



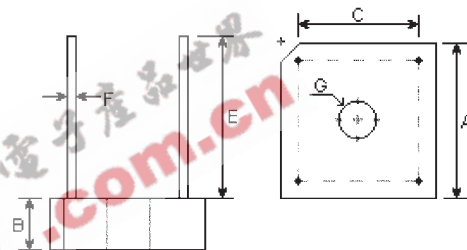
# KBPC6005 THRU KBPC610

**SINGLE-PHASE SILICON BRIDGE**  
**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 6.0 Amperes**

## Features

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

## BR6



DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.580	0.620	14.69	15.71	
B	0.230	0.270	5.84	6.86	
C	0.405	0.445	10.29	11.31	
E	0.750	-	19.1	-	
F	0.038	0.042	0.97	1.07	φ
G	HOLE FOR NO. 6 SCREW				

## 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%.

	Symbols	KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 606	KBPC 608	KBPC 610	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 $T_A=100^\circ\text{C}$ * $T_A=50^\circ\text{C}$ **	$I_{(AV)}$	6.0 6.0							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 element at 3.0A peak	$V_F$	1.0							Volt
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 1.0							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 — DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

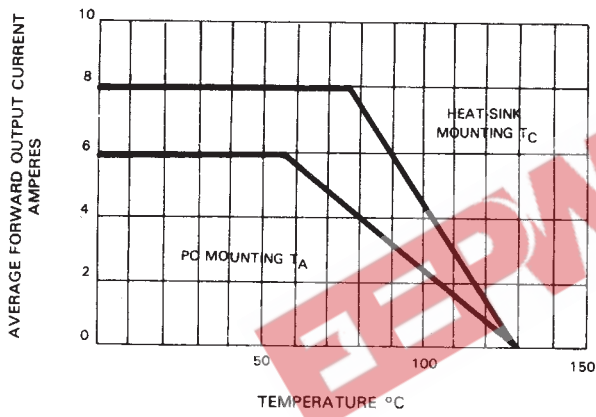


Fig. 2 — TYPICAL REVERSE CHARACTERISTICS

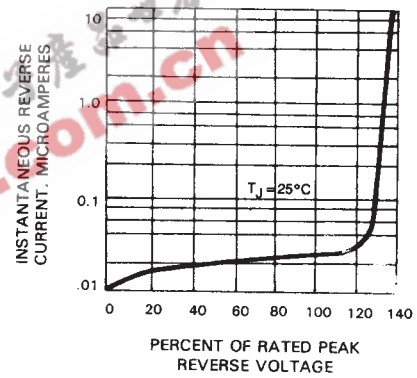


Fig. 3 — MAXIMUM FORWARD SURGE CURRENT

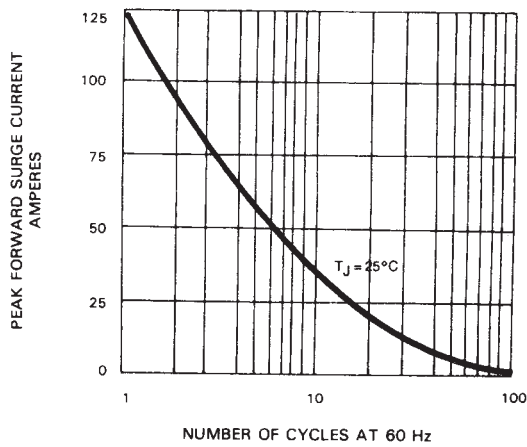


Fig. 4 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

