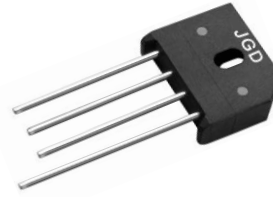


## Features

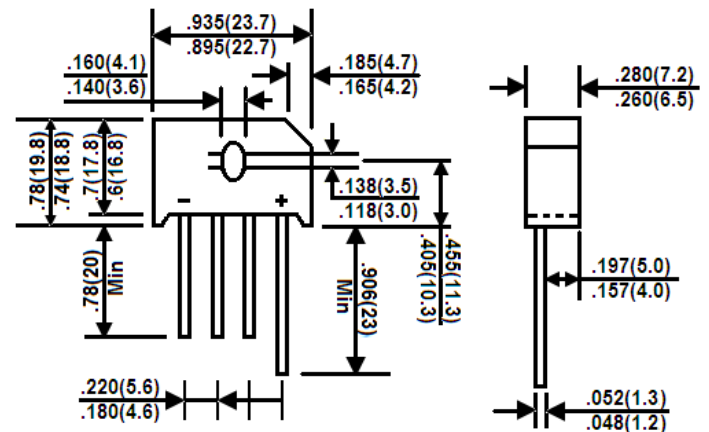
- \* Ideal for printed circuit board
- \* High surge current capability
- \* Reliable low cost construction technique results in inexpensive product



RoHS  
COMPLIANT

## Package Outline Dimensions in inches (millimeters)

KBU:



## Maximum Ratings and Electrical Characteristics

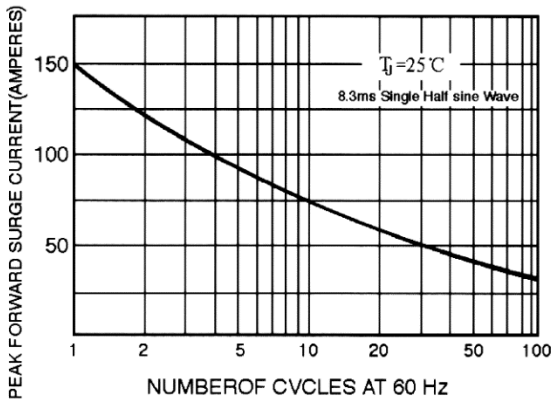
Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	KBU 6005	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	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 @ $T_C=100^\circ\text{C}$ (Note1) @ $T_A=40^\circ\text{C}$ (Note3)	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150							A
Maximum Forward Voltage Drop per element at 3.0A	$V_F$	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)	$R_{\theta JA}$ $R_{\theta JL}$	18.6 3.1							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

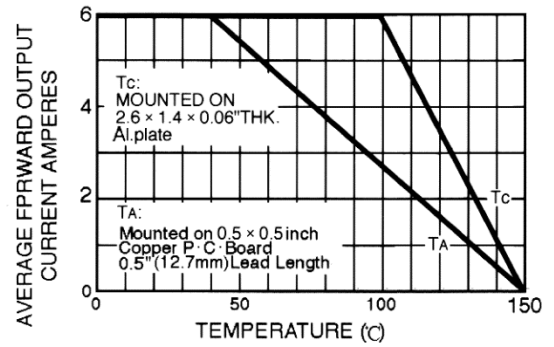
- Note:
1. Recommended mounted position is to bolt down on heat sink with silicone thermal compound for maximum heat transfer with #6 screw.
  2. Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5×0.5" (12×12mm) copper pads, 0.375" (9.5mm) lead length
  3. Thermal resistance from junction to case with units mounted on a 2.6×1.4×0.06" thick (6.5×3.5×0.15cm) plate.

## Ratings and Characteristic Curves

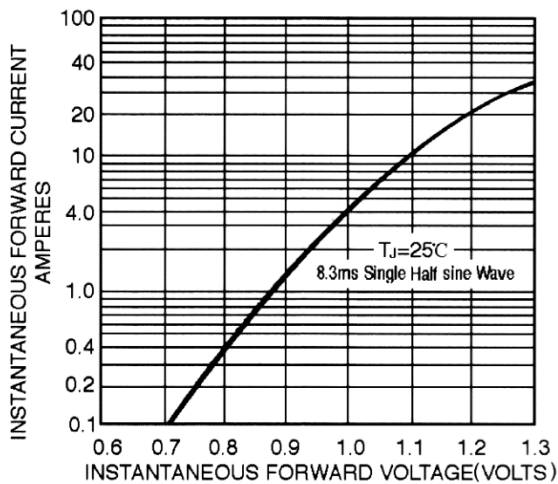
**FIG. 1 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT – PER ELEMENT**



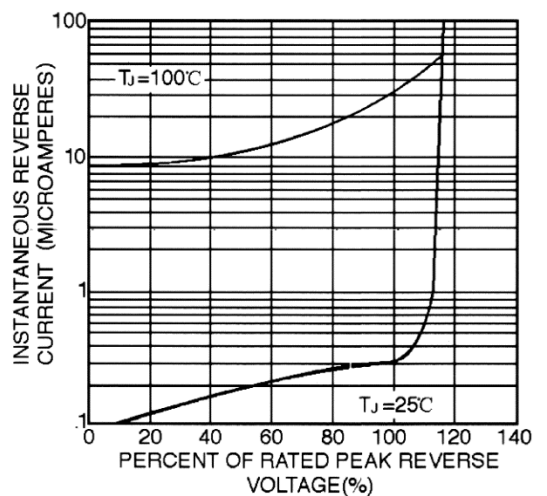
**FIG. 2 – TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE**



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



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





**KBU6006 THRU KBU610**  
*Single Phase 6.0 Amps. Glass Passivated Bridge Rectifiers*

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**Ordering Information**

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<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
KBU6005~KBU610	KBU	0.4K/Tray