



**KBPC1005 THRU KBPC1010**

**SINGLE PHASE SILICON  
BRIDGE RECTIFIER**

**TECHNICAL  
SPECIFICATION**

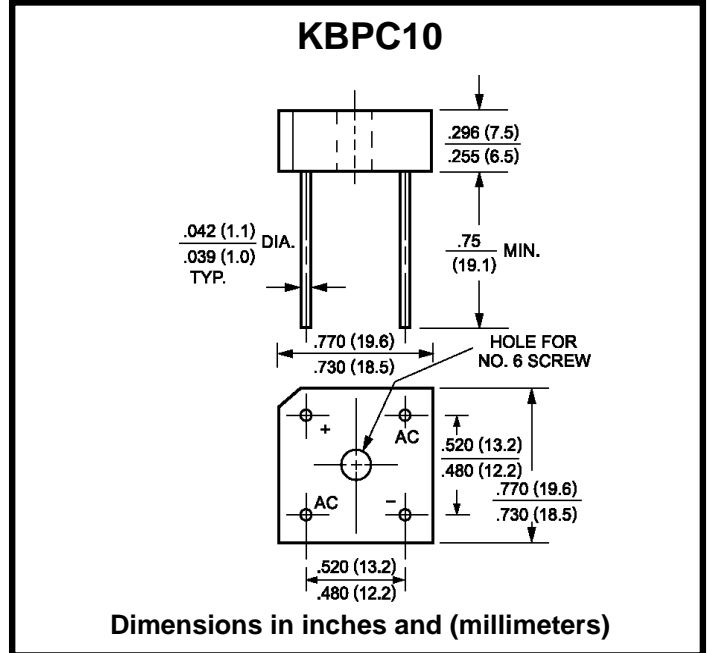
**VOLTAGE: 50 TO 1000V CURRENT: 10A**

**FEATURES**

- Surge overload rating: 200A peak
- High case dielectric strength
- High temperature soldering guaranteed:  
250°C/10sec/0.375"(9.5mm) lead length  
at 5 lbs tension

**MECHANICAL DATA**

- Terminal: Plated leads solderable per  
MIL-STD 202E, method 208C
- Case: UL-94 Class V-O recognized flame  
retardant epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: Hole thru for #6 screw



**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%)

| RATINGS   | SYMBOL      | KBPC<br>10005 | KBPC<br>1001 | KBPC<br>1002 | KBPC<br>1004 | KBPC<br>1006 | KBPC<br>1008 | KBPC<br>1010 | UNITS                          |
|---|-------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------------|
| Maximum Repetitive 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   | $V_{DC}$    | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V                              |
| Maximum Average Forward Rectified Current<br>( $T_c=50^\circ\text{C}$ )                                     | $I_{F(AV)}$ | 10.0          |              |              |              |              |              |              | A                              |
| Peak Forward Surge Current (8.3ms single<br>half sine-wave superimposed on rated load)                      | $I_{FSM}$   | 200           |              |              |              |              |              |              | A                              |
| Maximum Instantaneous Forward Voltage<br>(at forward current 5.0A DC)                                       | $V_F$       | 1.1           |              |              |              |              |              |              | V                              |
| Maximum DC Reverse Current $T_a=25^\circ\text{C}$<br>(at rated DC blocking voltage) $T_a=100^\circ\text{C}$ | $I_R$       | 10.0<br>500   |              |              |              |              |              |              | $\mu\text{A}$<br>$\mu\text{A}$ |
| Operating Temperature Range   | $T_J$       | -55 to +125   |              |              |              |              |              |              | $^\circ\text{C}$               |
| Storage Temperature   | $T_{STG}$   | -55 to +150   |              |              |              |              |              |              | $^\circ\text{C}$               |