

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 8.0 Amperes

FEATURES

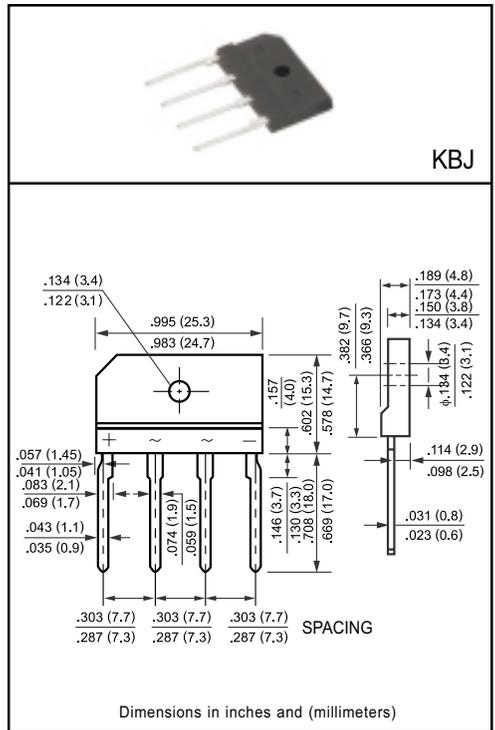
- * Ideal for printed circuit board
- * Surge overload rating: 170 Amperes peak

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	KBJ8A	KBJ8B	KBJ8D	KBJ8G	KBJ8J	KBJ8K	KBJ8M	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 $T_c = 100^\circ C$	I_o	8.0							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 4.0A DC	V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	@ $T_A = 25^\circ C$							uAmps
		@ $T_A = 100^\circ C$							
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	127							A^2Sec
Typical Junction Capacitance (Note1)	C_j	40							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	8.6							$^\circ C/W$
Operating Temperature Range	T_J	-55 to + 150							$^\circ C$
Storage Temperature Range	T_{STG}	-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 Case per element Unit mounted on 300x300x1.6mm Aluminum plate heat-sink.

RATING AND CHARACTERISTIC CURVES (KBJ8A THRU KBJ8M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

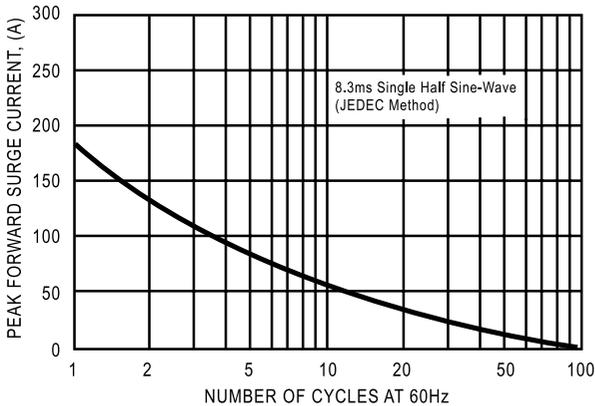


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

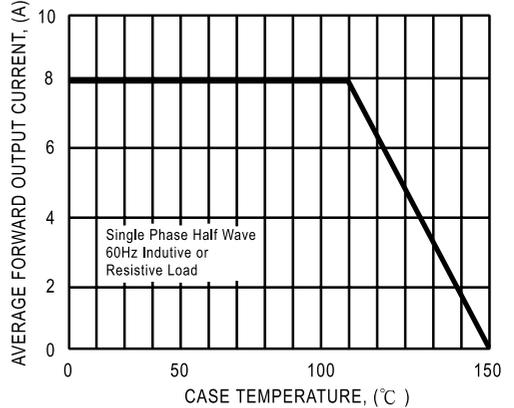


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

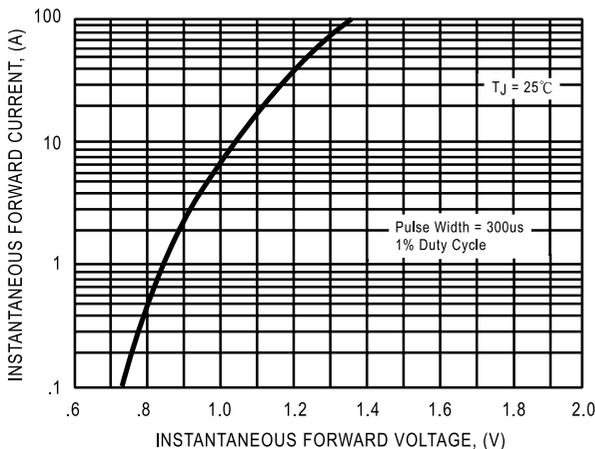


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

