Kingtronics®

KBJ6005 THRU KBJ610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

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

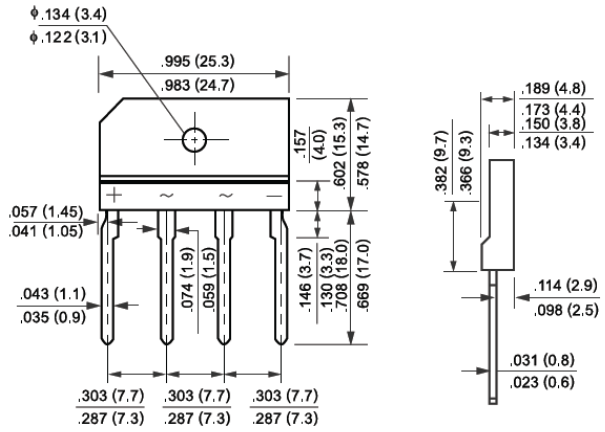
FEATURES

Rating to 1000V PRV.
Ideal for printed circuit board.
Reliable low cost construction utilizing molded plastic Technique.
The plastic material has UL flammability classification 94V-0.
Electrically isolated base-1500 Volts.

MECHANICAL DATA

Polarity: Symbols molded on body.
Weight: 0.15 ounces, 4.0 grams.
Mounting position: Any.

KBJ



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	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	6.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	170							A
Maximum forward Voltage at 3.0A DC	V_F	1.0							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	120							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	80							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.5							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

1- Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2- Unit Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

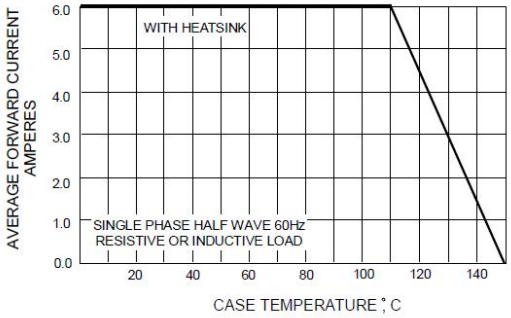


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

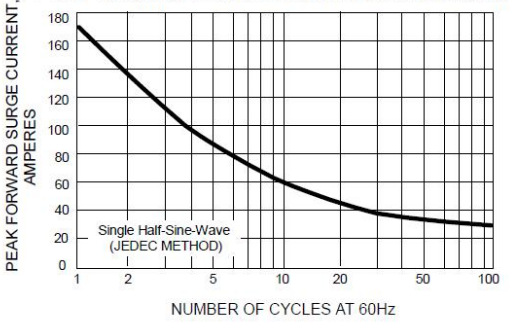


FIG.3 - TYPICAL JUNCTION CAPACITANCE

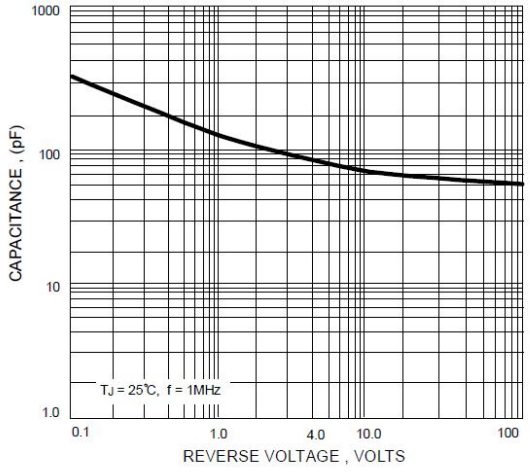


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

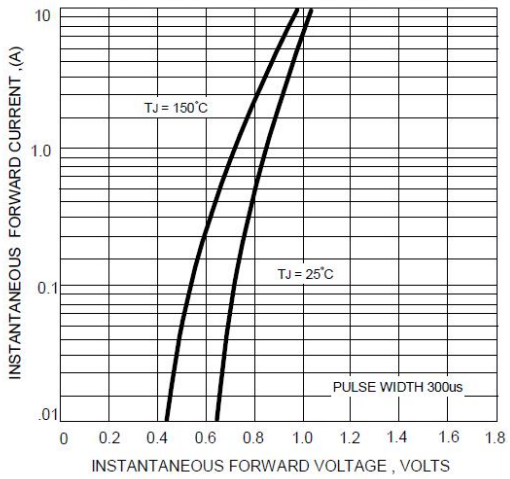
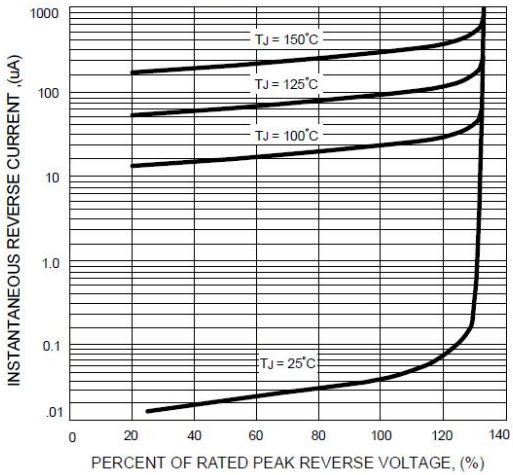


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.