

## **KBPC10005 THRU KBPC1010**

SINGLE PHASE SILICON BRIDGE RECTIFIER

Voltage: 50 TO 1000V CURRENT:10A

#### **FEATURES**

Surge overload rating: 200A peak

High case dielectric strength

#### **MECHANICAL DATA**

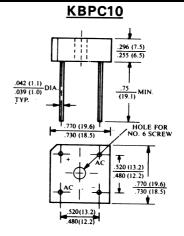
. Terminal: Plated leads solderable per

MIL-STD 202E, method 208C

. Case: UL-94 Class V-0 recognized Flame Retardant Epoxy

. Polarity: Polarity symbol marked on body

. Mounting: Hole thru for #6 screw



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60HZ, resistive or inductive load rating at 25 °C, unless otherwise stated,

for capacitive load, derate current by 20%)

| capacitive load, derate current by 2070)   |        |               |              |              |              |              |              |              |                      |
|--|--------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|
| PIIF                                       | SYMBOL | KBPC<br>10005 | KBPC<br>1001 | KBPC<br>1002 | KBPC<br>1004 | KBPC<br>1006 | KBPC<br>1008 | KBPC<br>1010 | units                |
| Maximum Recurrent Peak Reverse Voltage     | Vrrm   | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V                    |
| Maximum RMS Voltage                        | Vrms   | 35            | 70           | 140          | 280          | 420          | 560          | 700          | ٧                    |
| Maximum DC blocking Voltage                | Vdc    | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | ٧                    |
| Maximum Average Forward Rectified Tc=50 °C |        |               |              |              | 10.0         |              |              |              | Α                    |
| current at Ta=25 °C Ta=50 °C               | If(av) | 6.0           |              |              |              |              |              |              | Α                    |
| Peak Forward Surge Current 8.3ms single    |        |               |              |              |              |              |              |              |                      |
| half sine-wave superimposed on rated load  | Ifsm   | 200           |              |              |              |              |              |              | Α                    |
| Maximum Instantaneous Forward Voltage at   |        |               |              |              |              |              |              |              |                      |
| forward current 5.0A DC                    | Vf     | 1.1           |              |              |              |              |              |              | V                    |
| Maximum DC Reverse Voltage Ta=25 °C        |        | 10.0          |              |              |              |              |              |              | μА                   |
| at rated DC blocking voltage Ta=100 °C     | lr     | 200           |              |              |              |              |              |              | μд                   |
| Operating Temperature Range                | Tj     | -55 to +125   |              |              |              |              |              |              | $^{\circ}\mathrm{C}$ |
| Storage and operation Junction Temperature | Tstg   | -55 to +150   |              |              |              |              |              |              | °C                   |



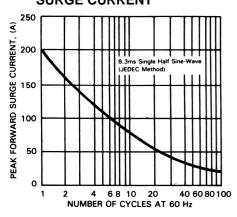
## **KBPC10005 THRU KBPC1010**

SINGLE PHASE SILICON BRIDGE RECTIFIER

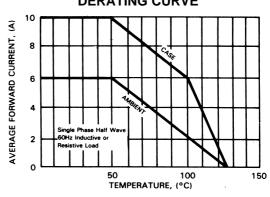
Voltage: 50 TO 1000V CURRENT:10A

### **RATINGS AND CHARACTERISTIC CURVES KBPC10005 THRU KBPC1010**

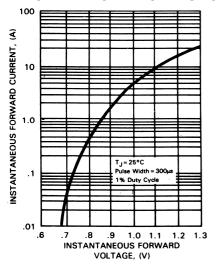
# FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



# FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



## FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



### FIG.4-TYPICAL REVERSE CHARACTERISTICS

