

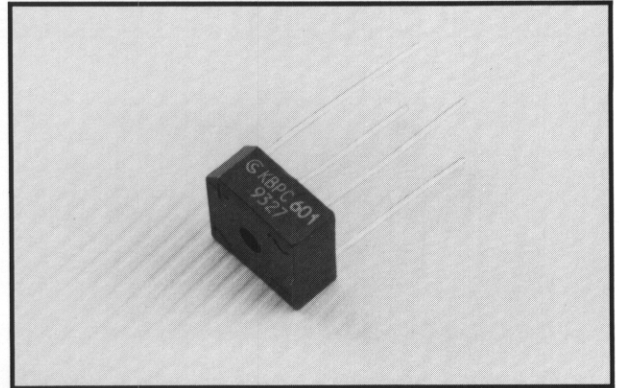
# KBPC6005 Thru KBPC610



## 6 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



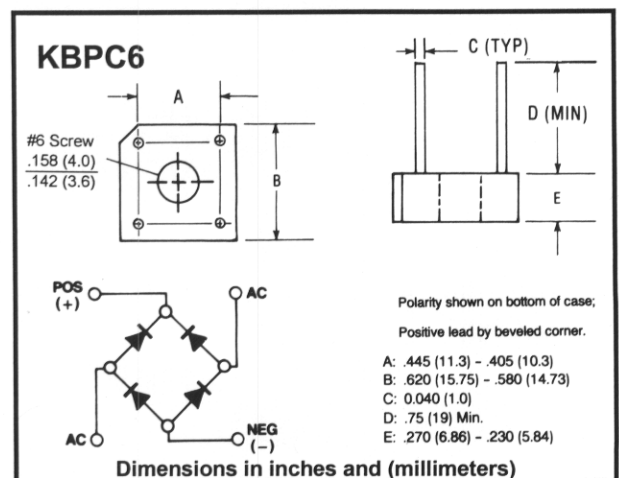
### Mechanical Data

- Case: Molded Plastic
- Leads: Silver plated copper
- Leads solderable per MIL-STD-202, Method 208
- Mounting: Through hole for #6 screw
- Weight: 0.13 ounce, 3.8 grams

### 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%

### Outline Drawing



|  |            | KBPC<br>6005 | KBPC<br>601 | KBPC<br>602 | KBPC<br>604 | KBPC<br>606 | KBPC<br>608 | KBPC<br>610 | 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   | $I_{(AV)}$ |              |             |             | 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 3.0A DC                                | $V_F$      |              |             |             | 1.1         |             |             |             | V                |
| Maximum DC Reverse Current At Rated<br>DC Blocking Voltage per Element                   | $I_R$      |              |             |             | 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   | $R_{THJC}$ |              |             |             | 8           |             |             |             | °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