



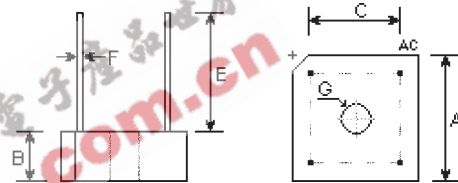
# KBPC8005 THRU KBPC810

**SINGLE-PHASE SILICON BRIDGE**  
**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 8.0 Amperes**

## Features

- Surge overload rating - 125 amperes peak
- Low forward voltage drop
- Mounting position: Any
- Small size; simple installation
- Silver plated copper leads

## BR8



DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.730	0.770	18.542	19.558	
B	0.250	0.300	6.35	7.63	
C	0.480	0.520	12.19	13.21	
E	0.750	-	19.1	-	
F	0.380	0.042	0.97	1.07	φ
G	0.140	0.150	3.56	3.81	φ

## Maximum Ratings and Electrical Characteristics

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

	Symbols	KBPC 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS bridge input voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum average forward rectified output current at $T_A=100^\circ\text{C}$ * $T_A=50^\circ\text{C}$ **	$I_{(AV)}$					8.0			Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$					125.0			Amps
Maximum forward Voltage drop per bridge element at 4.0A peak	$V_F$					1.1			Volts
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$					10.0			uA mA
Operating temperature range	$T_J$					-55 to +125			°C
Storage temperature range	$T_{STG}$					-55 to +150			°C

### Notes:

\* Unit mounted on metal chassis

\*\* Unit mounted on P.C. board

## RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – MAXIMUM FORWARD SURGE CURRENT

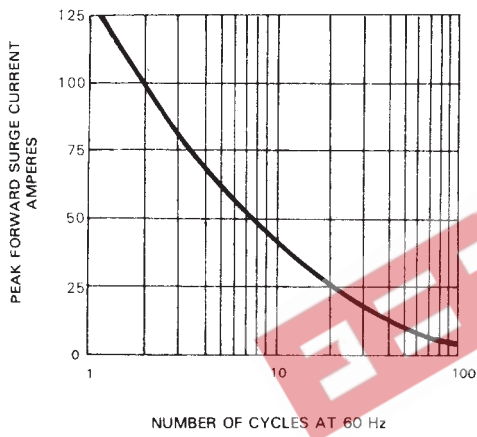


Fig. 2 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

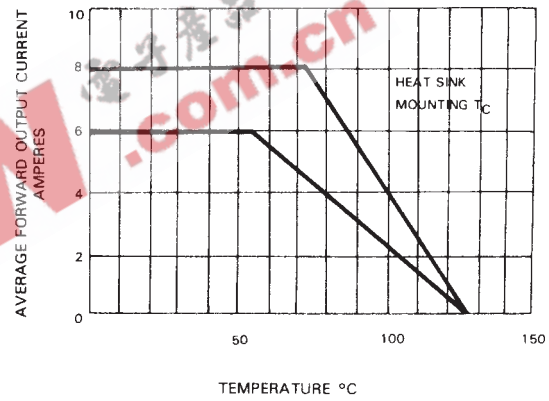


Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

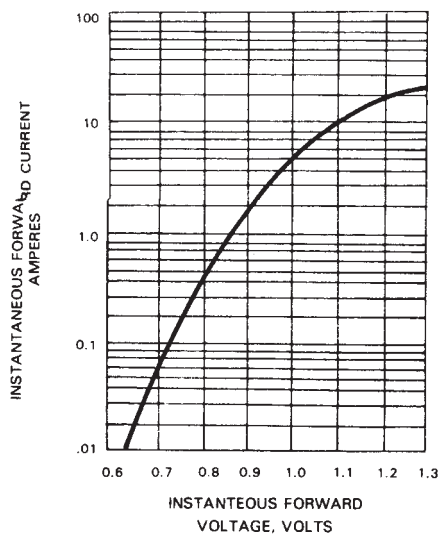


Fig. 4 – TYPICAL REVERSE CHARACTERISTICS

