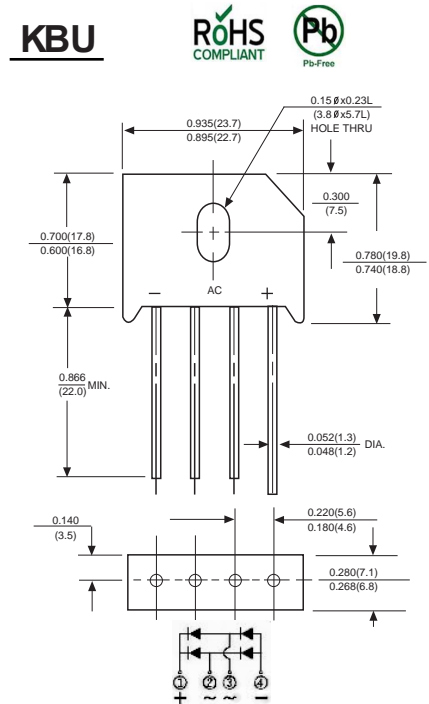


Features

1. The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
2. Ideal for printed circuit boards
3. Low reverse leakage
4. High forward surge current capability
5. High temperature soldering guaranteed:
260°C/10 seconds,0.375”(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

Case : JEDEC KBU Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.27ounce , 7.59grams



Dimensions in inches and (millimeters)

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 current derate by 20%.

Parameter	SYMBOLS	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810	UNITS
Marking Code									
Maximum repetitive 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 output rectified current at $T_c=50$ C(Note 1)	$I_{(AV)}$	8.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Maximum instantaneous forward voltage drop per bridge element at 4.0A	V_F	1.0							V
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=125^\circ C$	I_R	10							μA
		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	200							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	5.0							$^\circ C/W$
Operating junction temperature range	T_J	-55 to +150							$^\circ C$
storage temperature range	T_{STG}	-55 to +150							$^\circ C$

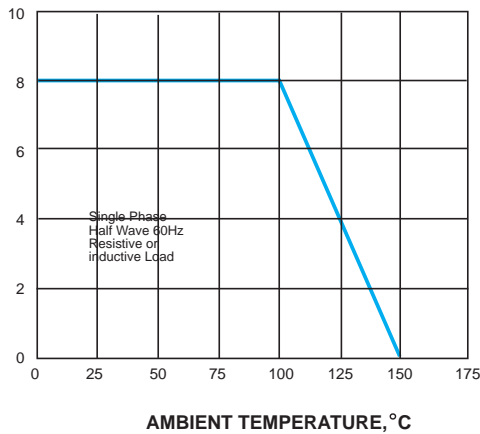
NOTES:

1. Device mounted on 100mm*100mm*1.6mm Cu plate heatsink

Ratings And Characteristic Curves

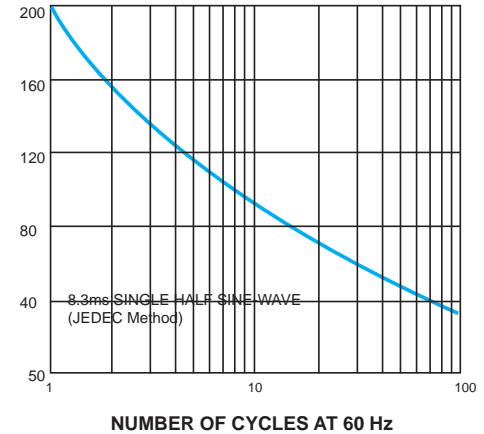
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



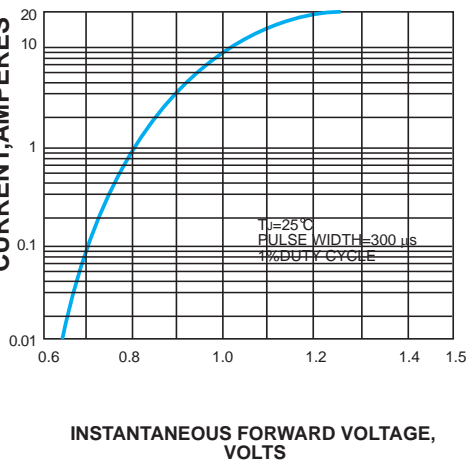
PEAK FORWARD SURGE CURRENT, AMPERES

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



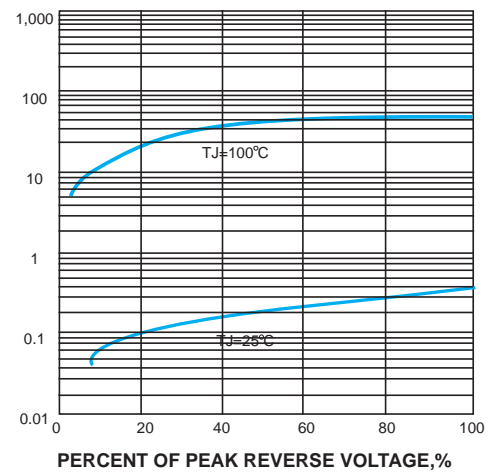
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



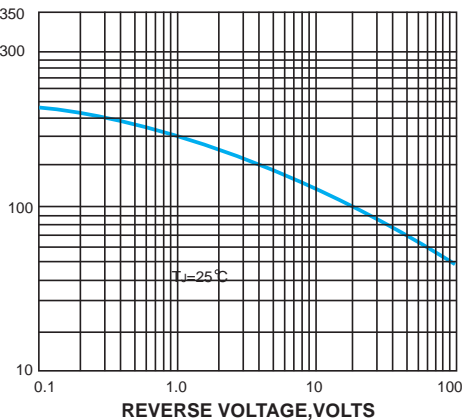
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

