



## KBU600G THRU KBU610G

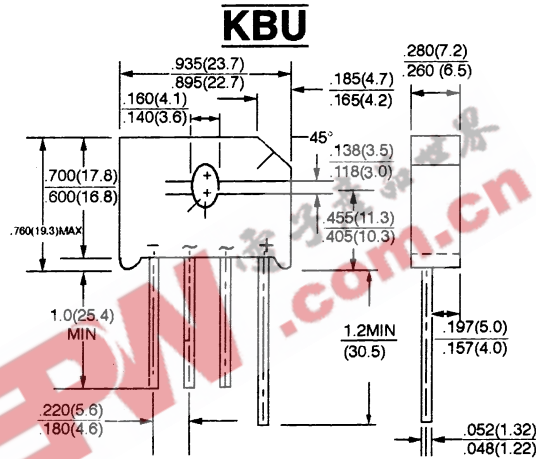
SINGLE PHASE 6.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS



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

### FEATURES

- \* Ideal for printed circuit board
- \* Reliable low cost construction
- \* Surge overvoltage soldering guaranteed:



### 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	KBU 600G	KBU 601G	KBU 602G	KBU 604G	KBU 606G	KBU 608G	KBU 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 @ $T_C = 100^\circ\text{C}^{(1)}$ $T_A = 40^\circ\text{C}^{(3)}$	$I_{F(AV)}$	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 @ $T_A = 100^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Typical thermal resistance per leg (2) (3)	$R_{\theta JA}$ $R_{\theta JC}$	18.6 3.1							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

**NOTE:**

- (1) Recommended mounted position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
- (2) Thermal resistance from junction to ambient with units in free air, P. C. B. mounted on 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length
- (3) Thermal resistance from junction to case with units mounted on a 2.6 x 1.4 x 0.06" thick (6.5 x 3.5 x 0.15cm) Plate.



## RATINGS AND CHARACTERISTIC CURVES (KBU600G THRU KBU610G)

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

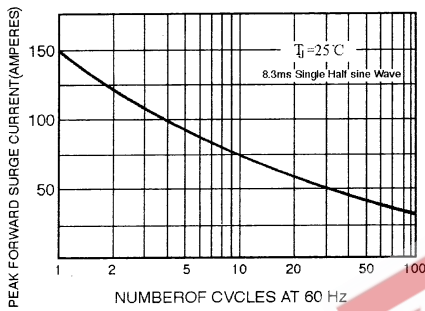


FIG. 2 - TYPICAL FORWARD OUTPUT DERATING CURVE

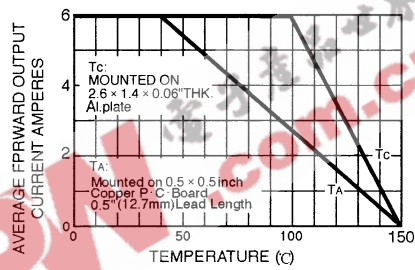


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS - PER ELEMENT

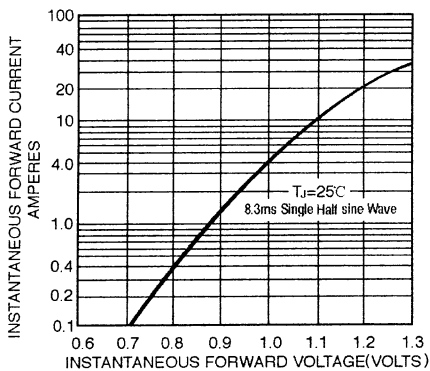


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS - PER ELEMENT

