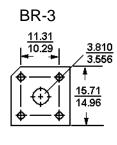
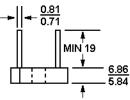
## 3 A Single-phase Silicon Bridge Rectifiers

## Features

- · Low forward voltage drop
- Small size: simple installation
- Tinned copper leads
- Mounting Position: Any

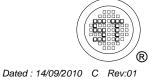




Dimensions in mm

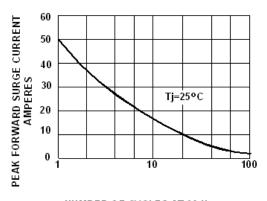
Absolute Maximum Ratings and Characteristics Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load, For capacitive load, derate current by 20%.

| Parameter   | Symbols            | KBPC<br>1005  | KBPC<br>101 | KBPC<br>102 | KBPC<br>104 | KBPC<br>106 | KBPC<br>108 | KBPC<br>110 | 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     |
| $ \begin{array}{ll} \mbox{Maximum Average Forward} & T_{C} = 50 \ ^{\circ}\mbox{C} \\ \mbox{Rectified Current} & T_{C} = 100 \ ^{\circ}\mbox{C} \\ & T_{A} = 50 \ ^{\circ}\mbox{C} \\ \end{array} $ | I <sub>F(AV)</sub> | 3<br>2<br>2   |             |             |             |             |             |             | А     |
| Peak Forward Surge Current 8.3 ms Single half<br>sine-wave Superimposed on Rated Load<br>(JEDEC method)   | I <sub>FSM</sub>   | 50            |             |             |             |             |             | A           |       |
| Maximum Instantaneous Forward Voltage 1.5 A   | V <sub>F</sub>     | 1.1           |             |             |             |             |             |             | V     |
| Maximum DC Reverse Current $T_A = 25 ^{\circ}C$   | I <sub>R</sub>     | 10            |             |             |             |             |             |             | μA    |
| at Rated DC Blocking Voltage $T_A = 100 ^{\circ}\text{C}$   |                    | 1             |             |             |             |             |             |             | mA    |
| Operating temperature Range   | Tj                 | - 55 to + 125 |             |             |             |             |             |             | °C    |
| Storage Temperature Range   | T <sub>stg</sub>   | - 55 to + 150 |             |             |             |             |             |             | °C    |



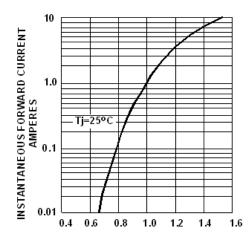
## KBPC1005...KBPC110

FIG.1-MAXIMUM FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60 Hz

FIG.3-TYPICAL FORWARD CHARACTERISTICS

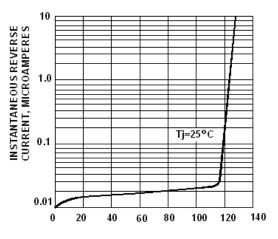


INSTANTANEOUS FORWARD VOLTAGE, VOLTS

OUTPUT RECTIFIED CURRENT AVERAGE FORWARD OUTPUT CURRENT AMPERES 4 3 HEAT SINK MOUNTING To 2 PC MOUNTING Т 1 0 150 0 100 50 TEMPERATURE. (°C)

FIG.2-DERATING CURVE FOR

FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE

