

# KBU4A ~ KBU4M

# Silicon Bridge Rectifiers

**PRV : 50 - 1000 Volts**

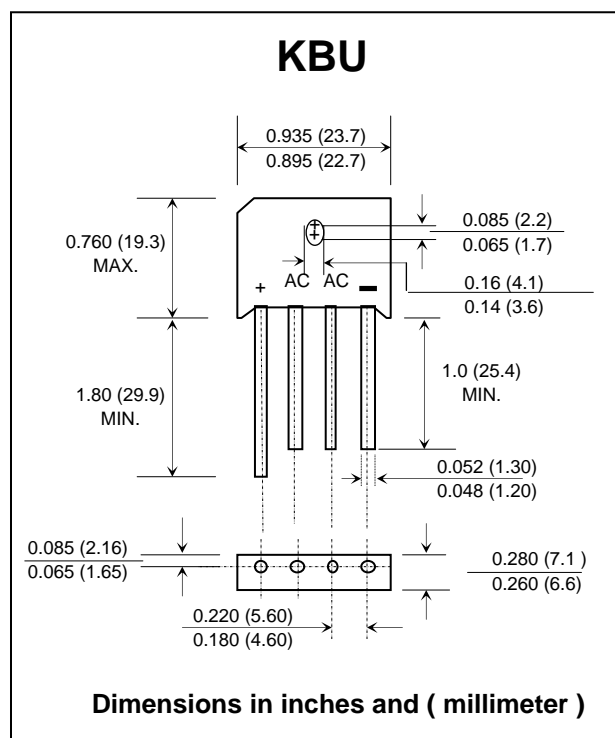
**Io : 4.0 Amperes**

### FEATURES :

- \* Ideal for printed circuit boards
- \* High surge current capability
- \* High case dielectric strength of 1500 V<sub>RMS</sub>
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Molded plastic
- \* Polarity : Polarity symbols marked on case
- \* Mounting position : Any
- \* Weight : 8.0 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

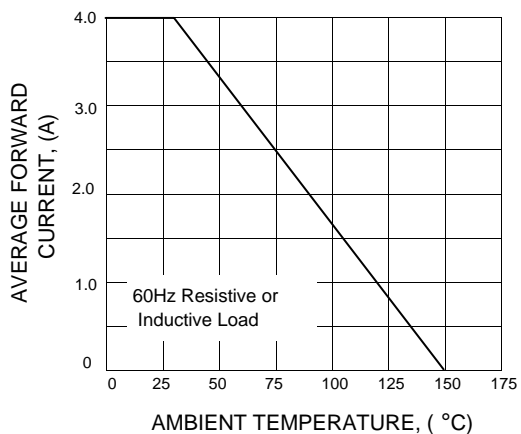
RATING	SYMBOL	KBU	KBU	KBU	KBU	KBU	KBU	KBU	UNIT
		4A	4B	4D	4G	4J	4K	4M	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current at Ta = 30 °C (Note 1)	I <sub>F(AV)</sub>	4.0							A
Peak Forward Surge Current, Single sine-wave Superimposed on rated load	I <sub>FSM</sub>	200							A
Maximum Instantaneous Forward Voltage per leg at I <sub>F</sub> = 4 A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	I <sub>R</sub>	5.0 (Ta = 25°C)							µA
	I <sub>R(H)</sub>	1.0 (Ta = 125°C)							mA
Thermal Resistance, Junction to Ambient, per leg (Note1)	R <sub>θJA</sub>	19							°C/W
Thermal Resistance, Junction to Lead, per leg (Note2)	R <sub>θJL</sub>	4.0							°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 50 to + 150							°C

### Notes :

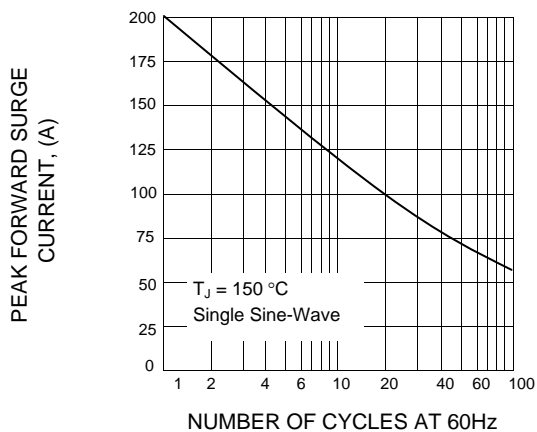
- (1) Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12 mm) copper pads and 0.375" (9.5 mm) lead length.
- (2) Units mounted on a 2.0 x 1.6 x 0.3" thick (5 x 4 x 0.8 cm) Al.Plate

## RATING AND CHARACTERISTIC CURVES ( KBU4A - KBU4M )

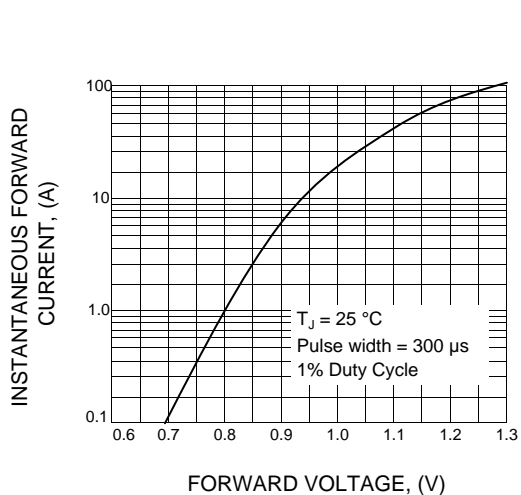
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



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



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

