WILLAS

RoHS COMPLIANT

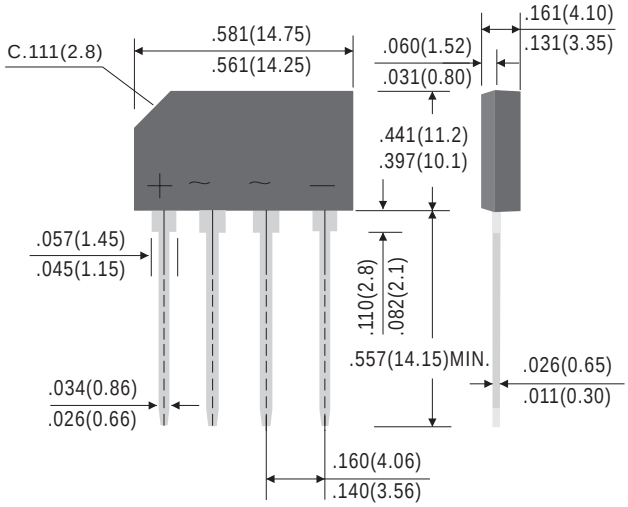
KBP3005G THRU KBP310G

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**



Dimensions in inches and (millimeters)

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive of 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_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	50	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	I_O	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	65							Amps
Typical Thermal Resistance (Note 2)	$R_{\Theta JA}/R_{\Theta JL}$	32 / 13							℃/W
Typical Junction Capacitance (Note 1)	C_J	25							pF
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

CHARACTERISTICS		SYMBOL	KBP3005G	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	UNIT
Maximum Forward Voltage at 3.0A DC		V_F	1.1							Volts
Maximum Average Reverse Current at	@T_C=25℃	I_R	5.0							μAmps
Rated DC Blocking Voltage	@T_C=100℃		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.

WILLAS

RoHS COMPLIANT

KBP3005G THRU KBP310G

3.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER - 50V-100V

KBP PACKAGE

RATING AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

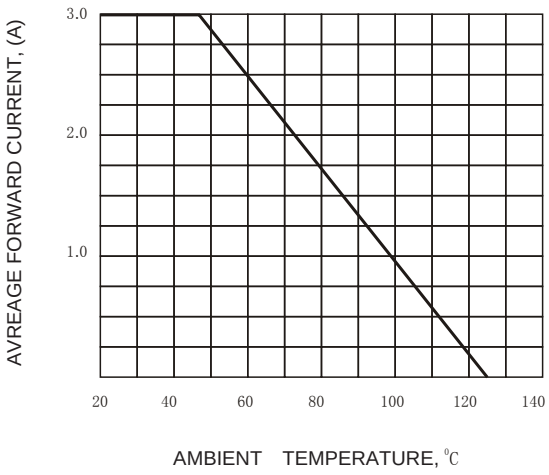


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

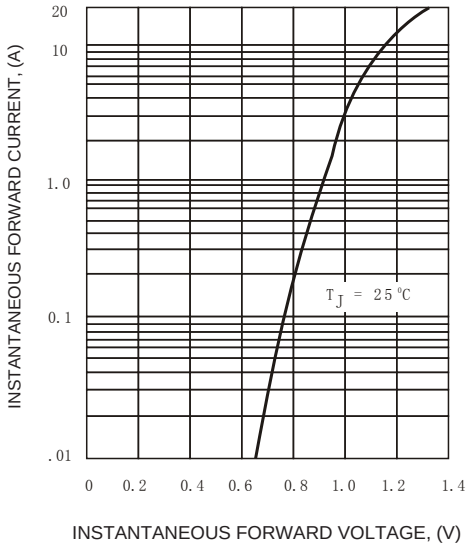


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

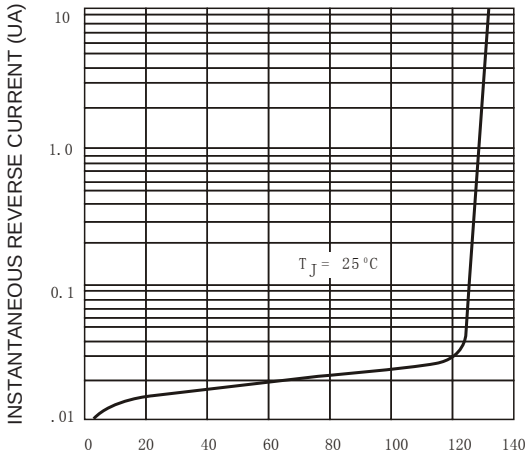


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT