



# KBU800 THRU KBU810

## SINGLE PHASE 8.0 AMPS SILICON BRIDGE RECTIFIERS

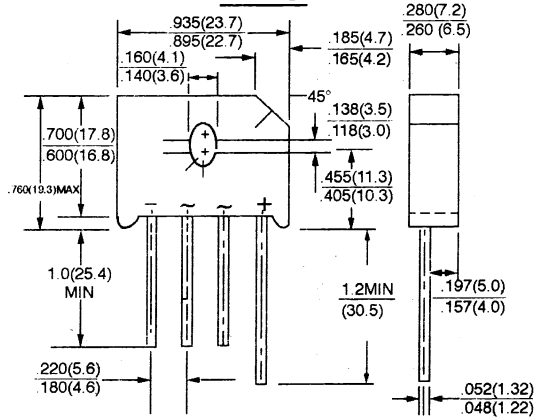


### FEATURES

- \* High Surge Current Capability
- \* Ideal for printed circuit board
- \* Reliable low cost construction technique results in inexpensive product

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

### KBU



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	KBU 800	KBU 801	KBU 802	KBU 804	KBU 806	KBU 808	KBU 810	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 @ $T_C = 90^\circ\text{C}^{(1)(3)}$ $T_A = 45^\circ\text{C}^{(2)}$	$I_{F(AV)}$					8.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$					250			A
Maximum Forward Voltage Drop per element @ 4.0A	$V_F$					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			$\mu\text{A}$
						500			$\mu\text{A}$
Typical thermal resistance per leg (NOTE 2) (NOTE 3)	$R_{\theta JA}$ $R_{\theta JC}$					18			$^\circ\text{C/W}$
						3.0			$^\circ\text{C/W}$
Operating Temperature Range	$T_J$					-55 to +125			$^\circ\text{C}$
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) Units mounted in free air, no heatsink, P. C. B. 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads
- (3) Units mounted on a 3.0 x 3.0 x 0.11" (7.5 x 7.5 x 0.3cm) Al. Plate heatsink

## RATINGS AND CHARACTERISTIC CURVES (KBU800 THRU KBU810)

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

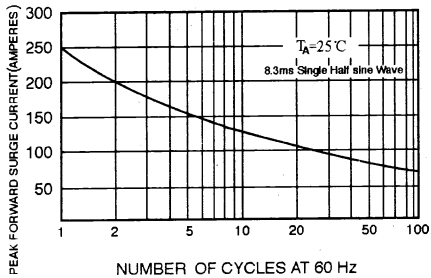


FIG. 2 - TYPICAL FORWARD OUTPUT DERATING CURVE

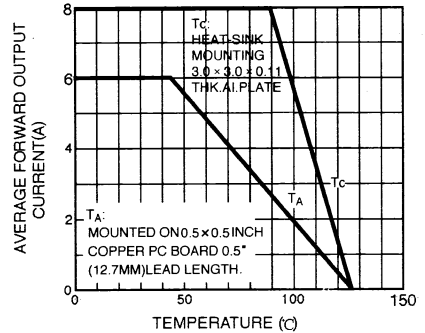


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD PER BRIDGE ELEMENT

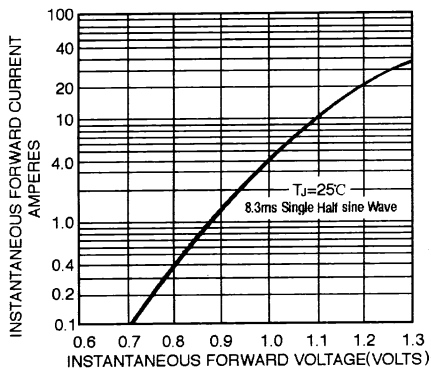


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS - PER ELEMENT

