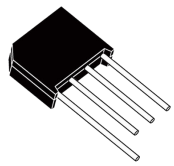
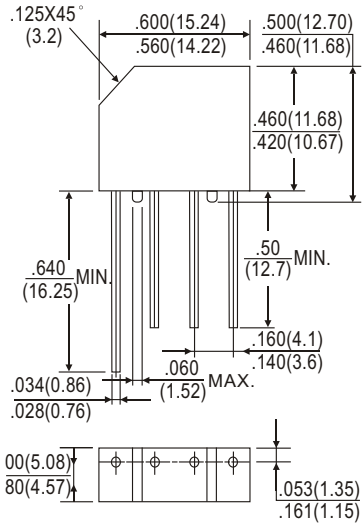
KBP3005-KBP310

SINGLE-PHASE SILICON BRIDGE

VOLTAGE RANGE: 50 - 1000V
CURRENT: 3.0 A



KBP



Dimensions in inches and (millimeters)

Features

- Surge overload rating-80 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Labooratory
- Flammability Classification 94V-O
- Mounting position: Any
- Lead: Silver Plated Cooper Lead.

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	60	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ T_A=25℃	$V_{(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	80							A
Maximum DC Forward Voltage drop per element at 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current at rated @ T_A=25℃	I_R	10							μA
DC Blocking Voltage Per Element @ T_A=100℃		1							mA
I^2t Rating for fusing(t<8.3ms)	I^2t	10							A^2S
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Fig. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

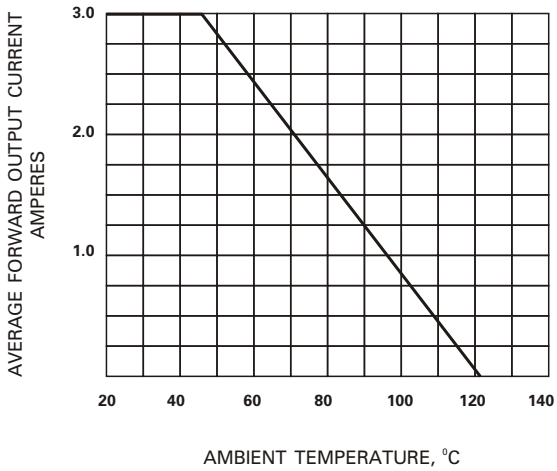


Fig. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

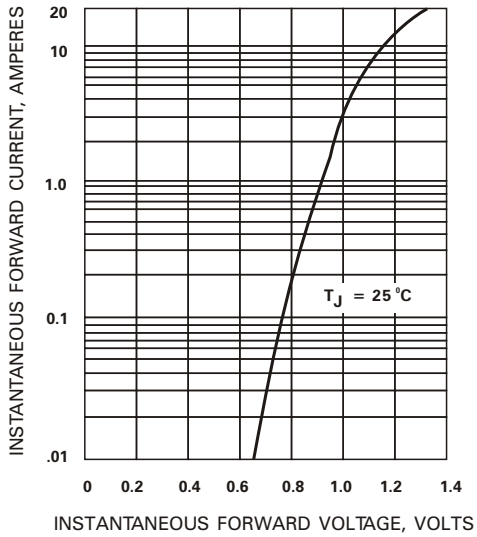


Fig. 3 - TYPICAL FORWARD CHARACTERISTICS

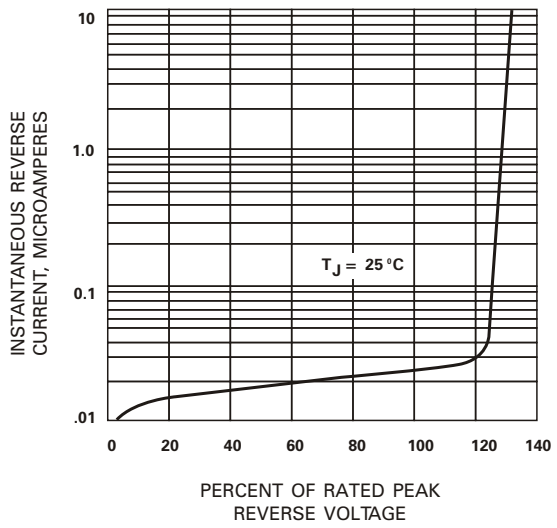


Fig. 4 - MAXIMUM FORWARD SURGE CURRENT