

# KBU8A ~ KBU8M

# Silicon Bridge Rectifier

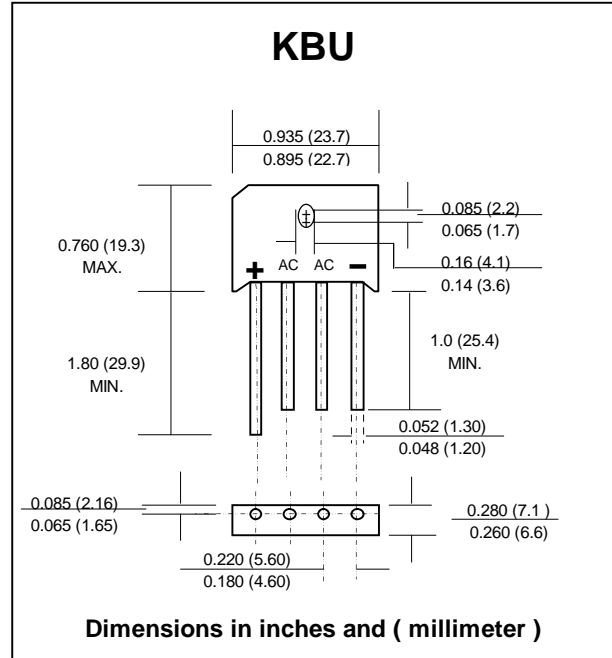
**PRV : 50 - 1000 Volts**  
**Io : 8.0 Amperes**

**FEATURES :**

- \* Ideal for printed circuit boards
- \* Reliable low cost construction utilizing molded plastic technique
- \* Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- \* **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.  
 This rating are limiting values above which the serviceability of any semiconductor device may be impaired.

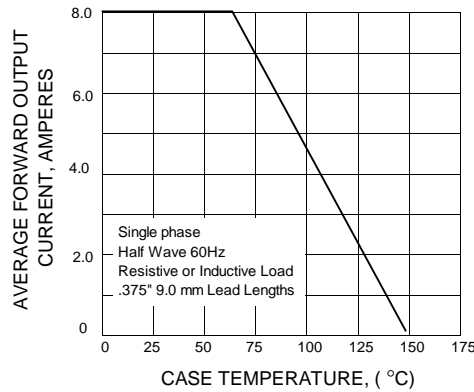
RATING	SYMBOL	KBU 8A	KBU 8B	KBU 8D	KBU 8G	KBU 8J	KBU 8K	KBU 8M	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current $T_c=65^{\circ}C$	$I_{F(AV)}$	8.0							A
Peak Forward Surge Current, 8.3ms Single half sine-wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	250							A
Maximum Instantaneous Forward Voltage per leg at $I_F = 8 A$	$V_F$	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	$I_R$	10 ( $T_a = 25^{\circ}C$ )							$\mu A$
	$I_{R(H)}$	1000 ( $T_a = 100^{\circ}C$ )							
Thermal Resistance, Junction to Ambient, per leg (Note1)	$R_{\theta JA}$	18							$^{\circ}C/W$
Operating Junction Temperature Range	$T_J$	- 55 to + 150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^{\circ}C$

**Note :**

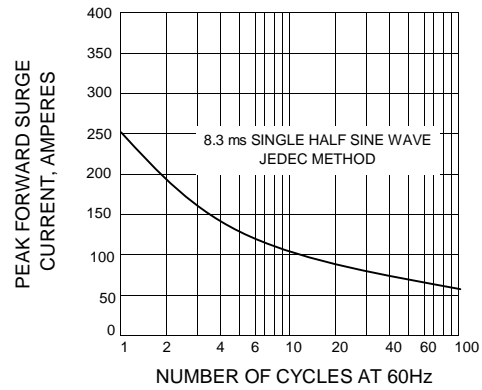
(1) Device mounted on PCB with 0.375" (9.5 mm) lead length and 0.5 x 0.5" (13 x 13 mm) copper pads.

## RATING AND CHARACTERISTIC CURVES ( KBU8A - KBU8M )

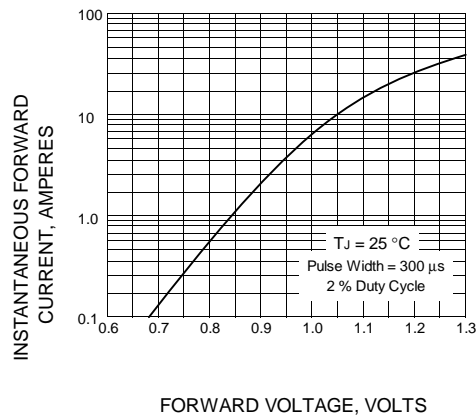
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



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



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

