KBU10005 THRU KBU1010

SINGLE-PHASE SILICON BRIDGE RECTIFIER

康 比 電 子
HORNBY ELECTRONIC

REVERSE VOLTAGE: **50 to 1000 VOLTS**

FORWARD CURRENT: **10.0 AMPERE**

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

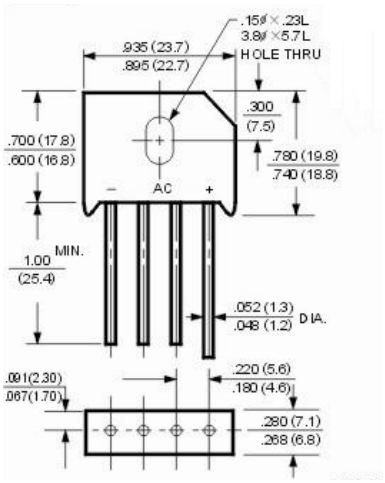
Epoxy: UL 94V-O rate flame retardant

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

Mounting position: Any

Weight: 0.3ounce, 8.0gram

KBU



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60H_Z, 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 .375"(9.5mm) Lead Length at T_A=55℃	$I_{(AV)}$	10.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250							**Amp**
Maximum Forward Voltage at 10.0A DC and 25℃	V_F	1.1							**Volts**
Maximum Reverse Current at T_A=25℃	I_R	10.0							**uAmp**
at Rated DC Blocking Voltage T_A=100℃		500							
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	18							℃/W
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	3							℃/W
Operating and Storage Temperature Range	T_J, Tstg	-55 to +125							℃

NOTES:

1- Units mounted in free air, no heatsink, P.C.B. at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads

2- Units mounted on a 3.0 x 3.0" x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. Plate heatsink

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RATINGS AND CHARACTERISTIC CURVES

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

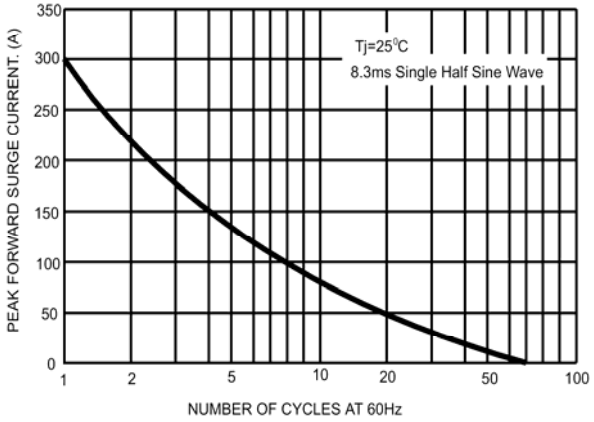

FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

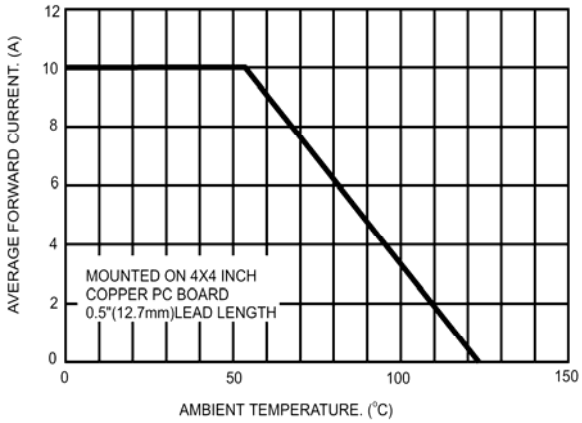

FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

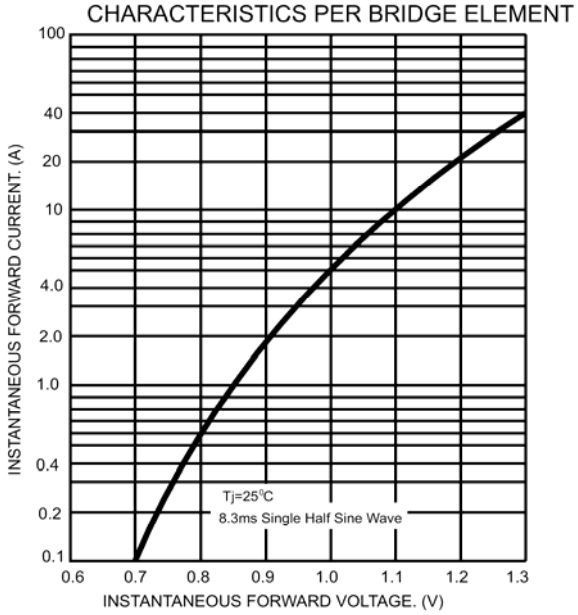

FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT