

# KBPC6005 THRU KBPC610

## SINGLE PHASE SILICON BRIDGE RECTIFIER

VOLTAGE: 50 to 1000V

CURRENT: 6.0A

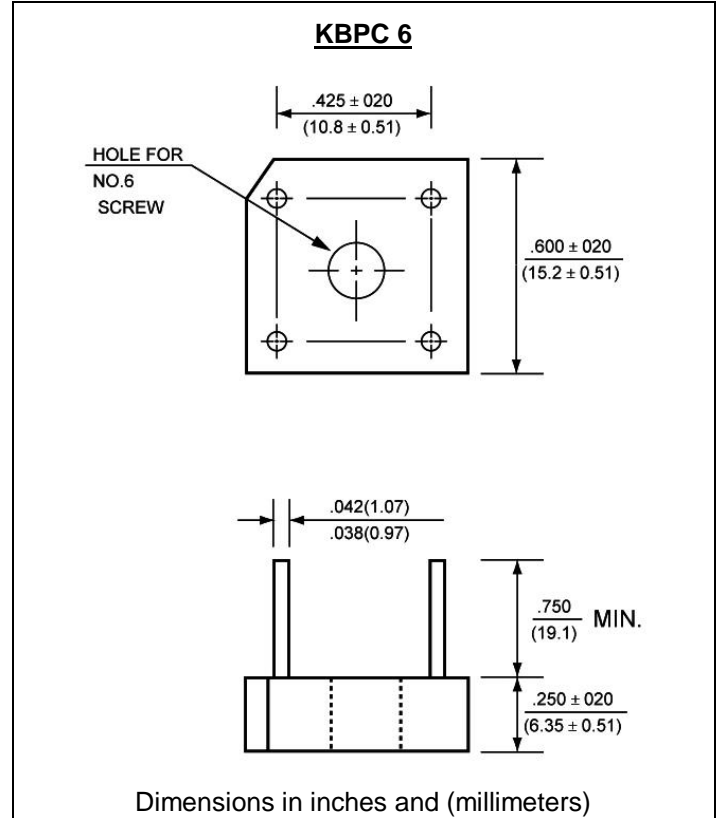


### FEATURE

Surge overload rating: 125 A peak  
High case dielectric strength

### MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002  
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting: 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)

	SYMBOL	KBPC6 005	KBPC6 01	KBPC6 02	KBPC6 04	KBPC6 06	KBPC6 08	KBPC6 10	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =75°C	I <sub>f(av)</sub>	6.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	125.0							A
Maximum Instantaneous Forward Voltage at forward current 3.0A DC	V <sub>f</sub>	1.0							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I <sub>r</sub>	10.0 200.0							μA μA
Operating Temperature Range	T <sub>j</sub>	-55 to +125							°C
Storage and Operation Junction Temperature	T <sub>stg</sub>	-55 to +150							°C

RATINGS AND CHARACTERISTIC CURVES KBPC6005 THRU KBPC610

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

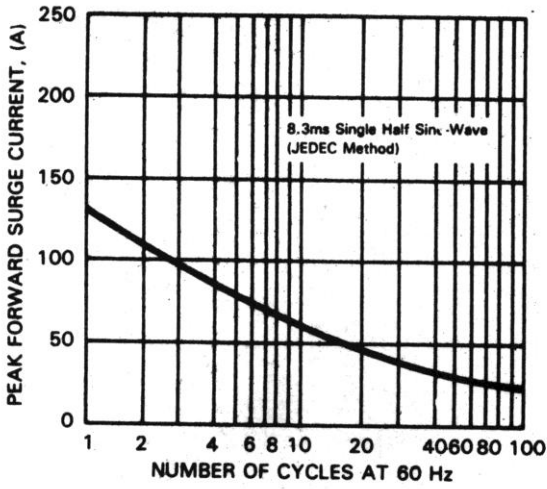


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

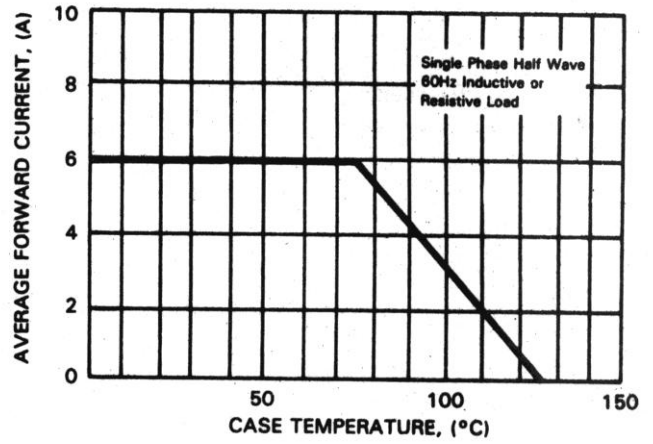


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

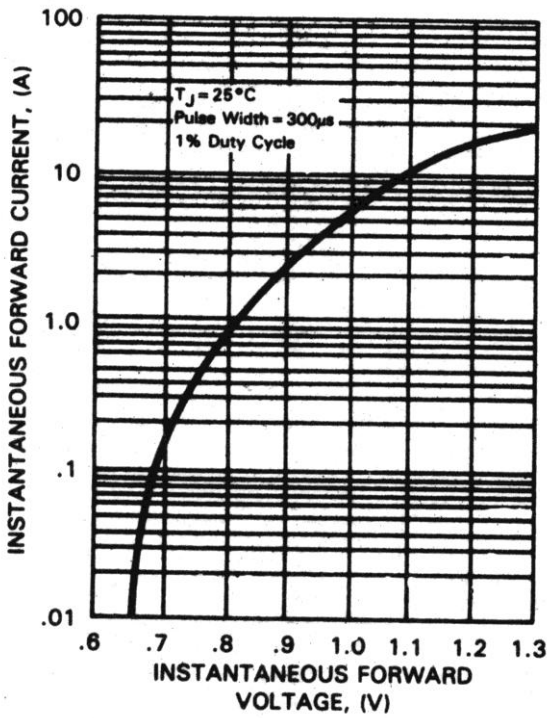


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

