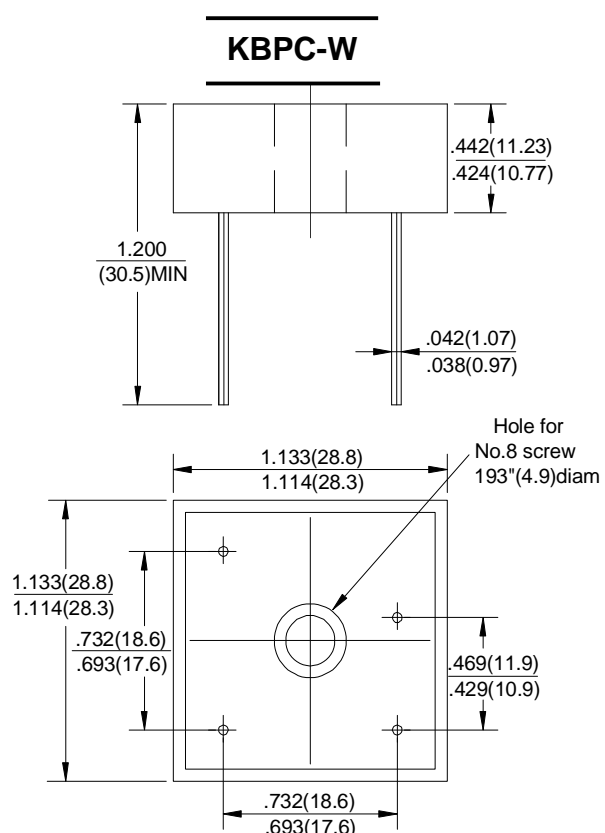


|  |   |
|--|---|
| <b>SILICON BRIDGE RECTIFIERS</b>   | <b>REVERSE VOLTAGE - 50 to 1000Volts</b><br><b>FORWARD CURRENT - 10/15/25/35/50 Amperes</b>   |
| <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● Surge overload -240~500 Amperes peak</li> <li>● Low forward voltage drop</li> <li>● Mounting Position : Any</li> <li>● Electrically isolated base -2000 Volts</li> <li>● Materials used carries U/L recognition</li> </ul> |  <p style="text-align: center;">Dimensions in inches and (millimeters)</p> |

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load 60Hz.

For capacitive load current by 20%

| CHARACTERISTICS   | SYMBOL            | KBPC-W      |        |          |        |          |        |          |        |          |        | UNIT |
|---|-------------------|-------------|--------|----------|--------|----------|--------|----------|--------|----------|--------|------|
|   |                   | KBPC-W      | KBPC-W | KBPC-W   | KBPC-W | KBPC-W   | KBPC-W | KBPC-W   | KBPC-W | KBPC-W   | KBPC-W |      |
|   |                   | 10005       | 1001   | 1002     | 1004   | 1006     | 1008   | 1010     |        |          |        |      |
|   |                   | 15005       | 1501   | 1502     | 1504   | 1506     | 1508   | 1510     |        |          |        |      |
|   |                   | 25005       | 2501   | 2502     | 2504   | 2506     | 2508   | 2510     |        |          |        |      |
|   |                   | 35005       | 3501   | 3502     | 3504   | 3506     | 3508   | 3510     |        |          |        |      |
| 50005   | 5001              | 5002        | 5004   | 5006     | 5008   | 5010     |        |          |        |          |        |      |
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>  | 50          | 100    | 200      | 400    | 600      | 800    | 1000     |        |          |        | V    |
| Maximum RMS Bridge Input Voltage  | V <sub>RMS</sub>  | 35          | 70     | 140      | 280    | 420      | 560    | 700      |        |          |        | V    |
| Maximum Average Forward Rectified Output Current @T <sub>c</sub> =55°C                | I <sub>(AV)</sub> | KBPC 10W    | 10     | KBPC 15W | 15     | KBPC 25W | 25     | KBPC 35W | 35     | KBPC 50W | 50     | A    |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load    | I <sub>FSM</sub>  | KBPC 10W    | 240    | KBPC 15W | 300    | KBPC 25W | 400    | KBPC 35W | 400    | KBPC 50W | 500    | A    |
| Maximum Forward Voltage Drop Per Element at 5.0/7.5/12.5/17.5/25.0A Peak              | V <sub>F</sub>    | 1.1         |        |          |        |          |        |          |        |          |        | V    |
| Maximum Reverse Current at Rate DC Blocking Voltage Per Element @T <sub>J</sub> =25°C | I <sub>R</sub>    | 10          |        |          |        |          |        |          |        |          |        | μA   |
| Operating Temperature Range   | T <sub>J</sub>    | -55 to +150 |        |          |        |          |        |          |        |          |        | °C   |
| Storage Temperature Range   | T <sub>STG</sub>  | -55 to +150 |        |          |        |          |        |          |        |          |        | °C   |

