



# KBPC600 THRU KBPC610

## SINGLE PHASE 6.0 AMPS SILICON BRIDGE RECTIFIERS

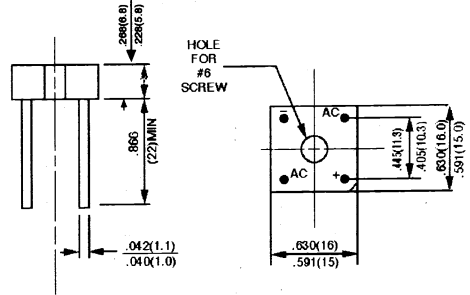


### FEATURES

- \* Surge overload rating 200 amperes peak
- \* Low forward voltage drop
- \* Small size, simple installation
- \* Leads solderable per MIL - STD - 202 Method 208

**VOLTAGE RANGE**  
50 to 1000 Volts  
**CURRENT**  
6.0 Amperes

### KBPC-6



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	KBPC 600	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 Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum D. C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C = 50^\circ C^{(1,2)}$	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	200							A
Maximum Forward Voltage Drop per element @ 3.0A	$V_F$	1.10							V
Maximum Reverse Current at Rated @ $T_A = 25^\circ C$ D. C. Blocking Voltage per element @ $T_A = 100^\circ C$	$I_R$	10 500							$\mu A$ $\mu A$
Operating Temperature Range	$T_J$	- 55 to + 125							$^\circ C$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^\circ C$

NOTE: (1) Bolt down on heat - sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with #6 screw  
(2) Unit mounted on  $5.5 \times 6.0 \times 0.11$ " thick ( $14 \times 15 \times 0.3$ cm) Al. Plate

## RATINGS AND CHARACTERISTIC CURVES (KBPC600 THRU KBPC610)

FIG. 1 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT - PER ELEMNET

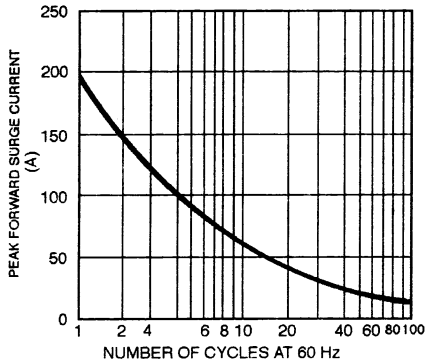


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

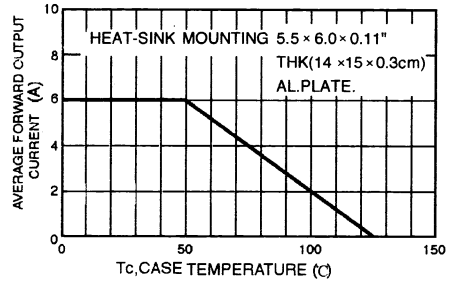


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER ELEMNET

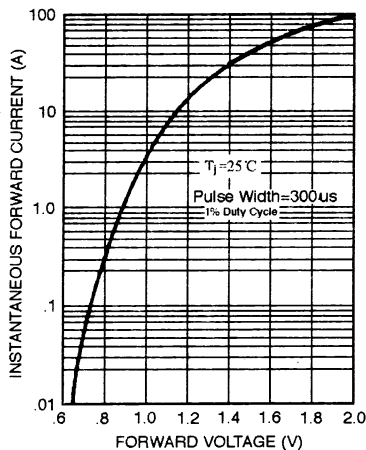


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER ELEMNET

