

# KBU6005 THRU KBU610

## Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 6.0 Amperes

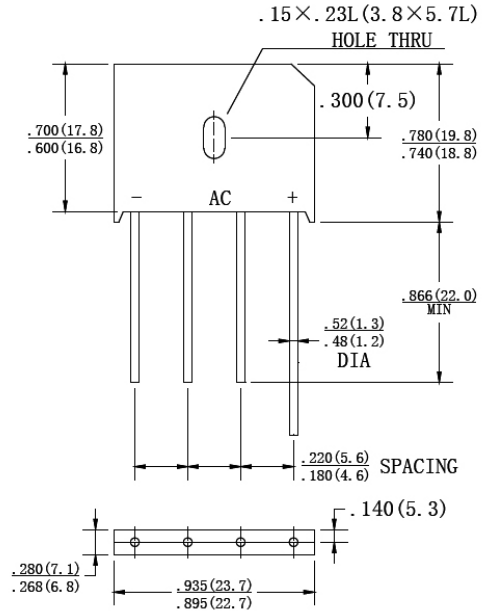
# KBU

### FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ◆ UL Recognized File number: E347214

### MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Lead: solder plated
- ◆ Polarity: As marked



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOLS	KBU 6005	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T <sub>A</sub> =65°C	I <sub>(AV)</sub>	6.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	175							A
Maximum Instantaneous Forward Voltage at 6.0A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C Rated DC Blocking voltage per leg T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 500							μA
Typical Thermal Resistance (Note1) (Note2)	R <sub>θJA</sub> R <sub>θJC</sub>	8.6 3.1							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

**Note:** 1. Thermal Resistance from Junction to Ambient with units in Free Air, P.C.B. Mounted on 0.5×0.5" (12×12mm) Copper Pads, 0.375" (9.5mm) Lead Length.

