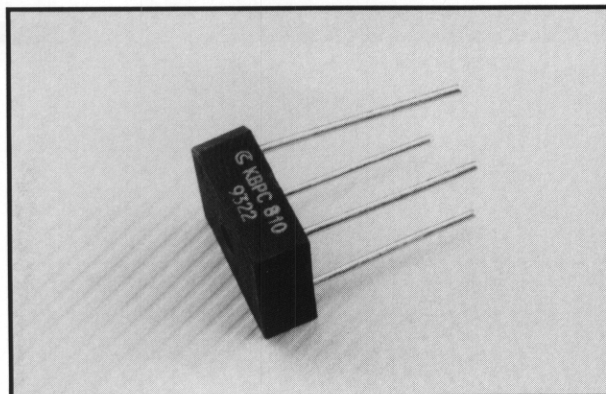


# KBPC8005 Thru KBPC810



## 8 AMP SILICON BRIDGE RECTIFIER



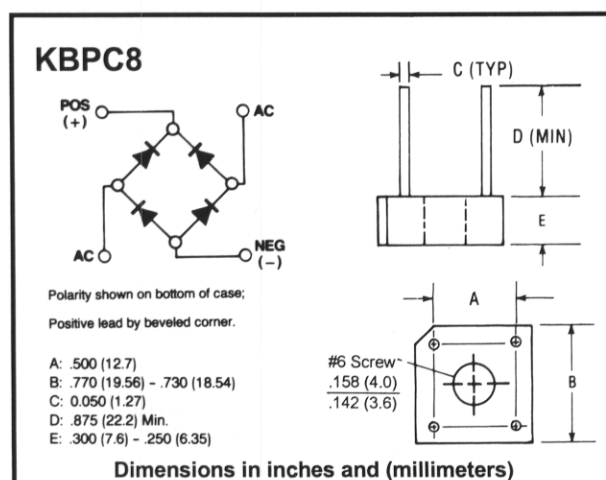
### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Surge overload rating to 125 Amperes peak
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- UL recognized: File #E106441
- UL recognized 94V-O plastic material

### Mechanical Data

- Case: Molded Plastic
- Leads: Silver plated copper
- Lead solderable per MIL-STD-202, Method 208
- Mounting through hole for #6 screw mounting
- Weight: 0.18 ounce, 5.4 grams

### Outline Drawing



### Maximum Ratings & Characteristics

- Ratings at 25° C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load
- For capacitive load, derate current by 20%

|                                                                                                                         |            | KBPC<br>8005 | KBPC<br>801 | KBPC<br>802 | KBPC<br>804 | KBPC<br>806 | KBPC<br>808 | KBPC<br>810 | Units            |
|-------------------------------------------------------------------------------------------------------------------------|------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                                  | $V_{RRM}$  | 50           | 100         | 200         | 400         | 600         | 800         | 1000        | V                |
| Maximum RMS Voltage                                                                                                     | $V_{RMS}$  | 35           | 70          | 140         | 280         | 420         | 560         | 700         | V                |
| Maximum DC Blocking Voltage                                                                                             | $V_{DC}$   | 60           | 100         | 200         | 400         | 600         | 800         | 1000        | V                |
| Maximum Average Forward Output Current<br>@ $T_C = 50^\circ C^*$<br>@ $T_A = 50^\circ C^{**}$                           | $I_{AV}$   | 8.0<br>6.0   |             |             |             |             |             |             | A                |
| Peak Forward Surge Current<br>8.3 ms Single Half-Sine-Wave<br>Superimposed On Rated Load                                | $I_{FSM}$  | 125          |             |             |             |             |             |             | A                |
| Maximum DC Forward Voltage Drop per Element<br>At 4.0A DC                                                               | $V_F$      | 1.1          |             |             |             |             |             |             | V                |
| Maximum DC Reverse Current at rated<br>DC Blocking Voltage per Element<br>@ $T_A = 25^\circ C$<br>@ $T_A = 100^\circ C$ | $I_R$      | 10<br>1      |             |             |             |             |             |             | $\mu A$<br>mA    |
| $I^2 t$ Rating for Fusing ( $t < 8.3ms$ )                                                                               | $I^2 t$    | 64           |             |             |             |             |             |             | A <sup>2</sup> S |
| Typical Thermal Resistance                                                                                              | $R_{THJC}$ | 6            |             |             |             |             |             |             | °C/W             |
| Operating Temperature Range                                                                                             | $T_J$      | -55 to +125  |             |             |             |             |             |             | °C               |
| Storage Temperature Range                                                                                               | $T_{STG}$  | -55 to +150  |             |             |             |             |             |             | °C               |

Note: \* Unit mounted on metal chassis

\*\* Unit mounted on P.C. board