

# Glass Passivated Bridge Rectifier



## Features

- Surge overload -240~500 Amperes peak
- Low forward voltage drop
- Electrically isolated base -2000 Volts
- Solderable 0.25" FAST ON terminals
- Materials used carries UL recognition

## Mechanical Data

Mounting Position : Any  
Reverse Voltage : 50 to 1000 Volts  
Forward Current : 10/15/25/35/50 Ampere

## Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| Part Number | Max. Recurrent Peak<br>Reverse Voltage | Max. RMS<br>Bridge Input<br>Voltage | Max. Average Forward<br>Rectified Output Current<br>@T <sub>c</sub> = 55°C | Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load |
|-------------|--|-------------------------------------|--|--|
|             | V <sub>RRM</sub>                       | V <sub>RMS</sub>                    | I <sub>(AV)</sub>  | I <sub>FSM</sub>   |
| KBPC3504    | 400                                    | 280                                 | 35   | 400  |
| KBPC1508    | 800                                    | 560                                 | 15   | 300  |
| KBPC15005   | 50                                     | 35                                  | 15   | 300  |
| KBPC3502    | 200                                    | 140                                 | 35   | 400  |
| KBPC3510    | 1000                                   | 700                                 | 35   | 400  |
| KBPC1510    | 1000                                   | 700                                 | 15   | 300  |
| KBPC1501    | 100                                    | 70                                  | 15   | 300  |
| KBPC2504    | 400                                    | 280                                 | 25   | 400  |
| KBPC5006    | 600                                    | 420                                 | 50   | 500  |
| KBPC3506    | 600                                    | 420                                 | 35   | 400  |
| KBPC5002    | 200                                    | 140                                 | 50   | 500  |
| KBPC25005   | 50                                     | 35                                  | 25   | 400  |
| KBPC3501    | 100                                    | 70                                  | 35   | 400  |
| KBPC1506    | 600                                    | 420                                 | 15   | 300  |
| KBPC5010    | 1000                                   | 700                                 | 50   | 500  |
| KBPC50005   | 50                                     | 35                                  | 50   | 500  |
| KBPC2502    | 200                                    | 140                                 | 25   | 400  |
| KBPC1504    | 400                                    | 280                                 | 15   | 300  |
| KBPC2508    | 800                                    | 560                                 | 25   | 400  |

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| Characteristics  | Symbol    | Values      | Unit             |
|--|-----------|-------------|------------------|
| Max. Forward Voltage Drop Per Element<br>at 5.0/7.5/12.5/17.5/25.0A Peak                   | $V_F$     | 1.1         | V                |
| Max. Reverse Current at Rate<br>DC Blocking Voltage Per Element @ $T_J = 25^\circ\text{C}$ | $I_R$     | 10          | $\mu\text{A}$    |
| Operating Temperature Range  | $T_J$     | -55 to +150 | $^\circ\text{C}$ |
| Storage Temperature Range  | $T_{STG}$ | -55 to +150 | $^\circ\text{C}$ |

