



KBU800 THRU KBU810

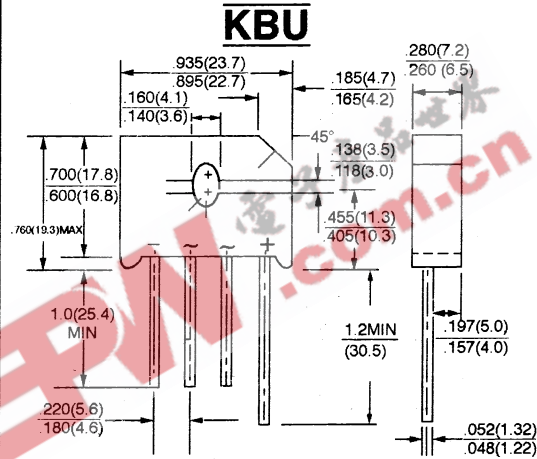
SINGLE PHASE 8.0 AMPS SILICON BRIDGE RECTIFIERS



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



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 @ $T_C = 90^\circ C^{(1)(3)}$ $T_A = 45^\circ C^{(2)}$	$I_{F(AV)}$					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 @ $T_A = 25^\circ C$ D. C. Blocking Voltage per element @ $T_A = 100^\circ C$	I_R					10			μA
						500			μA
Typical thermal resistance per leg (NOTE 2) (NOTE 3)	$R_{\theta JA}$ $R_{\theta JC}$					18			$^\circ C/W$
						3.0			
Operating Temperature Range	T_J					- 55 to + 125			$^\circ C$
Storage Temperature Range	T_{STG}					- 55 to + 150			$^\circ C$

NOTE:

- (1) Recommended mounted position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with # 6 screws
- (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

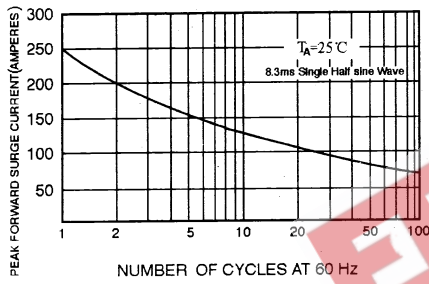


FIG.2 - TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

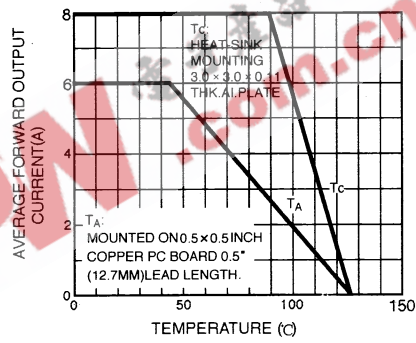


FIG.3 - TYPICAL INSTANTANEOUS FORWARD PER BRIDGE ELEMENT

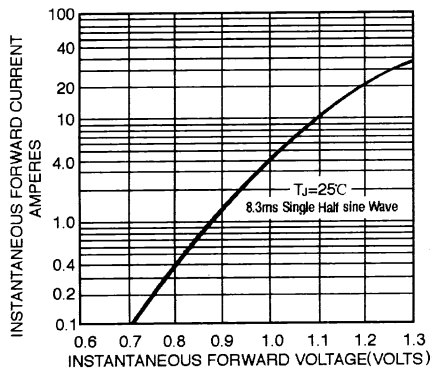


FIG.4 - TYPICAL REVERSE CHARACTERISTICS - PER ELEMENT

