Kingtronics®

KBU6005 THRU KBU610

SINGLE-PHASE BRIDGE RECTIFIER

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

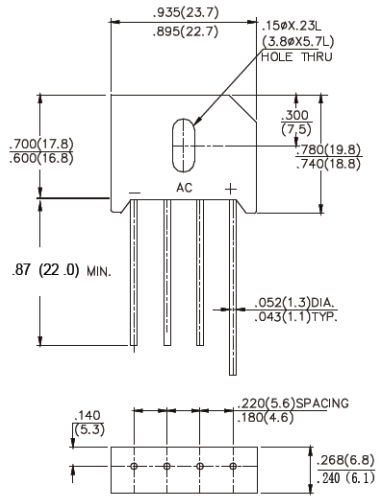
FEATURES

High forward surge current capability.
Ideal for printed circuit board.
High temperature soldering guaranteed:
260℃/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 208℃.
Polarity: Polarity symbols marked on case.
Mounting: Thru hole for #6 screw, 5 in,- lbs. Torque Max.
Weight: 0.27 ounce, 7.59 gram.

KBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER		SYMBOL	KBU 6005	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	UNIT
Maximum Repetitive Peak Revere 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 Output Current at T_C=100℃		$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	150							Amps
Rating for Fusing(t<8.3ms)		I^2T	93							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 3.0A		V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	T_A=25℃	I_R	10							μA
	T_A=100℃		1.0							mA
Typical Junction Capacitance (Note 1)		C_j	105							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JC}$	4.7							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{STG}	-65 to +150							

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.

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RATINGS AND CHARACTERISTIC CURVES

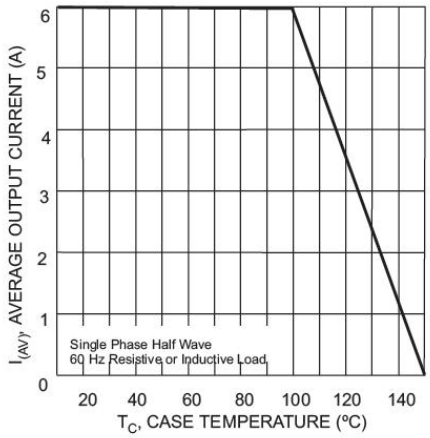

Fig. 1 Forward Current Derating Curve

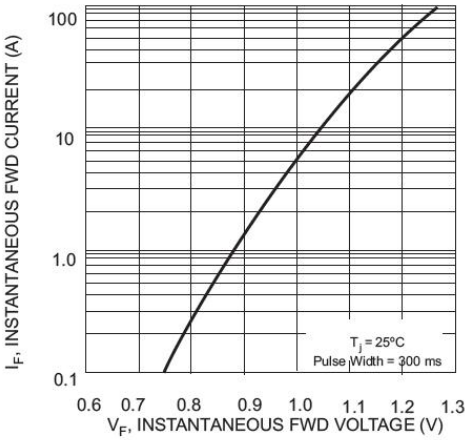

Fig. 2 Typical Forward Characteristics, per element

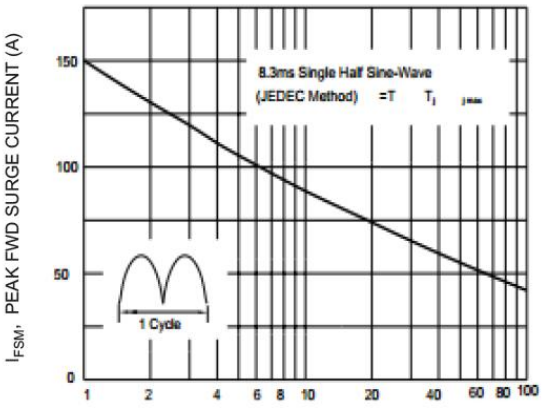

Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

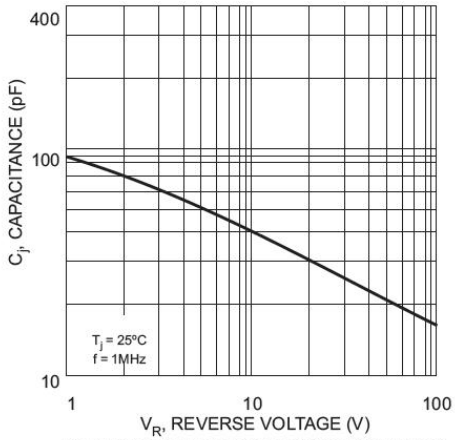

Fig. 4 Typical Junction Capacitance Per Element

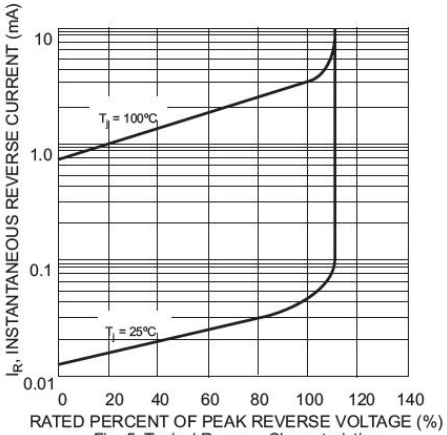

Fig. 5 Typical Reverse Characteristics

Note: Specifications are subject to change without notice.