



## KBPC600G THRU KBPC610G

**SINGLE PHASE 6.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS**

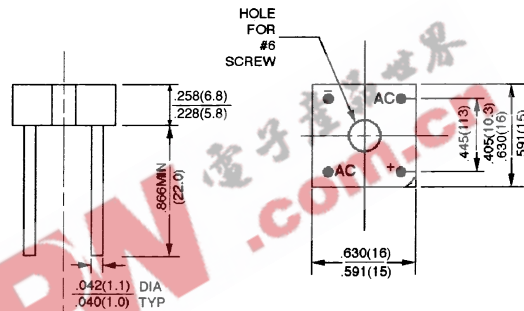


**VOLTAGE RANGE**  
50 to 1000 Volts  
**CURRENT**  
6.0 Amperes

### FEATURES

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

### 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 600G	KBPC 601G	KBPC 602G	KBPC 604G	KBPC 606	KBPC 608G	KBPC 610G	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 @ $T_C = 50^\circ\text{C}$	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150							A
Maximum Forward Voltage Drop per element @ 3.0A	$V_F$	1.10							V
Maximum Reverse Current at Rated @ $T_A = 25^\circ\text{C}$ D.C. Blocking Voltage per element @ $T_A = 125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

- 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 6.0 x 6.0 x 0.11" thick (15 x 15 x 0.3cm) Al. Plate



## RATINGS AND CHARACTERISTIC CURVES (KBPC600G THRU KBPC610G)

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

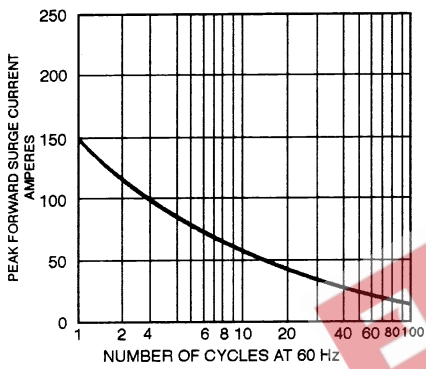


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

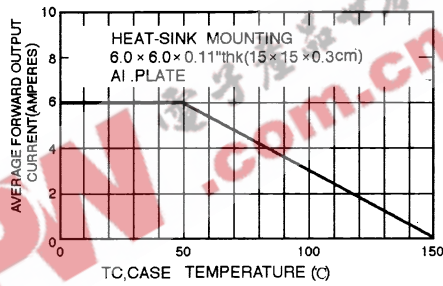


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

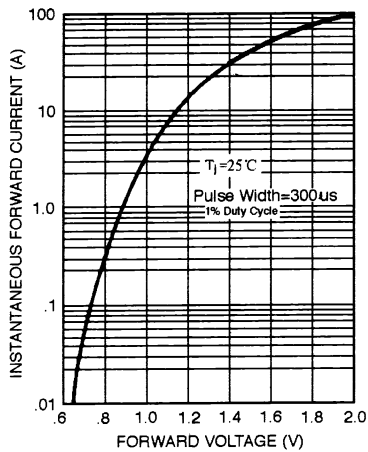


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