## Ratings and Characteristic Curves

FIG.1-MAXIMUM FORWARD SURGE CURRENT

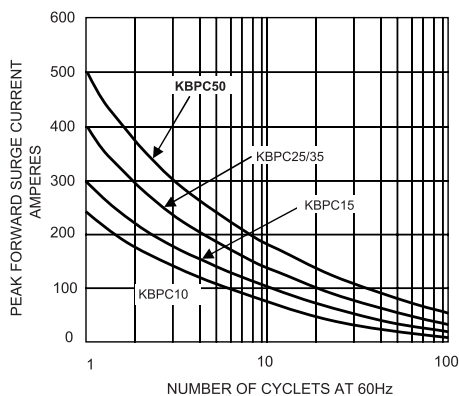


FIG.2- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

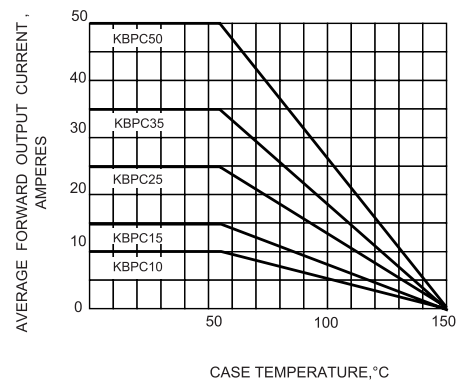


FIG.3-TYPICAL FORWARD  
CHARACTERISTICS

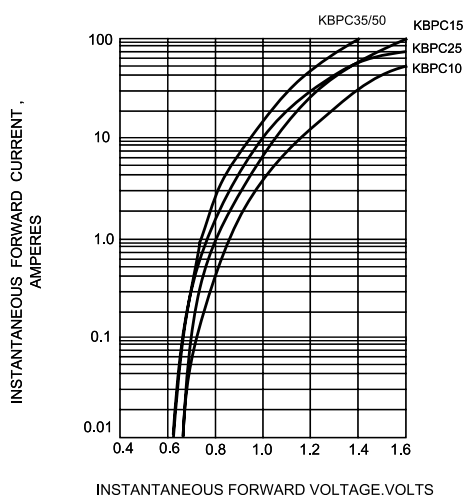
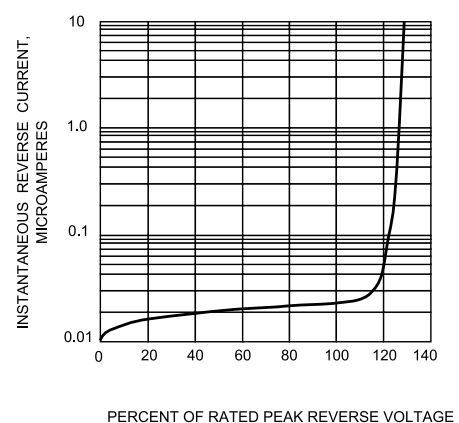


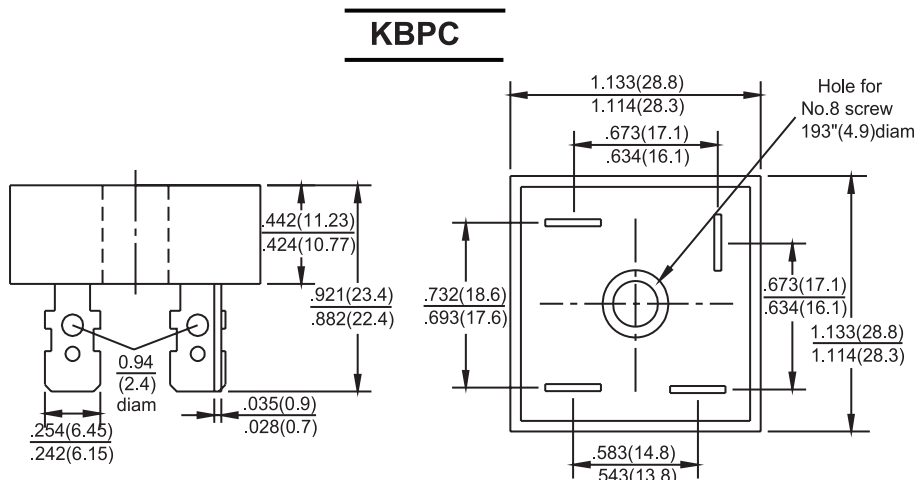
FIG.4-TYPICAL REVERSE  
CHARACTERISTICS



# Glass Passivated Bridge Rectifier



## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

| Description                                   | Part Number |
|---|-------------|
| Glass Passivated Bridge Rectifiers, 35A 400V  | KBPC3504    |
| Glass Passivated Bridge Rectifiers, 15A 800V  | KBPC1508    |
| Glass Passivated Bridge Rectifiers, 15A 50V   | KBPC15005   |
| Glass Passivated Bridge Rectifiers, 35A 200V  | KBPC3502    |
| Glass Passivated Bridge Rectifiers, 35A 1000V | KBPC3510    |
| Glass Passivated Bridge Rectifiers, 15A 1000V | KBPC1510    |
| Glass Passivated Bridge Rectifiers, 15A 100V  | KBPC1501    |
| Glass Passivated Bridge Rectifiers, 25A 400V  | KBPC2504    |
| Glass Passivated Bridge Rectifiers, 50A 600V  | KBPC5006    |
| Glass Passivated Bridge Rectifiers, 35A 600V  | KBPC3506    |
| Glass Passivated Bridge Rectifiers, 50A 200V  | KBPC5002    |
| Glass Passivated Bridge Rectifiers, 25A 50V   | KBPC25005   |
| Glass Passivated Bridge Rectifiers, 35A 100V  | KBPC3501    |
| Glass Passivated Bridge Rectifiers, 15A 600V  | KBPC1506    |
| Glass Passivated Bridge Rectifiers, 50A 1000V | KBPC5010    |
| Glass Passivated Bridge Rectifiers, 50A 50V   | KBPC50005   |
| Glass Passivated Bridge Rectifiers, 25A 200V  | KBPC2502    |
| Glass Passivated Bridge Rectifiers, 15A 400V  | KBPC1504    |
| Glass Passivated Bridge Rectifiers, 25A 800V  | KBPC2508    |

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