2. Thermal Resistance from Junction to Case with units Mounted on 2.6×1.4×0.06" Thick (6.5×3.5×0.15cm) Al. Plate.

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## RATING AND CHARACTERISTIC CURVES KBU6005 THRU KBU610

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELELMENT

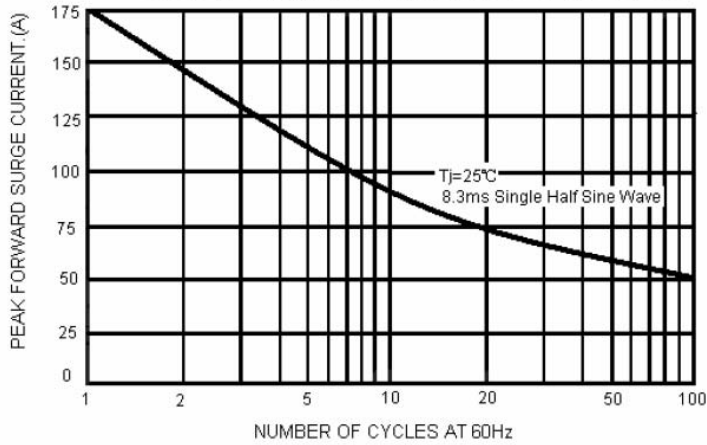


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

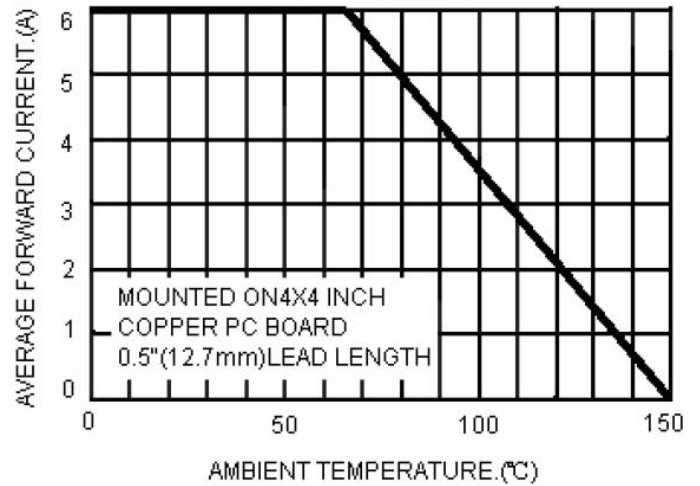


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

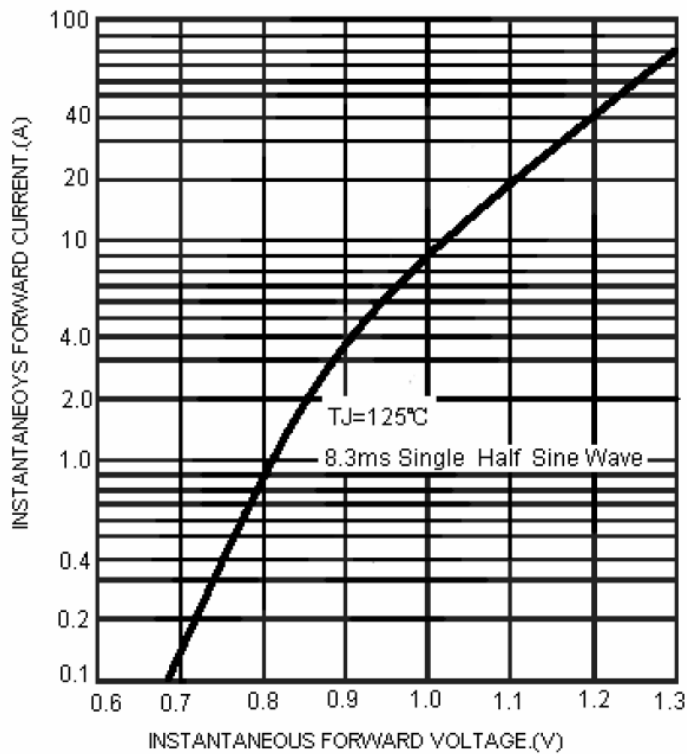
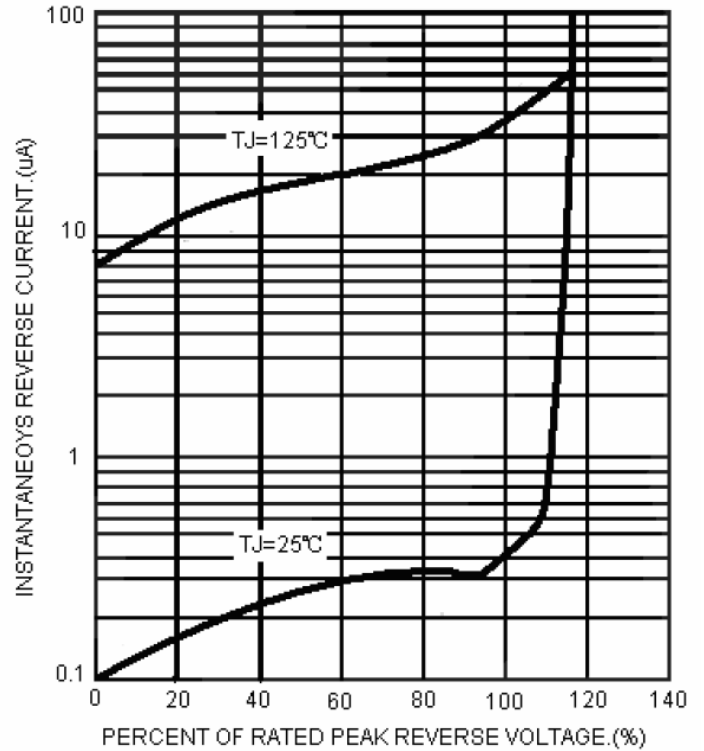


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice.