

KBU10M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 10 Amperes

FEATURES

- * Low leakage
- * Low forward voltage
- * Surge overload rating: 250 Amperes peak

MECHANICAL DATA

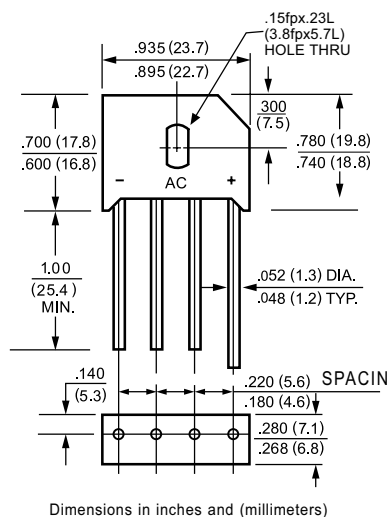
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 4.8 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



KBU



	SYMBOL	KBU10A	KBU10B	KBU10D	KBU10G	KBU10J	KBU10K	KBU10M	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Bridge Input 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 Output Current at $T_c = 75^\circ C$	I_o	10							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	250							Amps	
Maximum Forward Voltage Drop per element at 5.0A DC	V_F	1.1							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	@ $T_A = 25^\circ C$	10							uAmps
		@ $T_C = 100^\circ C$	500							
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	127							A^2Sec	
Typical Junction Capacitance (Note1)	C_J	186							pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	10							$^\circ C/W$	
Operating and Storage Temperature Range	$T_{J,TSTG}$	-55 to + 150							$^\circ C$	

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to leadmounted on P.C.B. with 0.47 x 0.47" (12x12mm) copper pads.

RATING AND CHARACTERISTIC CURVES

(KBU10A THRU KBU10M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

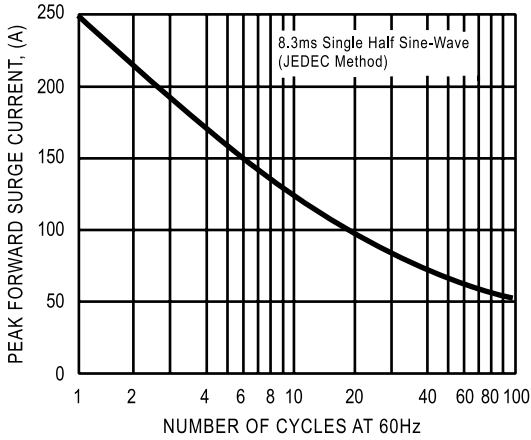


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

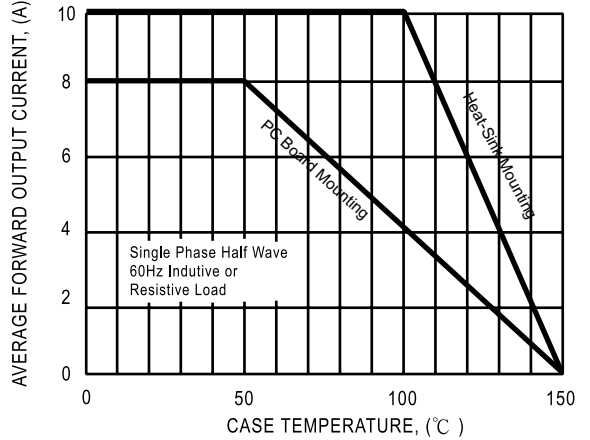


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

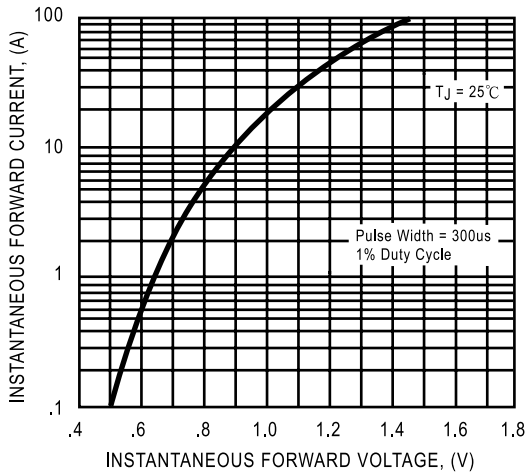


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

