

Kingtronics®

KBU6005 THRU KBU610

SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

FEATURES

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.

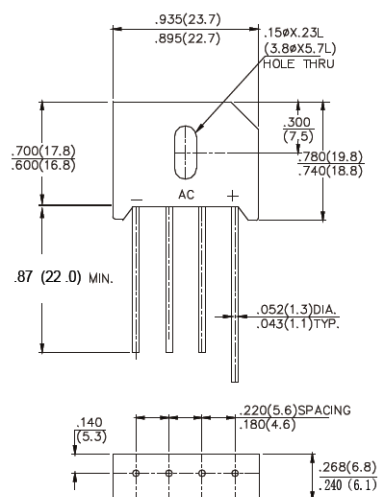
MECHANICAL DATA

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

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%

Dimensions in inches and (millimeters)



PARAMETER	SYMBOL	KBU 6005	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	UNIT
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 Output Current at $T_C=100^\circ C$	$I_{(AV)}$	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	$T_A=25^\circ C$	10							μA
	$T_A=100^\circ C$	1.0							mA
Typical Junction Capacitance (Note 1)	C_j	105							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	4.7							$^\circ C/W$
Operating Temperature Range	T_J	-65 to +150							$^\circ C$
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

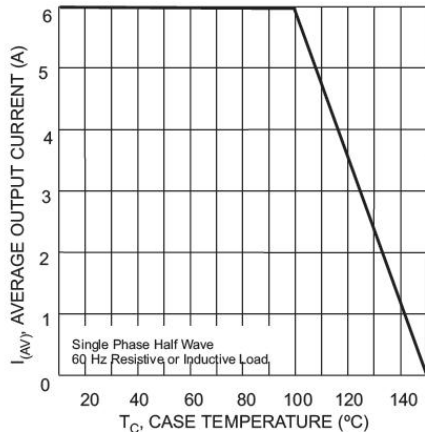


Fig. 1 Forward Current Derating Curve

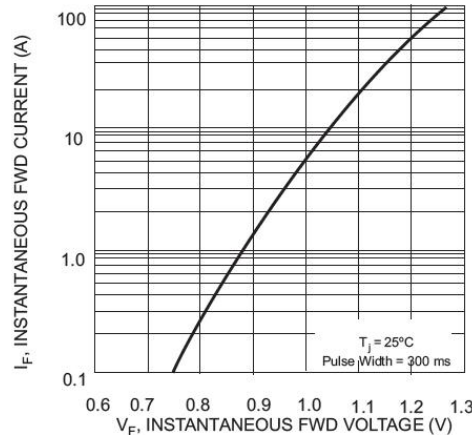


Fig. 2 Typical Forward Characteristics, per element

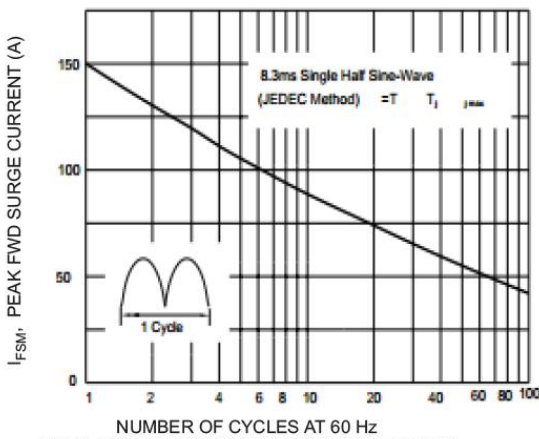


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

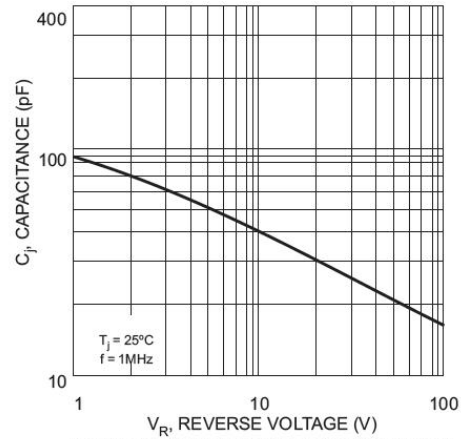


Fig. 4 Typical Junction Capacitance Per Element

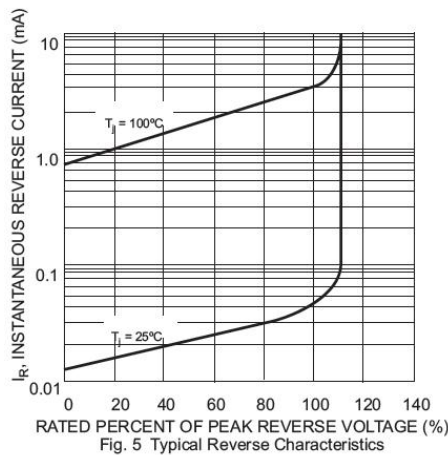


Fig. 5 Typical Reverse Characteristics

Note: Specifications are subject to change without notice.

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