



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**KBK20A
THRU
KBK20M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 20 Amperes

FEATURES

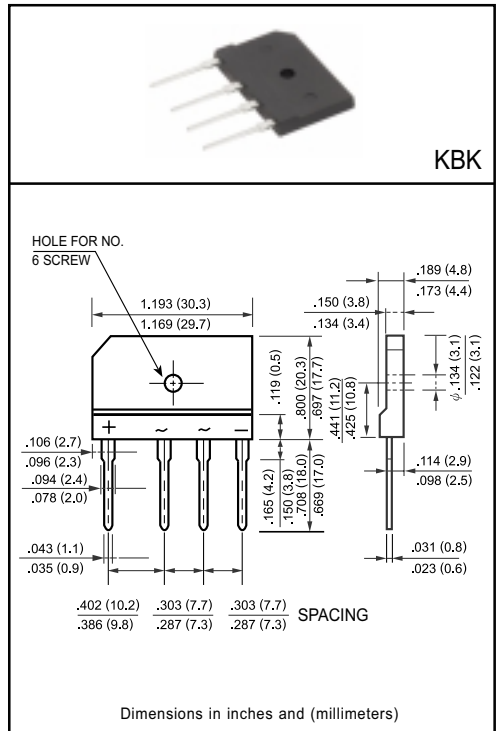
- * Low leakage
- * Low forward voltage
- * Surge overload rating: 240 Amperes peak
- * Ideal for printed circuit boards
- * High forward surge current capability

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	KBK20A	KBK20B	KBK20D	KBK20G	KBK20J	KBK20K	KBK20M	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	20							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	240							Amps
Maximum Forward Voltage Drop per element at 10 A DC	V _F	1.1							Volts
Maximum DC Reverse Current at Rated	I _R	10							uAmps
DC Blocking Voltage per element		500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	240							A ² Sec
Typical Junction Capacitance (Note 1)	C _J	60							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	12							°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

(KBK20A THRU KBK20M)

