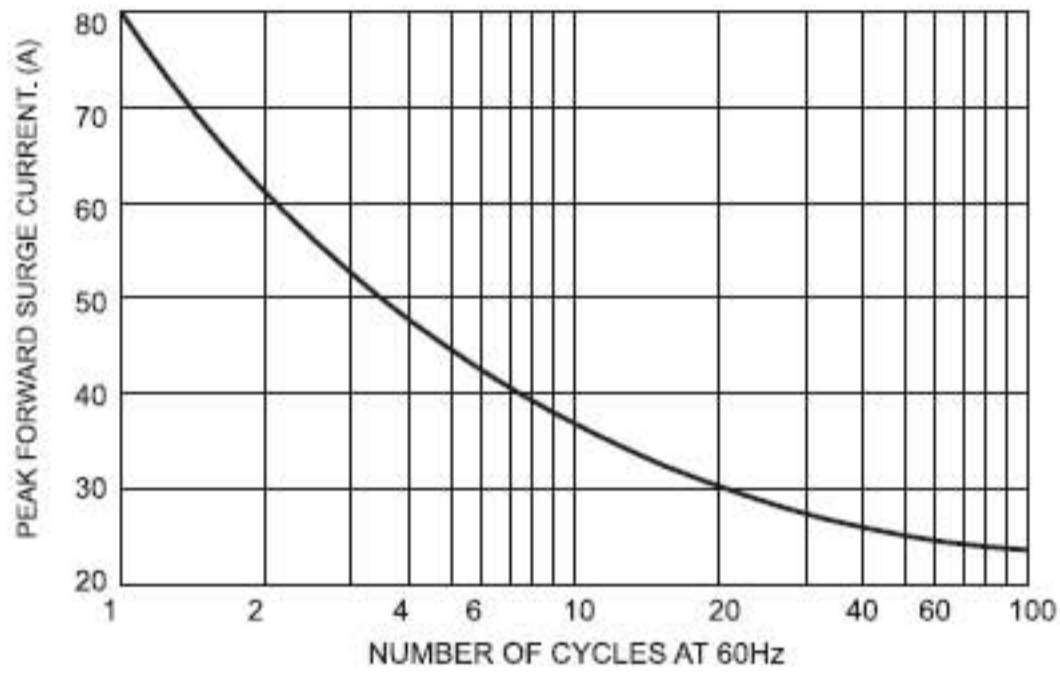


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

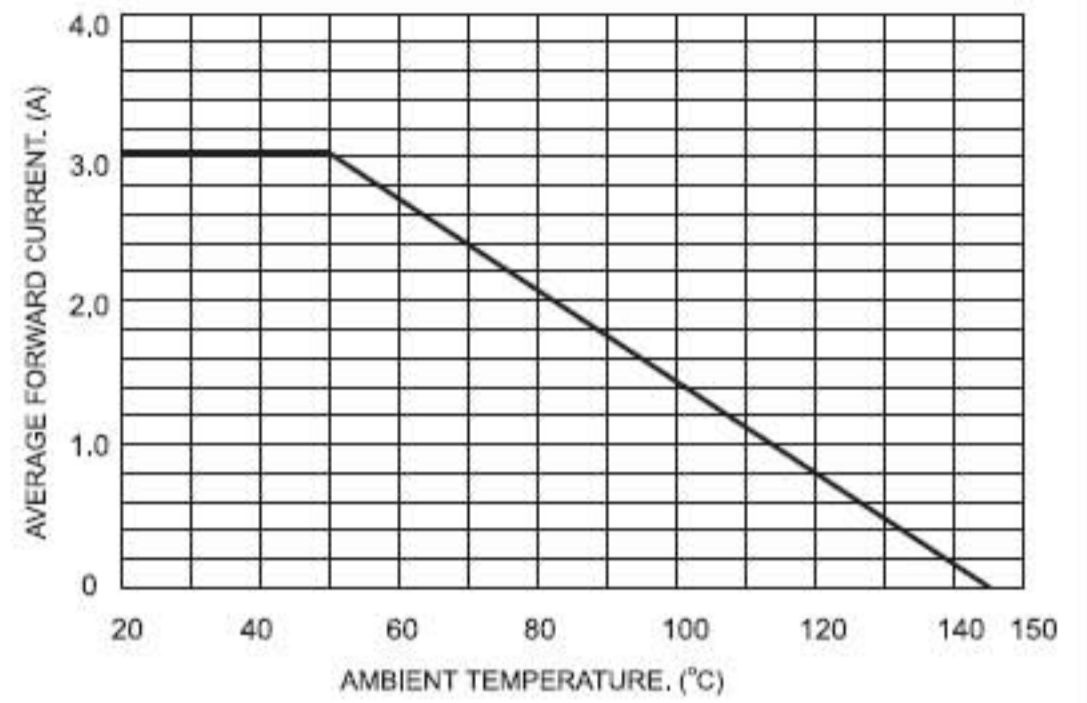


