

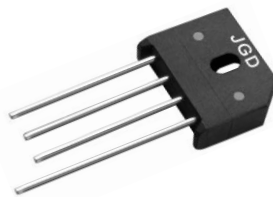


# KBU8005 THRU KBU810

## Single Phase 8.0 Amps. Glass Passivated Bridge Rectifiers

### Features

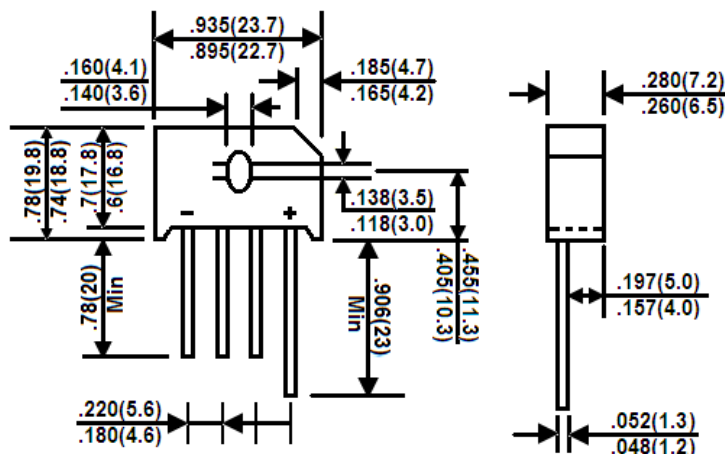
- \* Ideal for printed circuit board
- \* Reliable low cost construction technique results in inexpensive product
- \* Plastic material has underwriters laboratory flammability classification 94V-0
- \* Surge overload rating to 200 Amperes peak



RoHS  
COMPLIANT

### Package Outline Dimensions in inches (millimeters)

KBU:



### Maximum Ratings and Electrical Characteristics

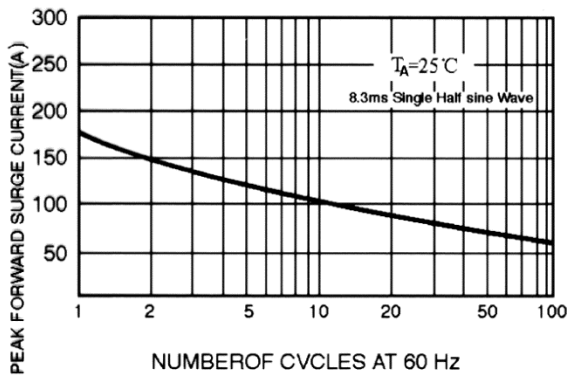
Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	KBU 8005	KBU 801	KBU 802	KBU 804	KBU 806	KBU 808	KBU 810	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=90^\circ\text{C}$ (Note1/3) @ $T_A=45^\circ\text{C}$ (Note2)	$I_{F(AV)}$	8.0 6.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	175							A
Maximum Forward Voltage Drop per element at 4.0A	$V_F$	1.10							V
Maximum Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
Typical thermal resistance per leg (Note2) (Note3)	$R_{\theta JA}$ $R_{\theta JL}$	18.0 3.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

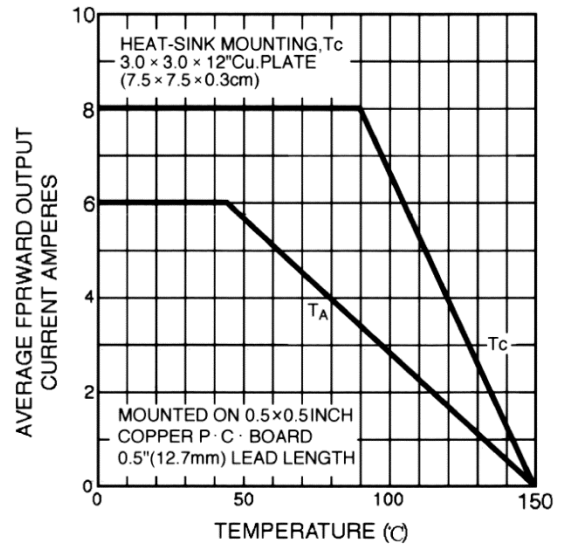
- Note:
1. Recommended mounted position is to bolt down on heat sink with silicone thermal compound for maximum heat transfer with #6 screw.
  2. Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5×0.5" (12×12mm) copper pads, 0.375" (9.5mm) lead length
  3. Thermal resistance from junction to case with units mounted on a 3.0×3.0×0.11" (7.5×7.5×0.3cm) Cu. plate.

## Ratings and Characteristic Curves

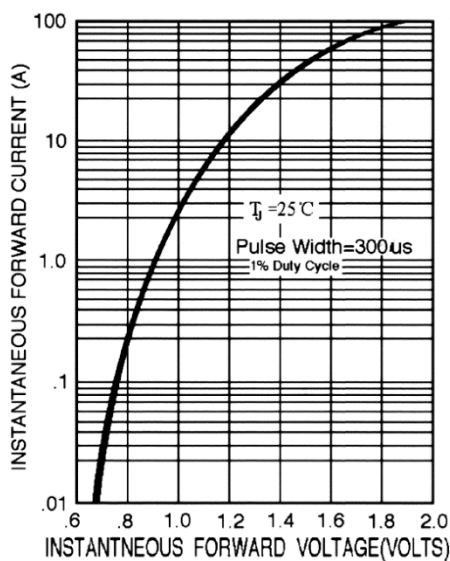
**FIG. 1 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT – PER ELEMENT**



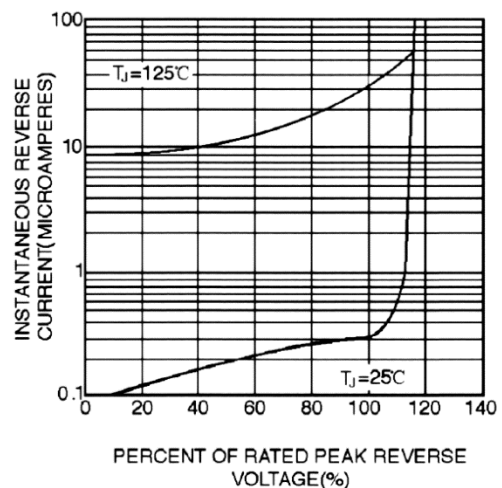
**FIG. 2 – TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE**



**FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS – PER ELEMENT**



**FIG. 4 – TYPICAL REVERSE CHARACTERISTICS PER ELEMENT**





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**Ordering Information**

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<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
KBU8005~KBU810	KBU	0.4K/Tray