



# WILLAS



## KBP3005G THRU KBP310G

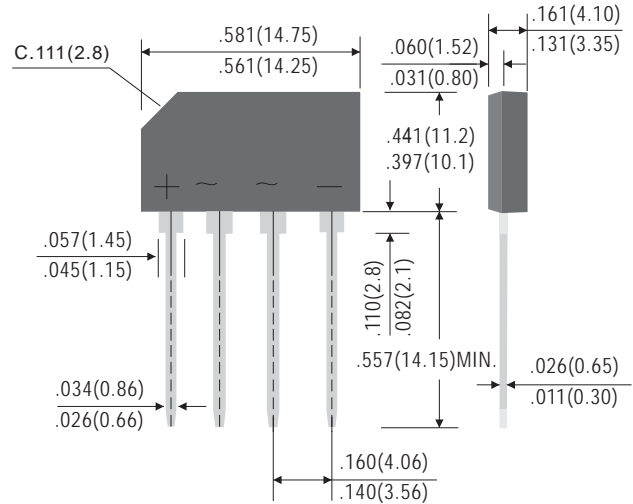
### 3.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER - 50V-100V KBP PACKAGE

#### FEATURES

- \* Ideal for printed circuit board
- \* Surge overload rating: 65 Amperes peak
- \* Mounting position: Any
- \* RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- \* **Moisture Sensitivity Level 1**

#### MECHANICAL DATA

- \* UL listed the recognized component directory, file #E195711
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Weight: 1.5 grams (approximate)



Dimensions in inches and (millimeters)

#### 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, derate current by 20%

RATINGS		SYMBOL	KBP3005G	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	UNIT
Marking Code			KBP3005G	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	
Maximum Recurrent Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	50	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current		I <sub>o</sub>	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	65							Amps
Typical Thermal Resistance (Note 2)		R <sub>θJA</sub> /R <sub>θJL</sub>	32 / 13							°C/W
Typical Junction Capacitance (Note 1)		C <sub>J</sub>	25							pF
Operating Temperature Range		T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range		T <sub>sTG</sub>	-55 to +150							°C
CHARACTERISTICS		SYMBOL	KBP3005G	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	UNIT
Maximum Forward Voltage at 3.0A DC		V <sub>F</sub>	1.1							Volts
Maximum Average Reverse Current at		I <sub>R</sub>	5.0							μAmps
Rated DC Blocking Voltage			500							

NOTES :1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.47 x 0.47"(12 x 12mm)copper pads.

**RATING AND CHARACTERISTIC CURVES**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

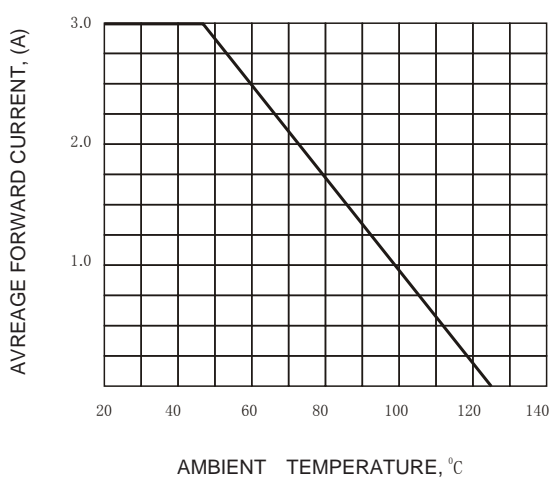


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

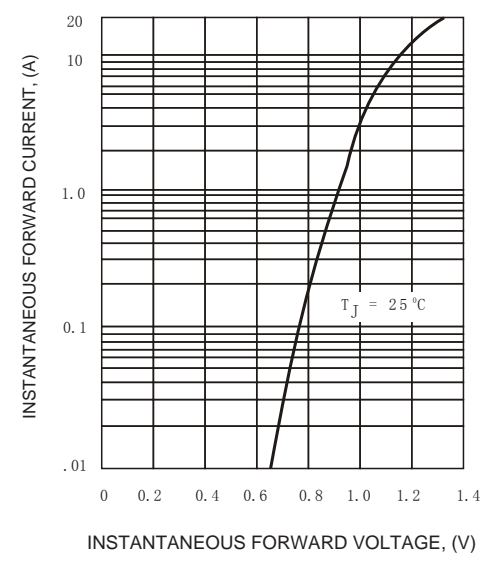


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

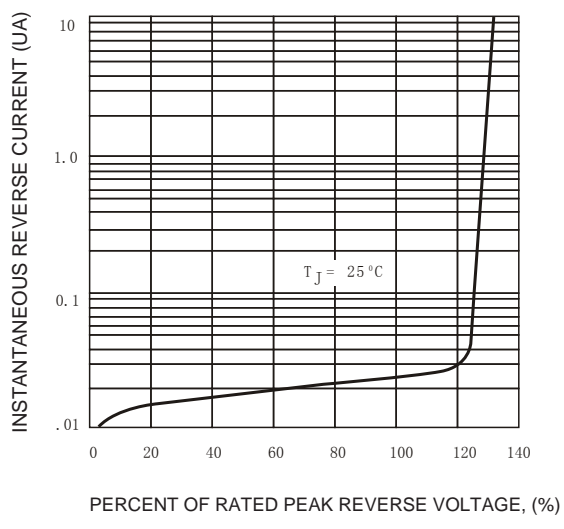


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

