



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

KBU6A / RS601

THRU

KBU6M / RS607

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 6.0 Amperes

FEATURES

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

MECHANICAL DATA

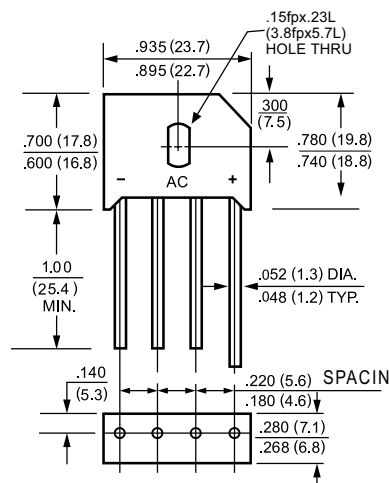
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 4.8 grams

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



Dimensions in inches and (millimeters)

	SYMBOL	KBU6A RS601	KBU6B RS602	KBU6D RS603	KBU6G RS604	KBU6J RS605	KBU6K RS606	KBU6M RS607	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 _{bc}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at T _c = 75°C	I _o	6.0							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 3.0A DC	V _F	1.0							Volts
Maximum DC Reverse Current at Rated	I _R	@T _A = 25°C				10			uAmps
DC Blocking Voltage per element		@T _C = 100°C				500			
i ² t Rating for Fusing (t<8.3ms)	I ² t	127							A ² Sec
Typical Junction Capacitance (Note1)	C _J	186							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	10							°C/W
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to + 150							°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

(KBU6A THRU KBU6M)
 (RS601 THRU RS607)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

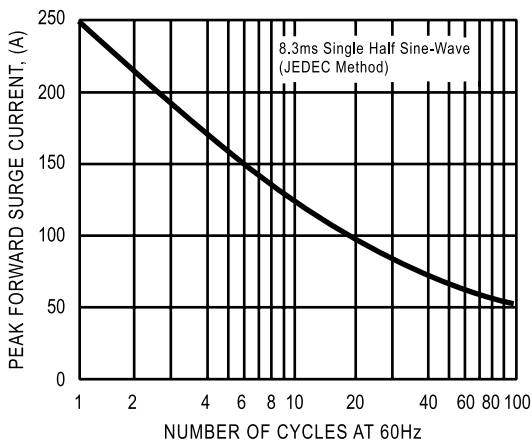


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

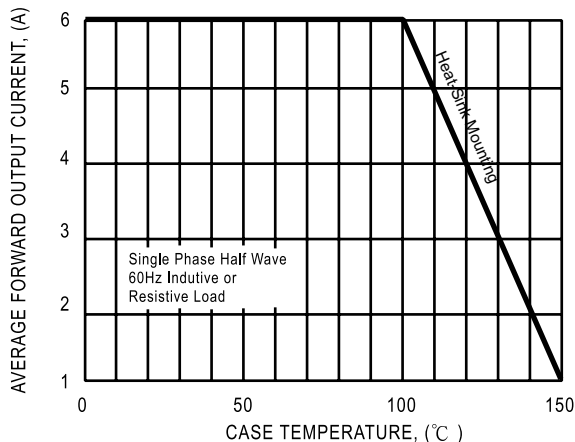


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

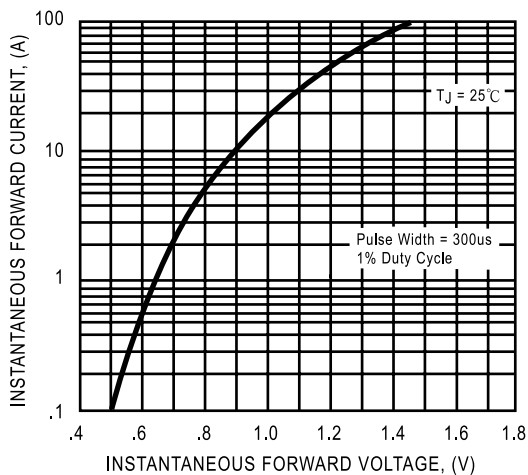
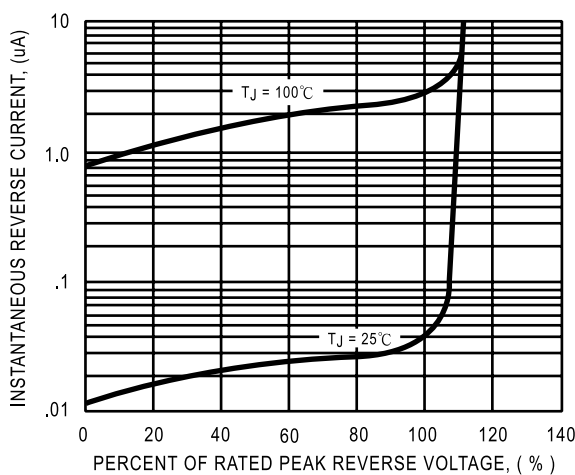


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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