



KBU10005 THRU KBU1010

FEATURES

- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

MECHANICAL DATA

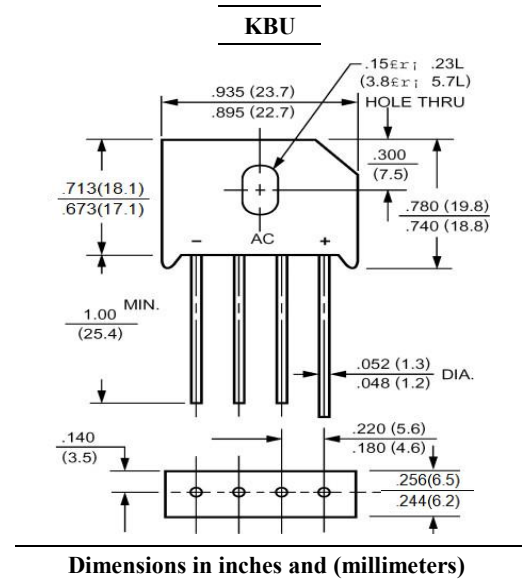
Case: Molded plastic, KBU

Epoxy: UL 94V-0 rate flame retardant

Terminals: Pure tin plated, lead free, Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: As Marking

Weight: 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	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010	Units
Maximum Recurrent 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 at $T_A=65^\circ\text{C}$	$I_{(AV)}$	10.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amp
Maximum Instantaneous Forward Voltage @ 5.0A @ 10.0A	V_F	1.0 1.1							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	10.0 500							uAmp
Typical Junction Capacitance per leg (Note 1)	C_J	400							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	25 2.2							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{stg}	-55 to +150							°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Unit case mounted on 4" x 6" x 0.25" Al plate heat sink.



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FIG 1 Maximum Derating Curve for Output

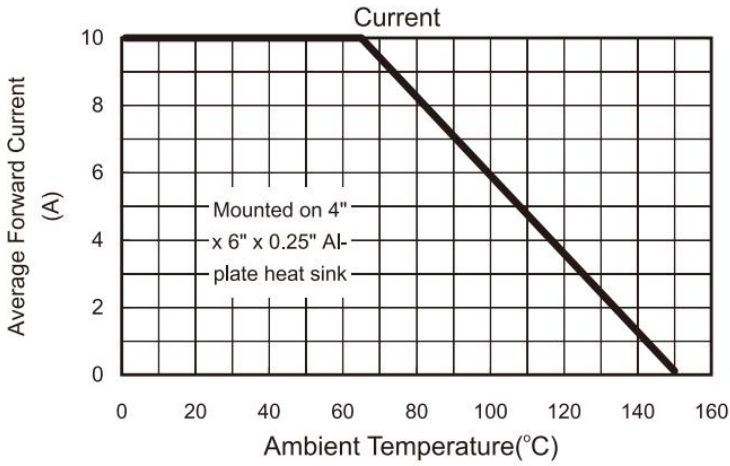


FIG 2 Maximum Forward Surge Current per Leg

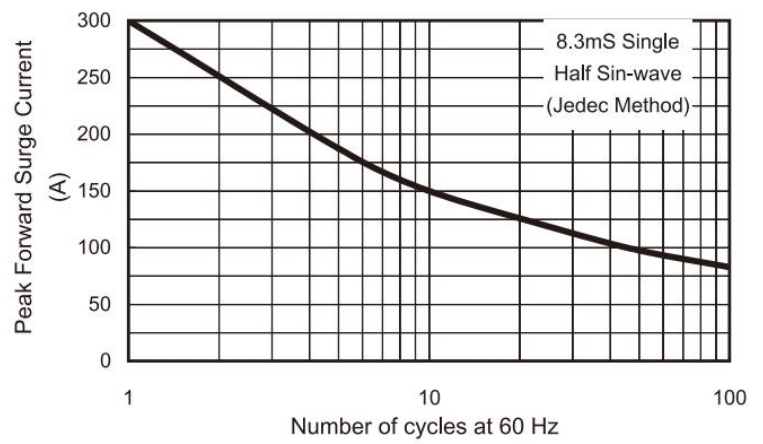


FIG 3 Typical Reverse Leakage Characteristics per Leg

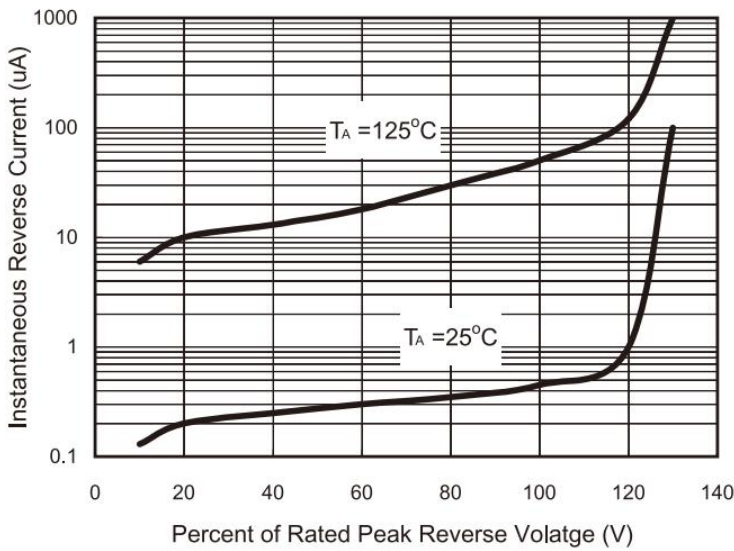


FIG 4 Typical Forward Characteristics per Leg.

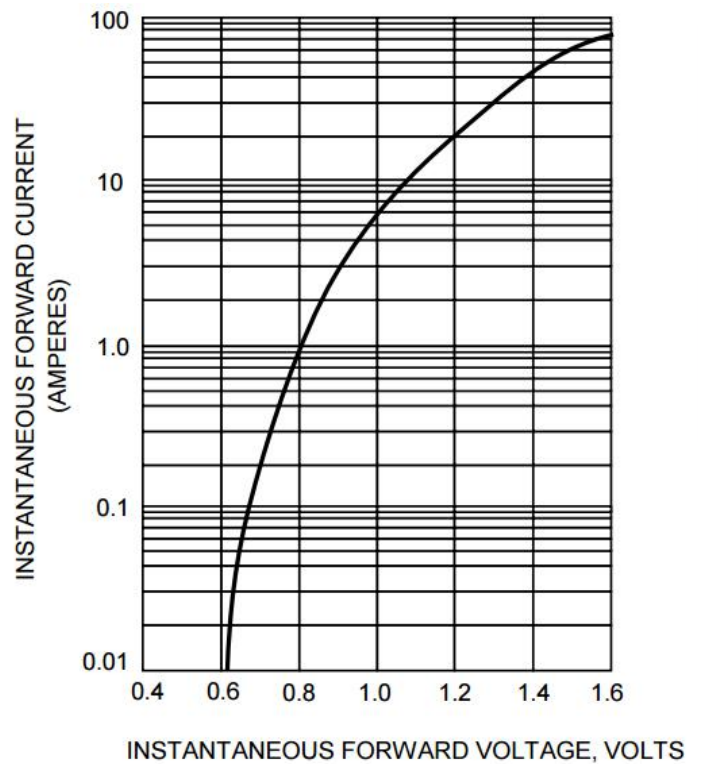


FIG 5 Typical Junction Capacitance

