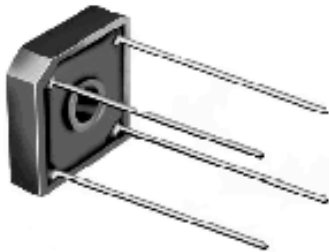


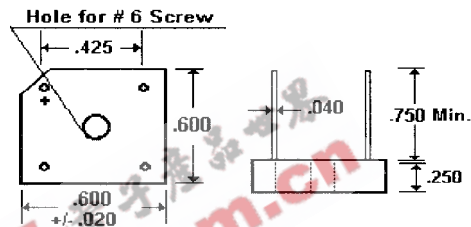
# 6.0 Amp SINGLE PHASE SILICON BRIDGE

**KBPC600 ... 610 Series**

## Description



## Mechanical Dimensions



Mechanical Data: Weight - 0.3 Ounces. Mounting Torque - 5.1 lbs. Mounting Position - Any.

## Features

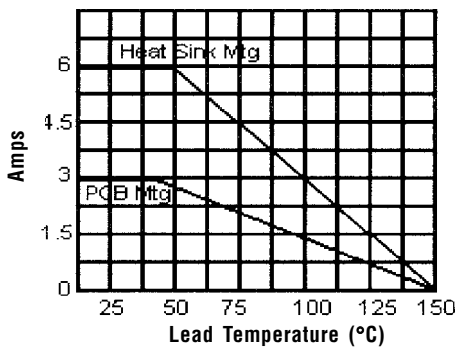
- COMPACT SIZE
- LOW LEAKAGE CURRENT
- 150 AMP SURGE OVERLOAD RATING
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	KBPC600...610 Series							Units
Maximum Ratings	KBPC600	KBPC601	KBPC602	KBPC604	KBPC606	KBPC608	KBPC610	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	560	700	Volts
DC Blocking Voltage... $V_{DC}$	50	100	200	400	600	800	1000	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_C = 50^\circ\text{C}$ , Alum. Heat Sink (5.5" x 6.0" x 0.11" Plate)				6.0				Amps
$T_A = 45^\circ\text{C}$ , PCB Mounting				3.0				Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 8.3 mS Single 1/2 Sine Wave Imposed on Rated Load				175				Amps
Point Rating for Fusing...(T < 8.3 mS)				127				A <sup>2</sup> S
Forward Voltage... $V_F$ Bridge Element @ 3.0 Amps				1.0				Volts
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage				5.0				$\mu\text{Amps}$
$T_A = 25^\circ\text{C}$				500				$\mu\text{Amps}$
$T_A = 125^\circ\text{C}$								
Typical Thermal Resistance... $R_{\theta JC}$ (Alum Heat Sink)				8.0				$^\circ\text{C} / \text{W} / \text{Leg}$
Typical Junction Capacitance... $C_J$	< 186 >			< 90 >			pF	
Operating & Storage Temperature Range... $T_J, T_{STRG}$				-55 to 150				$^\circ\text{C}$

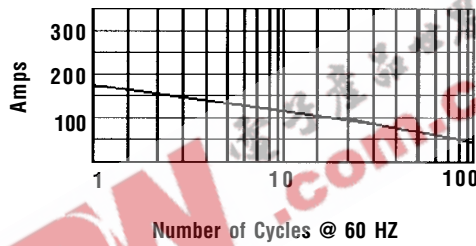
# 6.0 Amp SINGLE PHASE SILICON BRIDGE

**KBPC600 . . . 610 Series**

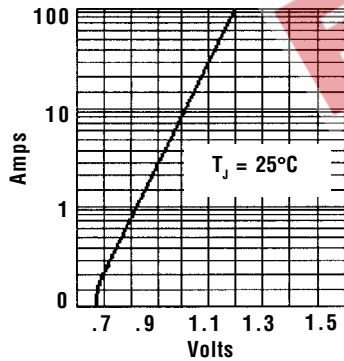
**Forward Current Derating Curve**



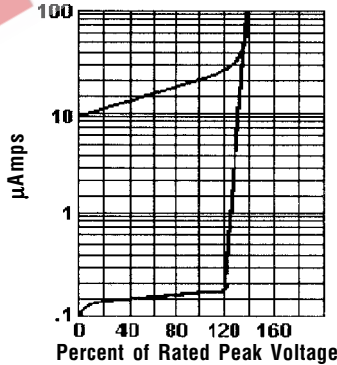
**Non-Repetitive Peak Forward Surge Current**



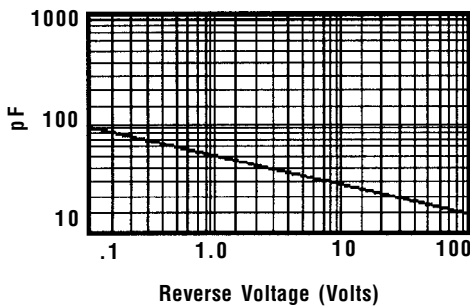
**Typical Instantaneous Forward Characteristics**



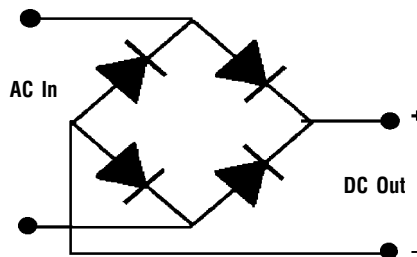
**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**Electrical Description**



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.