

Kingtronics®

KBU8005 THUR KBU810

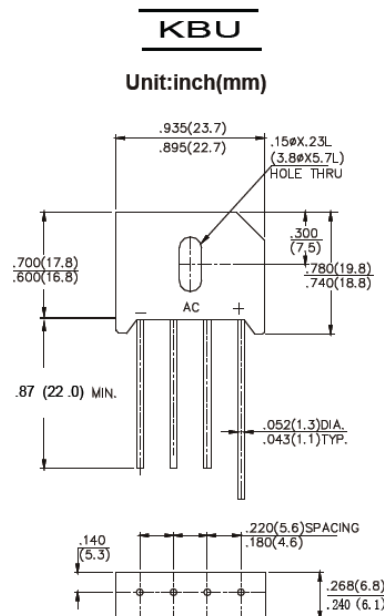
FEATURE

- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:
260°C/10 second, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #6 screw, 5 in,- lbs. Torqute Max.
- Weight: 0.27 ounce, 7.59 gram

CURRENT 8.0 Ampere VOLTAGE RANGE 50 to 1000



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%

Type Number	Symbols	KBU 8005	KBU 801	KBU8 02	KBU 804	KBU 806	KBU 808	KBU 810	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_A = 100^\circ\text{C}$	$I_{(AV)}$	8.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	175							Amps
Rating for Fusing ($t < 8.3\text{ms}$)	$I^2 t$	93							$\text{A}^2 \text{S}$
Maximum instantaneous forward voltage Drop per bridge element at 4.0A	V_F	1.0							Volts
Maximum DC reverse current $T_A = 25^\circ\text{C}$	I_R	5.0							μA
at rated DC blocking voltage $T_A = 100^\circ\text{C}$		1.0							mA
Typical junction capacitance at (Note 1)	C_J	105							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	4.7							$^\circ\text{C}/\text{W}$
Operating temperature range	T_J	(-65 to +150)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-65 to +150)							$^\circ\text{C}$

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- Notes:** 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
 2. Unit mounted on 2.6" X 1.4" X 0.06" thick (6.3 X 3.5 X 0.15cm) Al. plate.

RATING AND CHARACTERISTIC CURVES

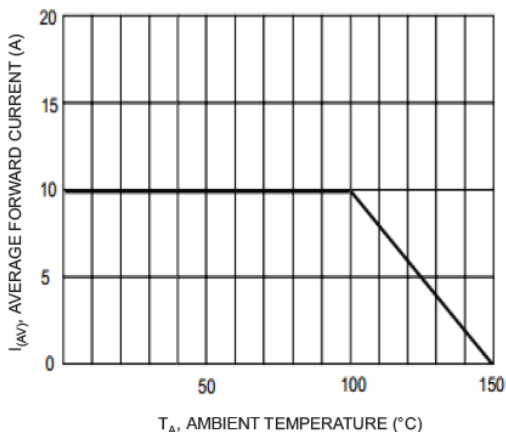


FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

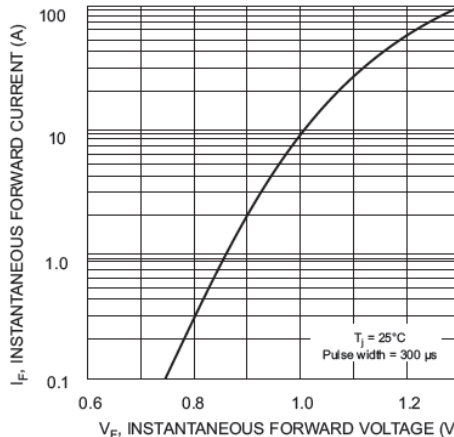


FIG. 2 - TYPICAL FORWARD CHARACTERISTICS

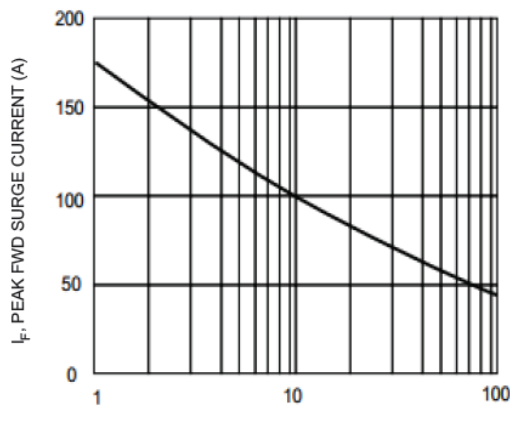


Fig. 3 Max Non-Repetitive Forward Surge Current

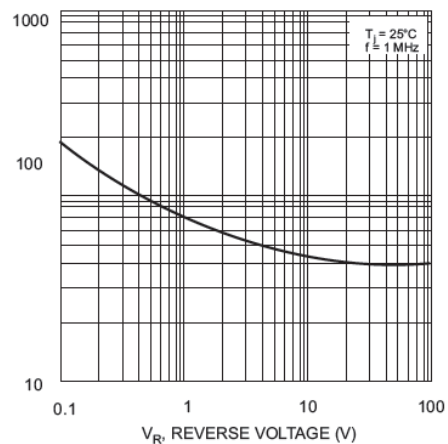


Fig. 4 Typ Junction Capacitance per element

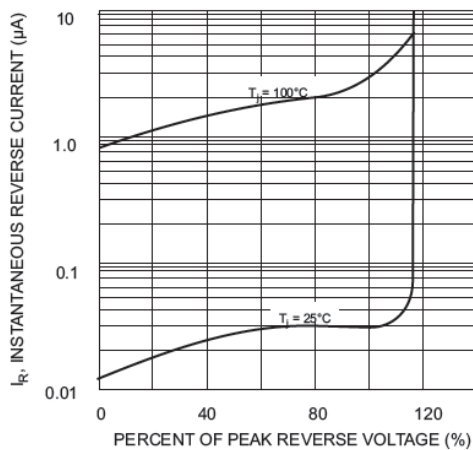


Fig. 5 Typical Reverse Characteristics

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