



KBU1000 THRU KBU1010

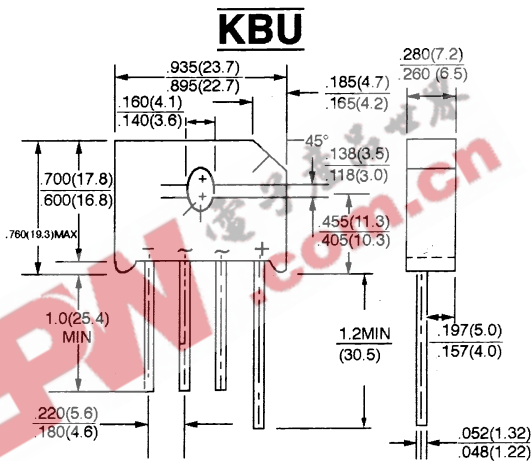
SINGLE PHASE 10 AMPS SILICON BRIDGE RECTIFIERS



VOLTAGE RANGE
50 to 1000 Volts
CURRENT
10.0 Amperes

FEATURES

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



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 1000	KBU 1001	KBU 1002	KBU 1004	KBU 1006	KBU 1008	KBU 1010	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 @ $T_C = 75^\circ\text{C}$ (1,2)	$I_{F(AV)}$	10.0							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 @ 5.0A	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							μA μA
Typical thermal resistance per leg (NOTE 2)	$R_{\theta JC}$	2.2							$^\circ\text{C}/\text{W}$
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 on a 4.0 x 4.0 x 0.11" thick (10.2 x 10.2 x 0.3cm) Al. Plate heatsink



RATINGS AND CHARACTERISTIC CURVES (KBU1000 THRU KBU1010)

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

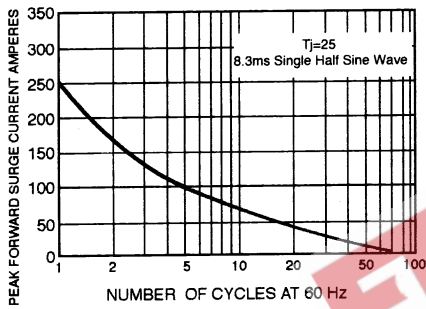


FIG.2 - TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

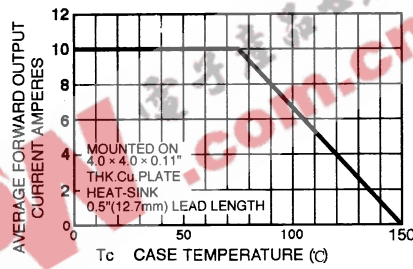


FIG.3 - TYPICAL INSTANTANEOUS FORWARD PER BRIDGE ELEMENT

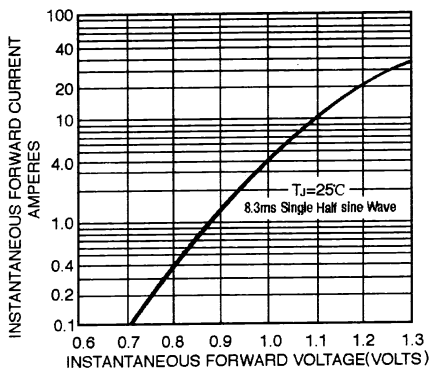


FIG.4 - TYPICAL REVERSE CHARACTERISTICS - PER ELEMENT

