

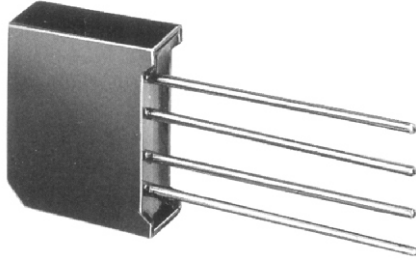
# KBP005 thru KBP10

# RS2005 thru RS210

## SINGLE-PHASE SILICON BRIDGE



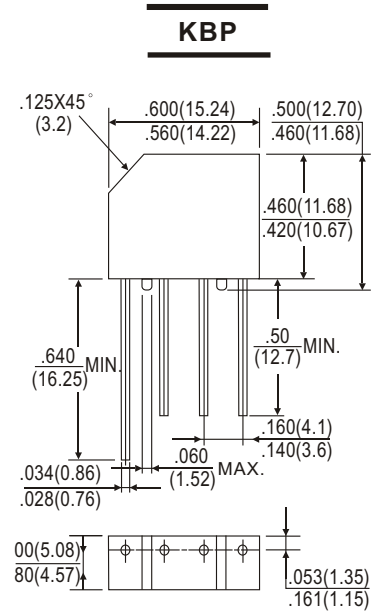
### CHENG-YI ELECTRONIC



#### FEATURES

- UL recognized file # E149311
- Surge overload ratings-50 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Mounting position: Any
- Lead: Silver Plated Cooper Lead.
- Electrically isolated base-1800Volts

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
2.0 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%.

		RS2005	RS201	RS202	RS204	RS206	RS208	RS210	UNITS
		KBP005	KBP01	KBP02	KBP04	KBP06	KBP08	KBP10	
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 @ $T_A=25^\circ C$	$V_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	50							A
Maximum DC Forward Voltage drop per element at 1.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at rated @ $T_A=25^\circ C$ DC Blocking Voltage Per Element @ $T_A=100^\circ C$	$I_R$	10 1							$\mu A$ mA
$I^2t$ Rating for fusing ( $t < 8.3ms$ )	$I^2t$	10							A <sup>2</sup> S
Operating Temperature Range	$T_J$	-55 to +125							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

**KBP005 thru KBP10**

**RS2005 thru RS210**

**SINGLE-PHASE SILICON BRIDGE**

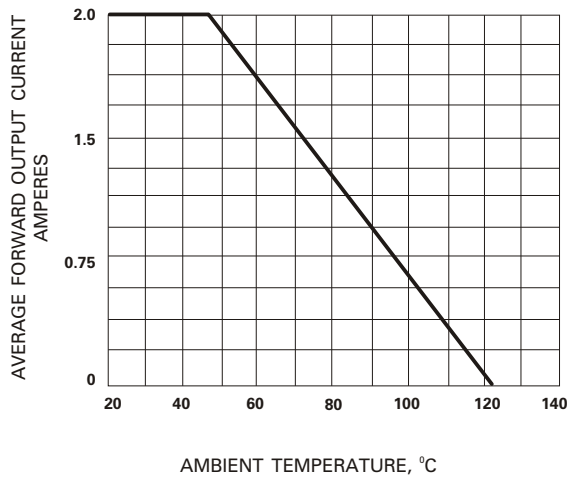


**CHENG-YI  
ELECTRONIC**

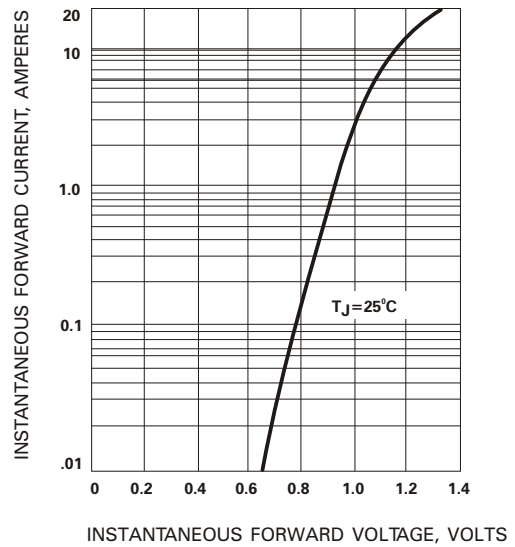
**RATING AND CHARACTERISTICS CURVES**

KBP005 THRU KBP10  
RS2005 THRU RS210

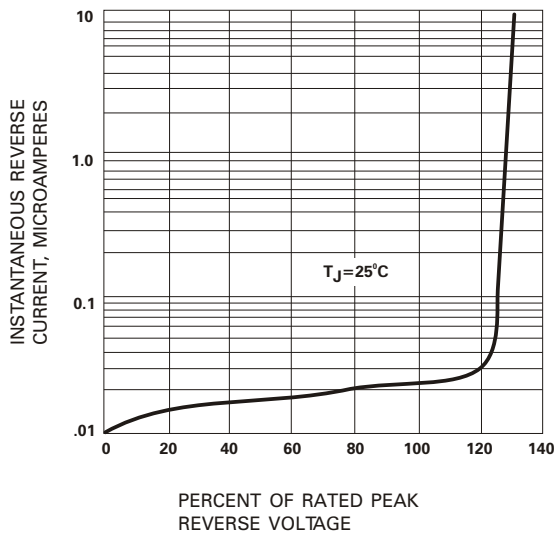
**Fig. 1 - DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT**



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



**Fig. 3 - TYPICAL FORWARD  
CHARACTERISTICS**



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