# RATING AND CHARACTERISTIC CURVES

## KBPC10/15/25/35/50A W SERIES



FIG.1-MAXIMUM FORWARD SURGE CURRENT

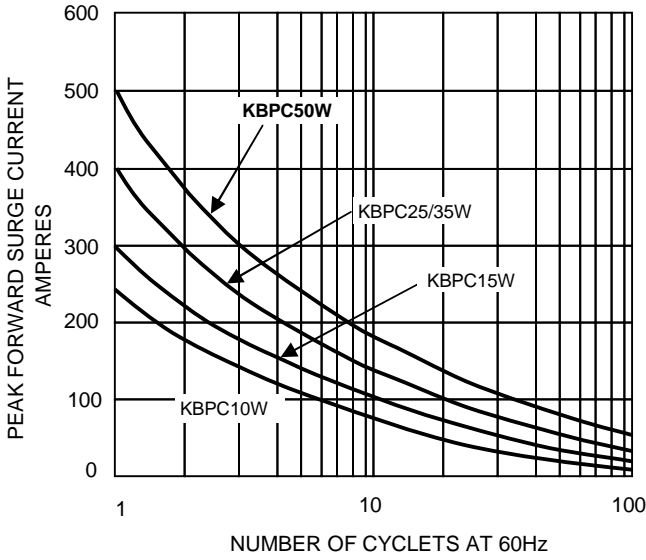


FIG.2- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

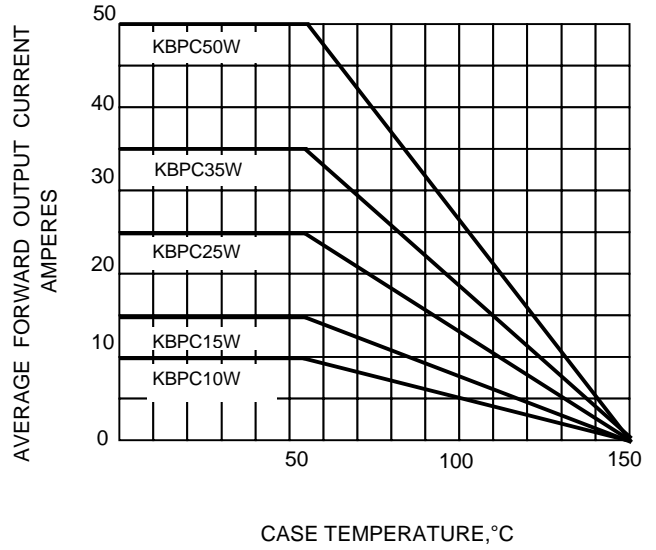


FIG.3-TYPICAL FORWARD CHARACTERISTICS

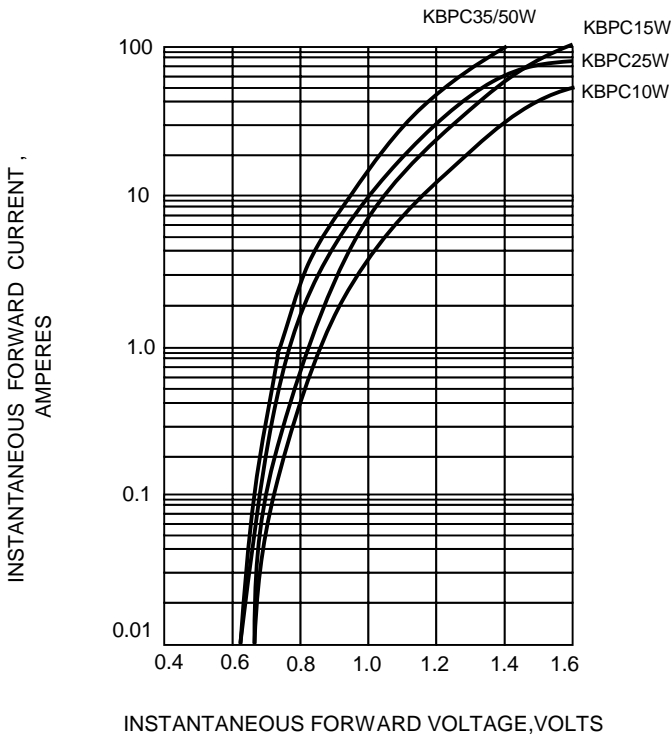


FIG.4-TYPICAL REVERSE CHARACTERISTICS