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

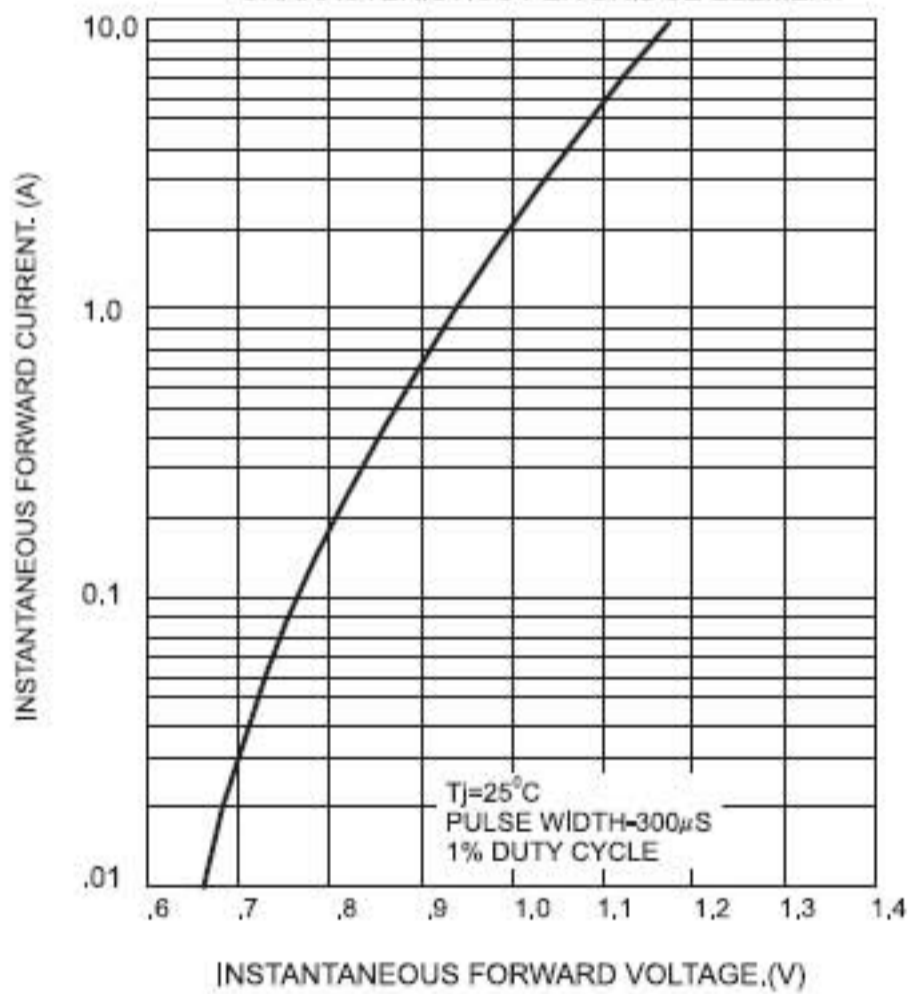


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

