



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

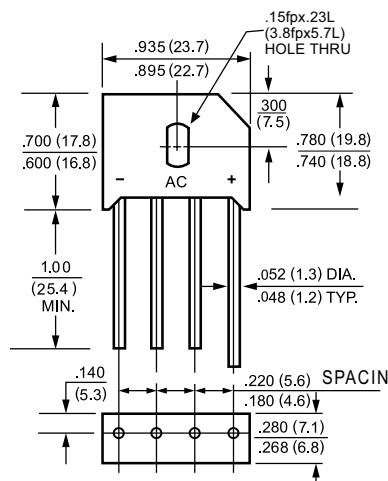
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



KBU



Dimensions in inches and (millimeters)

		KBU6A	KBU6B	KBU6D	KBU6G	KBU6J	KBU6K	KBU6M		
	SYMBOL	RS601	RS602	RS603	RS604	RS605	RS606	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 _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Output Current at Tc = 75°C	Io	6.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	IFSM	250							Amps	
Maximum Forward Voltage Drop per element at 3.0A DC	VF	1.0							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ TA = 25°C @ Tc = 100°C	Ir	10							uAmps
			500							
I²t Rating for Fusing (t<8.3ms)	I²t	127							A²Sec	
Typical Junction Capacitance (Note1)	CJ	186							pF	
Typical Thermal Resistance (Note 2)	RθJA	10							°C/W	
Operating and Storage Temperature Range	TJ,TSTG	-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 KBU6M)
RS601 THRU RS607

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

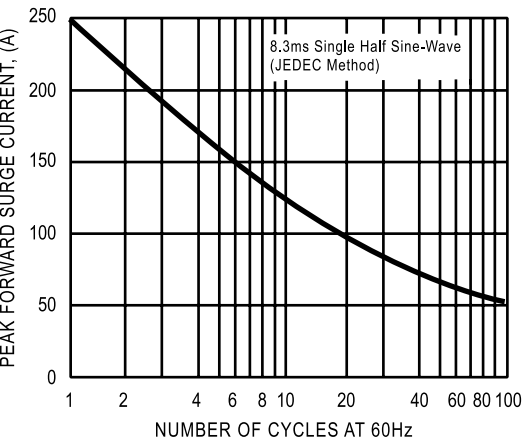


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

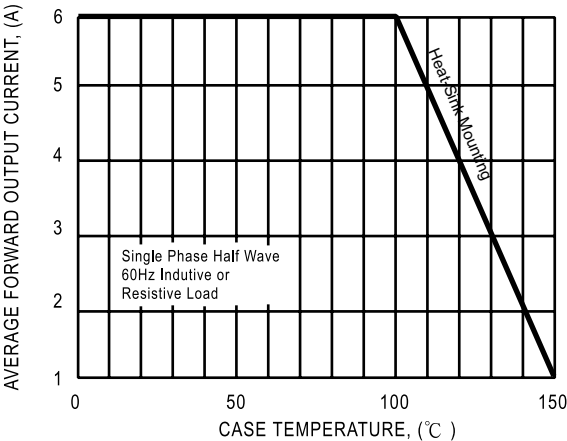


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

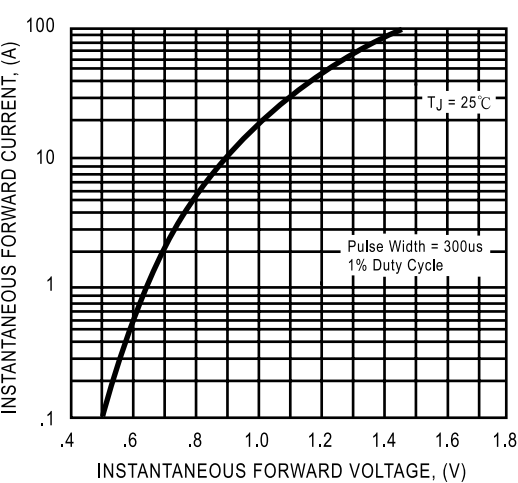


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

