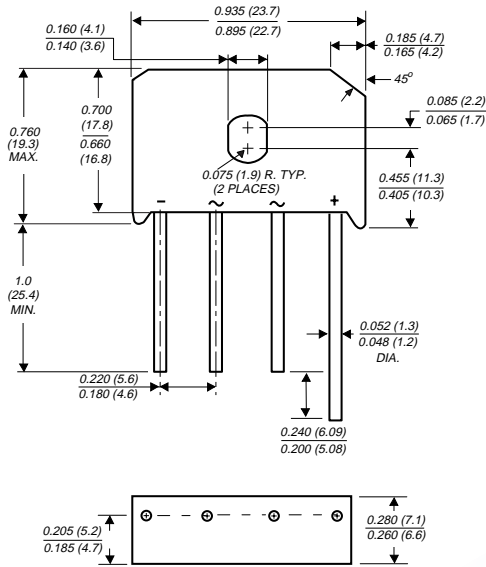


# KBU8A THRU KBU8M

## SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts      Forward Current - 8.0 Amperes

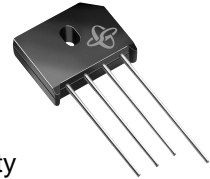
### Case Style KBU



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL listed under Recognized Component Index, file number E54214
- ◆ High case dielectric strength of 1500 VRMS
- ◆ Ideal for printed circuit boards
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension



### MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Mounting Position:** Any (NOTE 1)

**Mounting Torque:** 5 in.-lb. max.

**Weight:** 0.3 ounce, 8.0 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

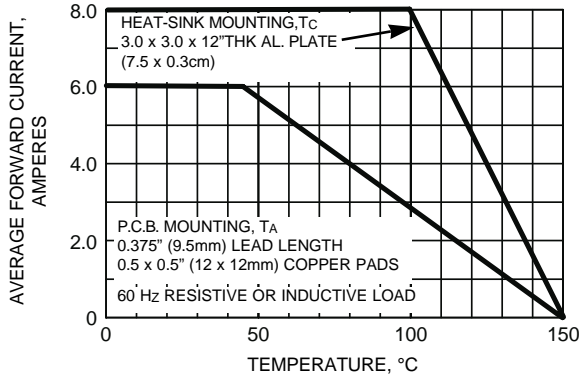
	SYMBOLS	KBU 8A	KBU 8B	KBU 8D	KBU 8G	KBU 8J	KBU 8K	KBU 8M	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at T <sub>C</sub> =100°C (NOTE 1, 3) T <sub>A</sub> =45°C (NOTE 2)	I <sub>(AV)</sub>	8.0 6.0							Amps
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T <sub>J</sub> =150°C	I <sub>FSM</sub>	300.0							Amps
Maximum instantaneous forward voltage drop per leg at 8.0A	V <sub>F</sub>	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage per leg T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>	10.0 1.0							μA mA
Typical thermal resistance per leg (NOTE 2) (NOTE 3)	R <sub>θJA</sub> R <sub>θJC</sub>	18.0 3.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-50 to +150							°C

#### NOTES:

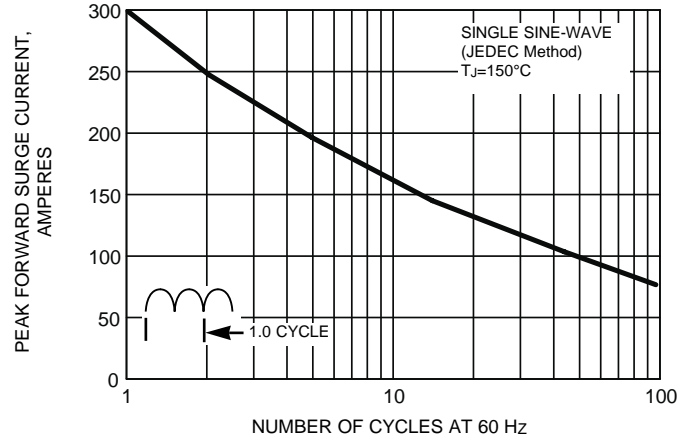
- (1) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
- (2) Units mounted in free air, no heatsink, P.C.B. at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads
- (3) Units mounted on a 3.0 x 3.0" x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. Plate heatsink

# RATINGS AND CHARACTERISTICS CURVES KBU8A THRU KBU8M

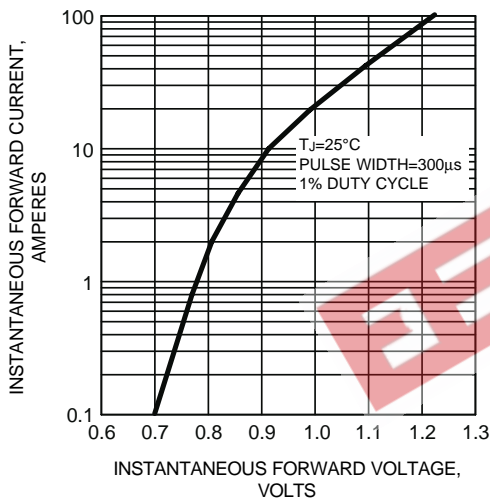
**FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT**



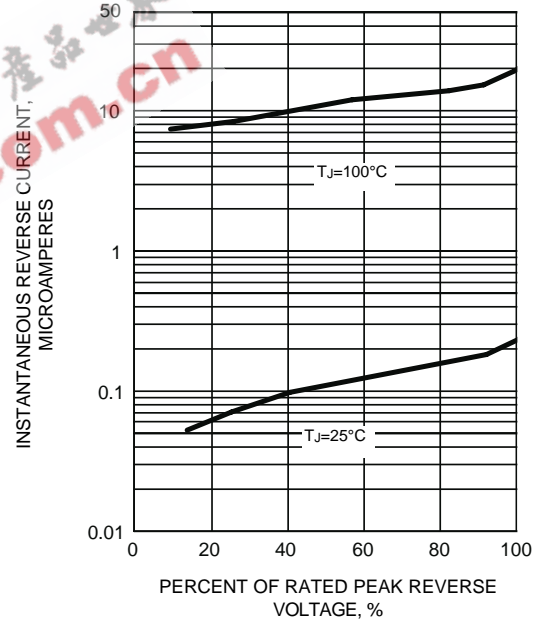
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG**

