



**KBPC6005 THRU KBPC610**

**SINGLE PHASE SILICON  
BRIDGE RECTIFIER**

**TECHNICAL  
SPECIFICATION**

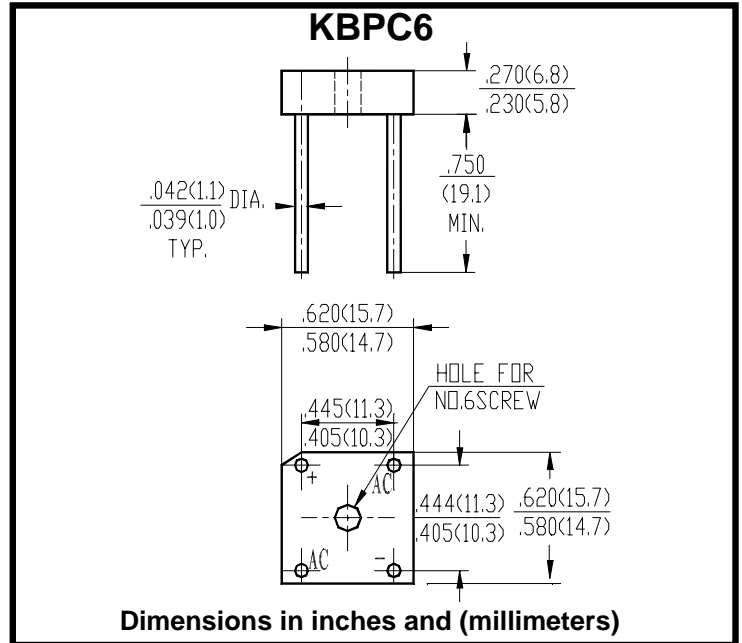
**VOLTAGE: 50 TO 1000V CURRENT: 6.0A**

**FEATURES**

- Surge overload rating: 125A peak
- High case dielectric strength
- High temperature soldering guaranteed: 250°C/10sec/0.375"(9.5mm) lead length at 5 lbs tension

**MECHANICAL DATA**

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Case: UL-94 Class V-O recognized flame retardant epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: Hole thru for #6 screw



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	UNITS
		6005	601	602	604	606	608	610	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current ( $T_c=75^\circ\text{C}$ )	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	$I_{FSM}$	125							A
Maximum Instantaneous Forward Voltage (at forward current 3.0A DC)	$V_F$	1.0							V
Maximum DC Reverse Current ( $T_a=25^\circ\text{C}$ )	$I_R$	10.0							$\mu\text{A}$
(at rated DC blocking voltage) ( $T_a=100^\circ\text{C}$ )		500							$\mu\text{A}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150							$^\circ\text{C}$