

KBP3005 THRU KBP310

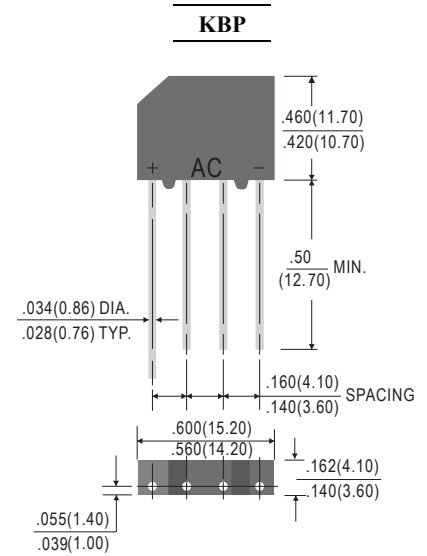
3.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 65 Amperes peak
- * Mounting position: Any

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	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	UNIT
Marking Code		KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	
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 _{θJA} /R _{θJL}	32 / 13							°C/W
Typical Junction Capacitance (Note 1)	C _J	25							pF
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{sTg}	-55 to +150							°C

CHARACTERISTICS	SYMBOL	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	UNIT
Maximum Forward Voltage at 3.0A DC	V _F	1.1							Volts
Maximum Average Reverse Current at	I _R	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

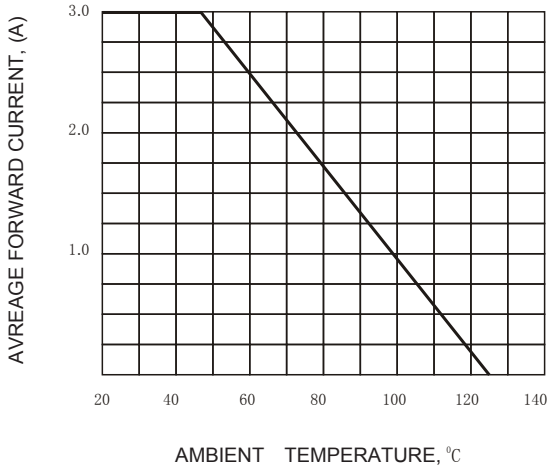


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

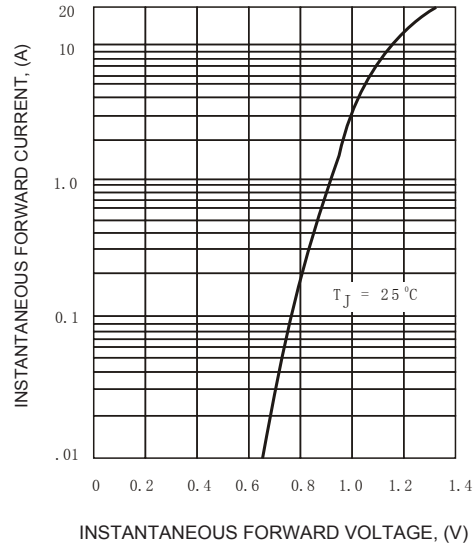


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

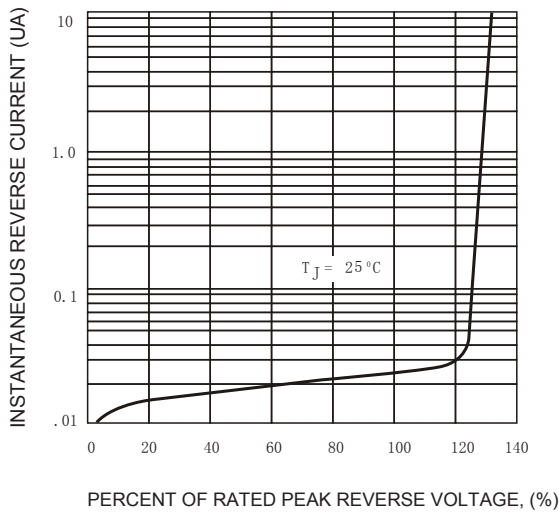


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

