

SAMYANG ELECTRONICS KBPC6005 --- KBPC610

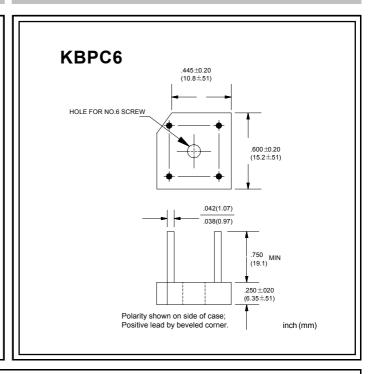
SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V

CURRENT: 6.0 A

FEATURES

- ♦ Surge overload rating to 125 Amperes peak
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 606	KBPC 608	KBPC 610	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}		70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forw ard output current @T _A =50℃	I _{F(AV)}	6.0						А	
Peak forw ard surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	125.0							А
Maximum instantaneous forw ard voltage @ 3.0 A	V _F	1.1						V	
Maximum reverse current $@T_A = 25 ^{\circ}C$ at rated DC blocking voltage $@T_A = 100 ^{\circ}C$	I _R	10.0 1.0							μA m A
Operating junction temperature range	T _J	- 55 + 125							${\mathbb C}$
Storage temperature range	T _{STG}	- 55 + 150							$^{\circ}$

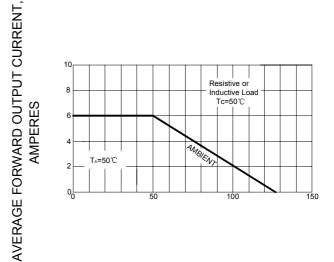
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FIG.1 - PEAK FORWARD SURGE CURRENT

PEAK FORWARD SURGE CURRENT, 125 100 ngle Half Sine Wave TJ=125 ℃ **AMPERES** 75 50 25 0 10 100

NUMBER OF CYCLES AT 60Hz

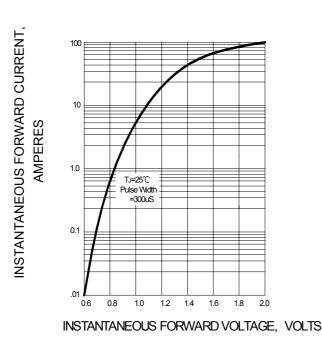
FIG.2 - FORWARD DERATING CURVE

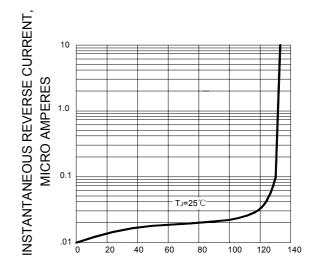


AMBIENT TEMPERATURE, °C

FIG.3 - TYPICAL FORWARD CHARACTERISTIC

FIG.4 - TYPICAL REVERSE CHARACTERISTIC





PERCENT OF RATED PEAK REVERSE VOLTAGE