



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**KBK25A
THRU
KBK25M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts **CURRENT - 25 Amperes**

FEATURES

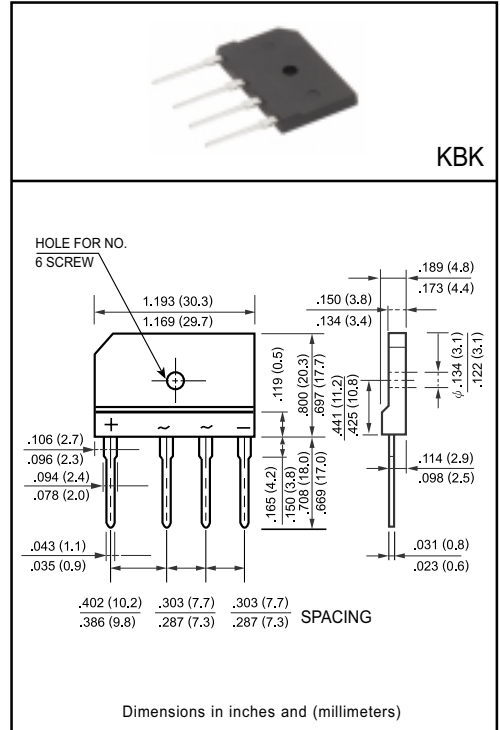
- * Low leakage
- * Low forward voltage
- * Surge overload rating: 300 Amperes peak
- * Ideal for printed circuit boards
- * High forward surge current capability

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: 6.6 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	KBK25A	KBK25B	KBK25D	KBK25G	KBK25J	KBK25K	KBK25M	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	25							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	300							Amps
Maximum Forward Voltage Drop per element at 12.5 A DC	V _F	1.1							Volts
Maximum DC Reverse Current at Rated	I _R	@T _A = 25 °C							uAmps
DC Blocking Voltage per element		@T _A = 100 °C							
I ² t Rating for Fusing (t<8.3ms)	I ² t	510							A ² Sec
Typical Junction Capacitance (Note1)	C _J	85							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	10							°C/W
Operating 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 Case per element Unit mounted on 300x300x1.6mm Aluminum plate heat-sink.

RATING AND CHARACTERISTIC CURVES

(KBK25A THRU KBK25M)

