



# KBP3005G THRU KBP310G

## SINGLE PHASE SILICON BRIDGE RECTIFIER

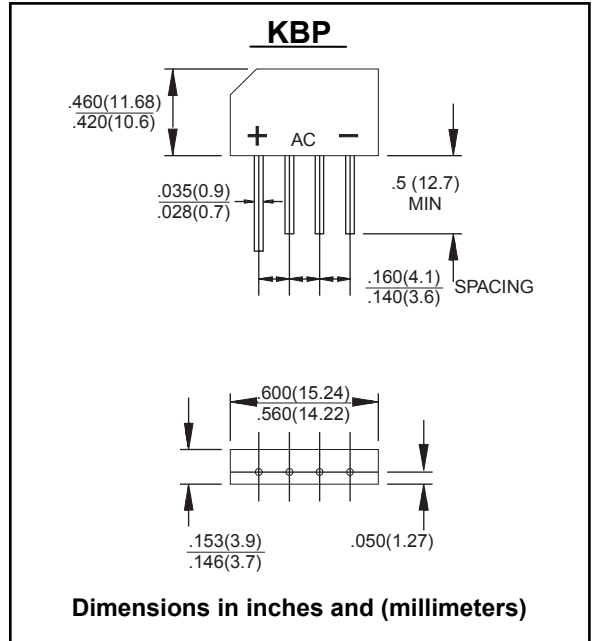
Reverse Voltage - 50 to 1000 Volts    Forward Current - 3.0 Ampere

### FEATURES

- Ideal for printed circuit board
- Surge overload rating: 80A peak
- High case dielectric strength
- High temperature soldering guaranteed:  
260°C/10 seconds at 5lbs. (2.3kg) tension

### MECHANICAL DATA

- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Terminals: Plated leads solderable per  
MIL-STD 202, method 208
- Mounting Position: Any
- Weight: 1.70 g
- Marking: Type Number



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	KBP3005G	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Output Current at T <sub>A</sub> = 50°C	I <sub>O</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>	60							A
Maximum DC Forward Voltage Drop per Bridge Element at 3.0A DC	V <sub>F</sub>	1.1							V
Maximum Reverse Current at rated DC Blocking Voltage per element	@ T <sub>A</sub> = 25°C	10.0							μA
	@ T <sub>A</sub> = 125°C	500							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C



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## RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

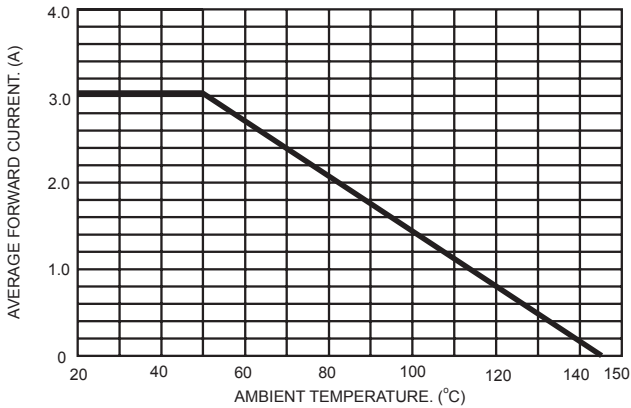


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

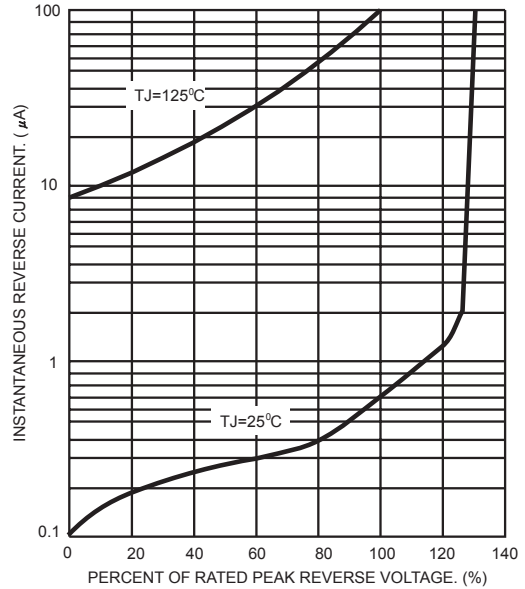


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

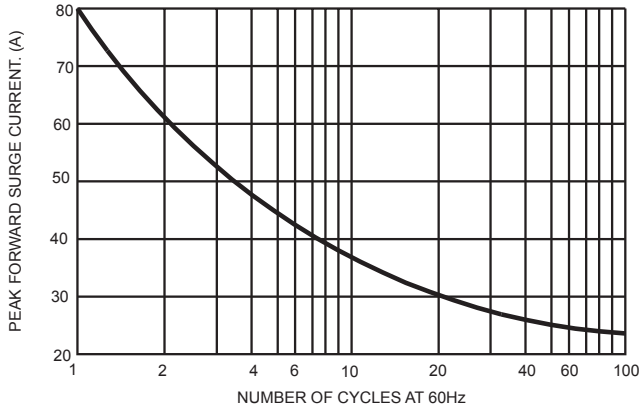


FIG.4- TYPICAL JUNCTION CAPACITANCE

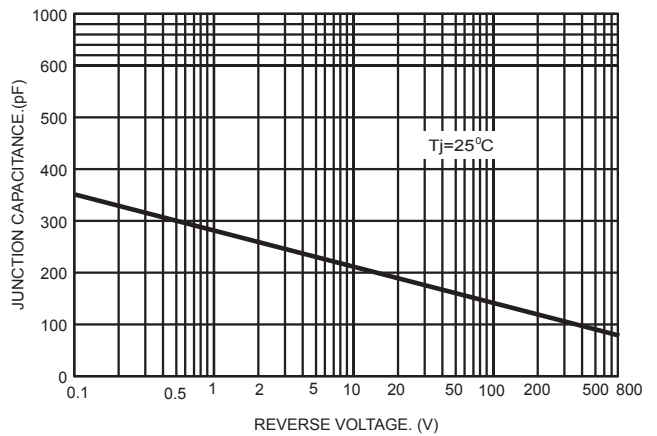


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

