



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**KBK8A
THRU
KBK8M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 8.0 Amperes

FEATURES

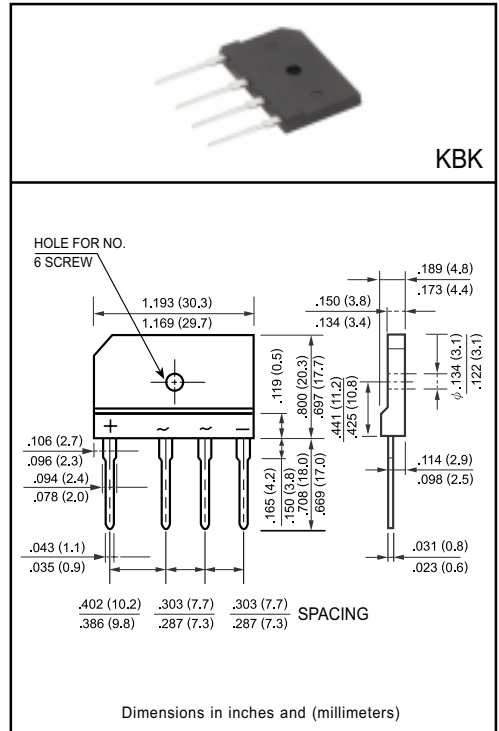
- * Low leakage
- * Low forward voltage
- * Surge overload rating: 170 Amperes peak
- * Ideal for printed circuit boards
- * High forward surge current capability

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%.



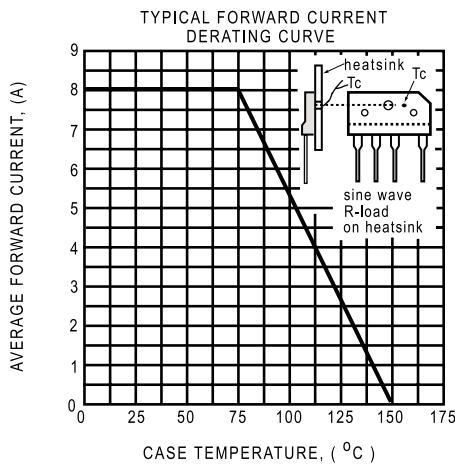
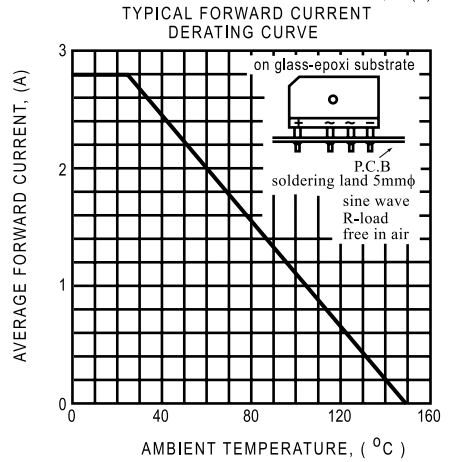
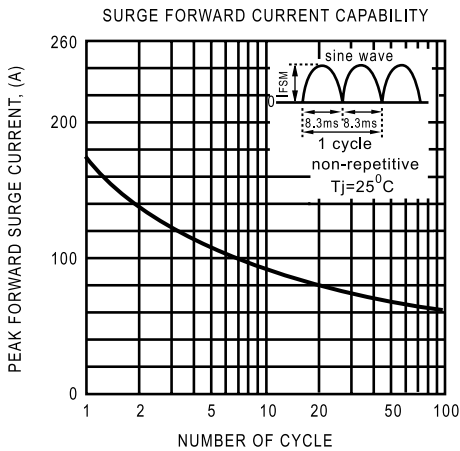
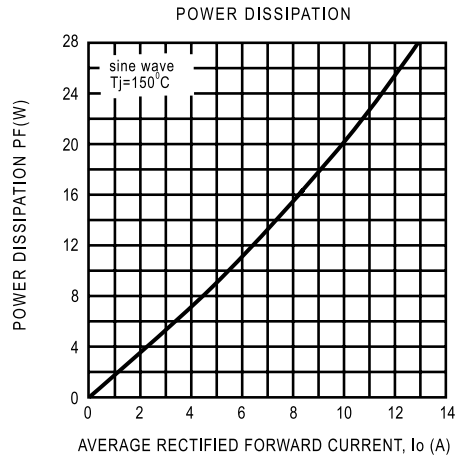
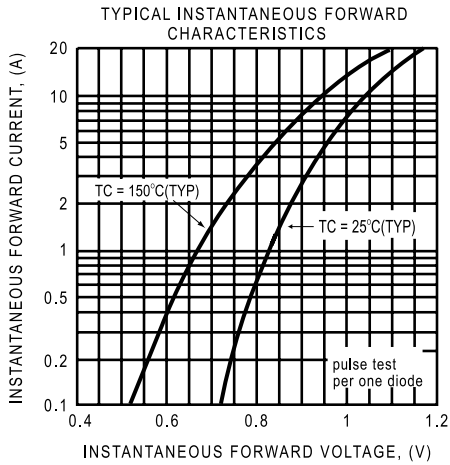
| | SYMBOL | KBK8A | KBK8B | KBK8D | KBK8G | KBK8J | KBK8K | KBK8M | UNITS |
|---|---------------------------------|-------------------------|-------|-------|-------|-------|-------|-------|--------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 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 = 75° 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 | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated | I _R | @T _A = 25°C | | | | | | 10 | uAmps |
| DC Blocking Voltage per element | | @T _A = 100°C | | | | | | 500 | |
| i ² t Rating for Fusing (t<8.3ms) | i ² t | 120 | | | | | | | A ² Sec |
| Typical Junction Capacitance (Note1) | C _J | 55 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | RθJA | 15 | | | | | | | °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

(K BK8A THRU K BK8M)



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