# BR1005 THRU BR1010

## SINGLE-PHASE SILICON BRIDGE RECTIFIER

**VOLTAGE：50-1000V** **CURRENT：10.0A**

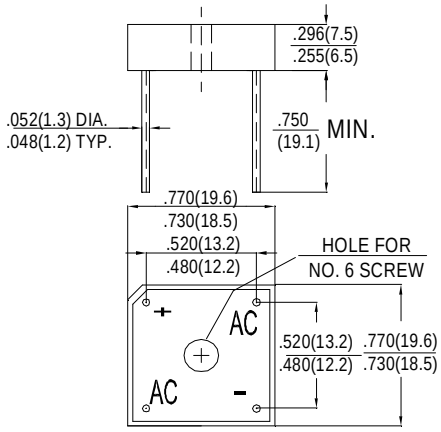
### *FEATURES*

- Surge overload ratings-250 Amperes
- Low forward voltage drop

### *MECHANICAL DATA*

- ***Case*:**Metal or plastic shell with plastic encapsulation
- ***Epoxy*:** UL 94V-0 rate flame retardant
- ***Lead*:** MIL-STD- 202E, Method 208 guaranteed
- ***Polarity*:** Symbols molded or marked on body
- ***Mounting:*** Thru hole for 6# screw
- ***Weight*:** 6.9 grams

### *KBPC-8/10*




Dimensions in inches and (millimeters)

## *MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS*

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

| | | SYMBOL | BR1005 | BR101 | BR102 | BR104 | BR106 | BR108 | BR1010 | units |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Bridge Input 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 Output Current at $T_C$=75°C | | $I_o$ | 10 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | | $I_{FSM}$ | 250 | | | | | | | A |
| Maximum Forward Voltage Drop per element at 5.0A DC | | $V_F$ | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per element | @ $T_A$=25°C | $I_R$ | 10 | | | | | | | μA |
| | @ $T_A$=100°C | | 500 | | | | | | | |
| $I^2t$ Rating for Fusing (t<8.3ms) | | $I^2t$ | 166 | | | | | | | $A^2S$ |
| Typical Junction Capacitance (Note 1) | | $C_J$ | 200 | | | | | | | pF |

Notes: 1.Measured at 1MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and fromjunction to lead mounted on P.C.B. with 0.5×0.5”(13×13mm) copper pads.