



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**KBJ6A
THRU
KBJ6M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 6.0 Amperes

FEATURES

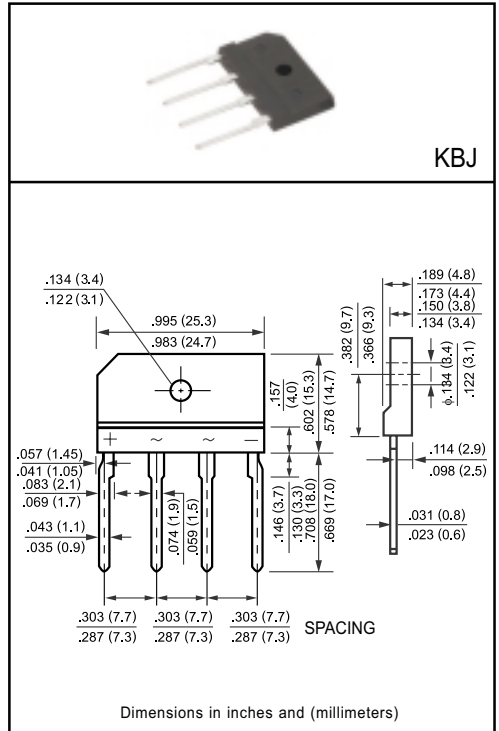
- * Ideal for printed circuit board
- * Surge overload rating: 170 Amperes peak

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 4.6 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%.



	SYMBOL	KBJ6A	KBJ6B	KBJ6D	KBJ6G	KBJ6J	KBJ6K	KBJ6M	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 Output Current at T _c = 100 °C	I _o	6.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	170							Amps	
Maximum Forward Voltage Drop per element at 3.0A DC	V _F	1.0							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I _R	@ T _A = 25 °C	10							uAmps
		@ T _A = 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	40							pF	
Typical Thermal Resistance (Note 2)	R _{θJA}	8.6							°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 volts

2. Thermal Resistance from Junction to Case per element Unit mounted on 300x300x1.6mm Aluminum plate heat-sink.

RATING AND CHARACTERISTIC CURVES (KBJ6A THRU KBJ6M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

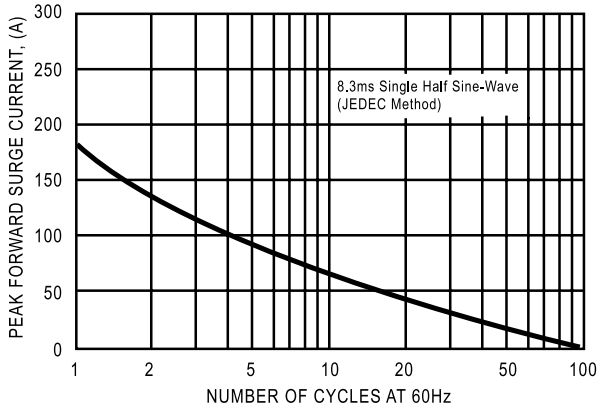


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

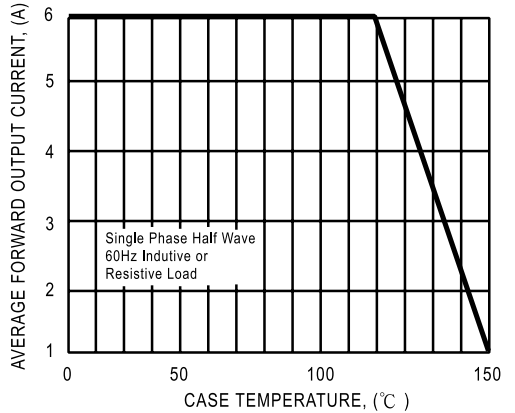


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

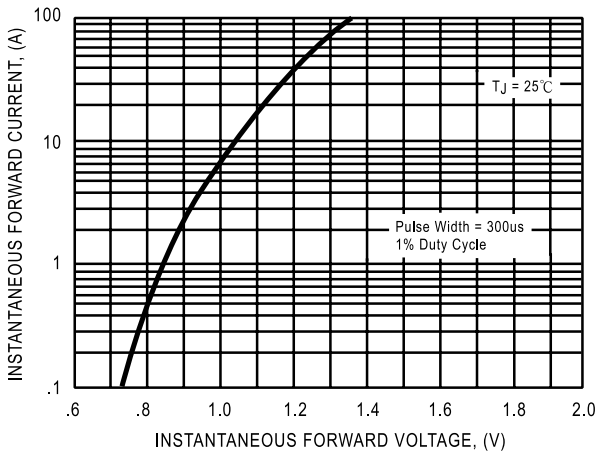
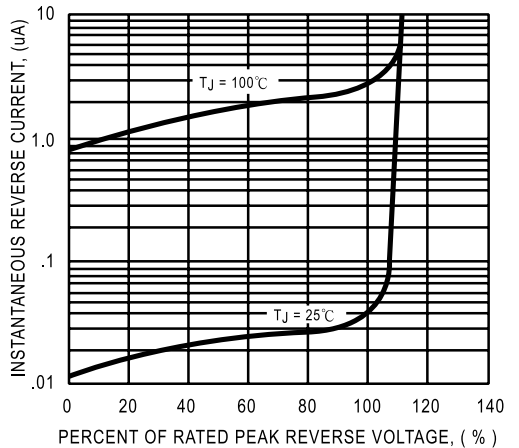


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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