



REVERSE VOLTAGE: 50 to 1000 VOLTS

FORWARD CURRENT: 6.0 AMPERE

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**

**FEATURES**

- High surge current capability
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Reliable low cost construction utilizing molded plastic technique

**MECHANICAL DATA**

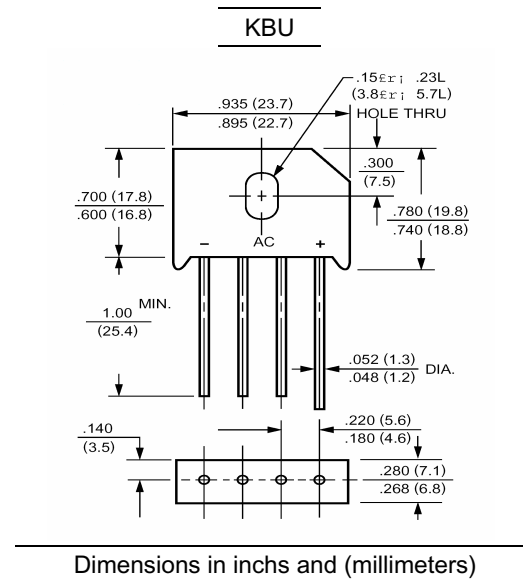
Case: Molded plastic, KBU

Epoxy: UL 94V-0 rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

Weight: 0.3ounce, 8.0gram



**Maximum Ratings and Electrical Characteristics**

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

	Symbols	KBU6005	KBU601	KBU602	KBU604	KBU606	KBU608	KBU610	Symbols
Maximum Recerrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=65^{\circ}C$	$I_{(AV)}$	6							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200							Amp
Maximum Forward Voltage at 6.0A DC and 25°C	$V_F$	1							Volts
Maximum Reverse Current at $T_A=25^{\circ}C$ at Rated DC Blocking Voltage $T_A=100^{\circ}C$	$I_R$	10 500							uAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	8.6							°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	3.1							°C/W
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 to +125							°C

**NOTES:**

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length



REVERSE VOLTAGE: 50 to 1000 VOLTS

FORWARD CURRENT: 6.0 AMPERE

### RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

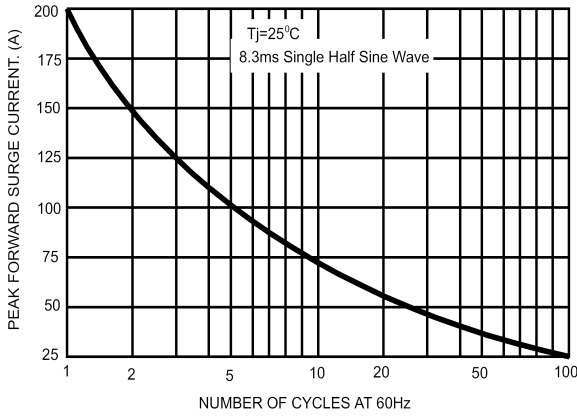


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

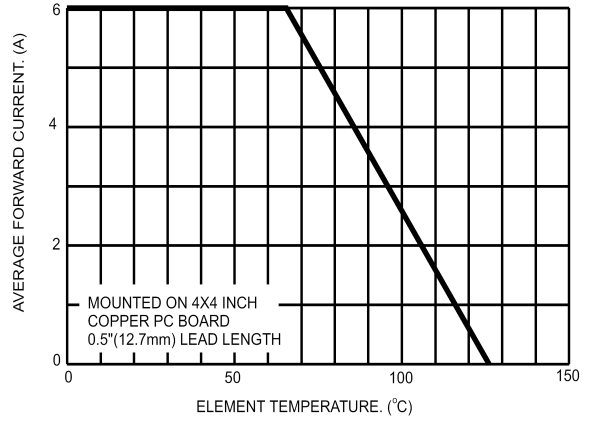


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

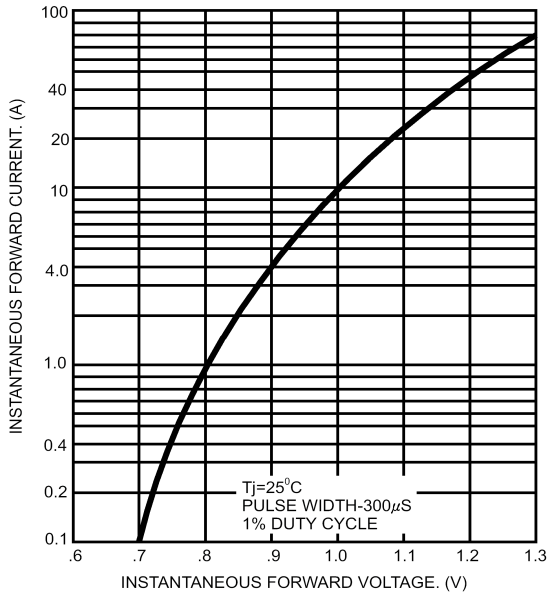


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

