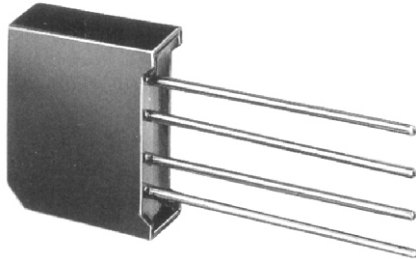


# KBP3005 thru KBP310

## SINGLE-PHASE SILICON BRIDGE



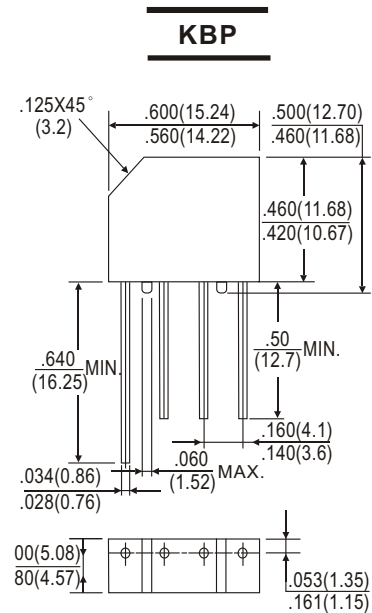
**CHENG-YI  
ELECTRONIC**



### FEATURES

- UL recognized file # E149311
- Surge overload rating-80 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Mounting position: Any
- Lead: Silver Plated Cooper Lead.

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
3.0 Amperes



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Resistive or inductive load, 60 Hz.  
For capacitive load, derate current by 20%.

		KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	UNITS
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 @ $T_A=25^\circ\text{C}$	$V_{(AV)}$	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 @ $T_A=25^\circ\text{C}$ DC Blocking Voltage Per Element @ $T_A=100^\circ\text{C}$	$I_R$	10 1							$\mu\text{A}$ mA
$I^2t$ Rating for fusing( $t < 8.3\text{ms}$ )	$I^2t$	10							$\text{A}^2\text{S}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

# KBP3005 thru KBP310

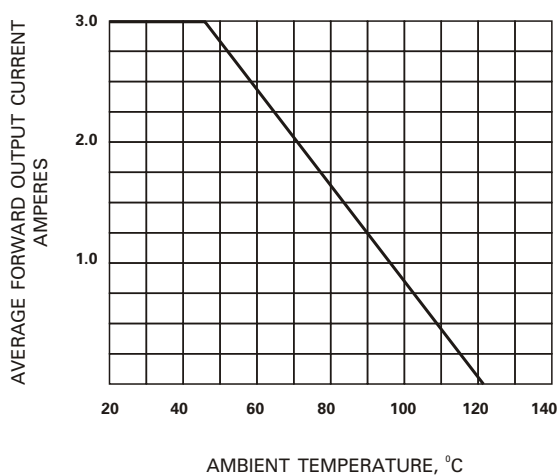
## SINGLE-PHASE SILICON BRIDGE



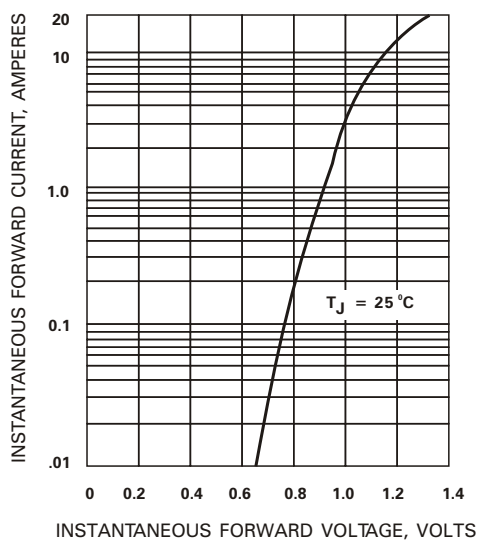
**CHENG-YI  
ELECTRONIC**

### RATING AND CHARACTERISTICS CURVES KBP3005 THRU KBP310

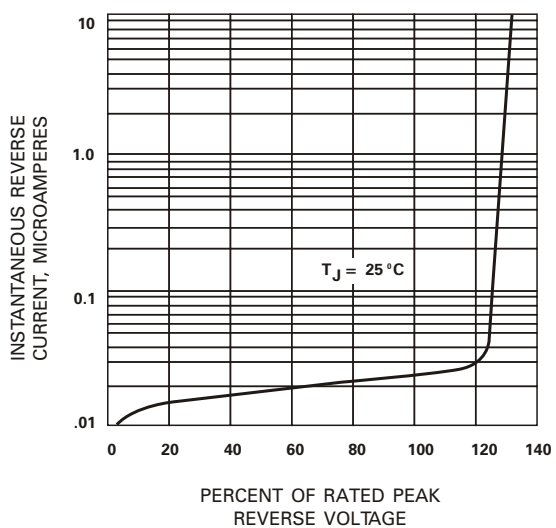
**Fig. 1 - DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT**



**Fig. 2 - DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT**



**Fig. 3 - TYPICAL FORWARD  
CHARACTERISTICS**



**Fig. 4 - MAXIMUM FORWARD SURGE CURRENT**

