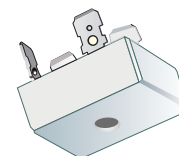


# KBPC10005-G Thru. KBPC5010-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 10/15/25/35/50A

RoHS Device

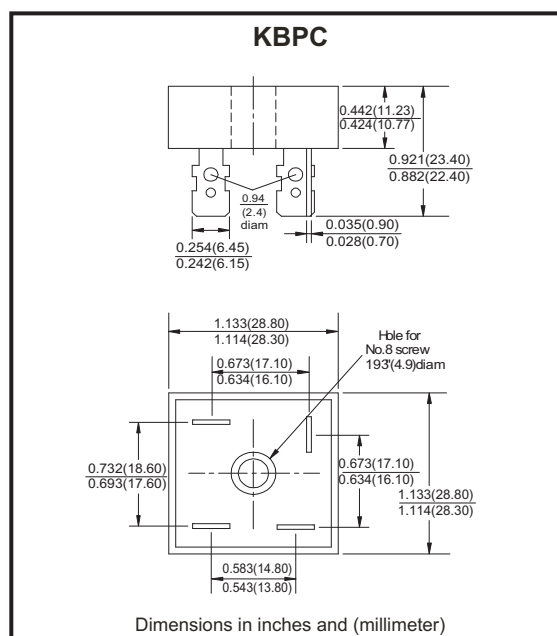


## Features

- Surge overload -240~500 Amperes peak.
- Low forward voltage drop.
- Electrically isolated base -2000 Volts.
- Materials used carries UL recognition.
- UL recognized file # E349301 

## Mechanical Data

- Polarity: As marked on Body.
- Mounting position: Any.
- Weight: 28.82 grams (approx.).



## 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%

| Parameter                              | Symbol    | KBPC-G | KBPC-G | KBPC-G | KBPC-G | KBPC-G | KBPC-G | KBPC-G | Unit |
|----------------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|------|
|                                        |           | 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 | $V_{RRM}$ | 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    |

| Parameter                                                                                | Symbol     | KBPC10      | KBPC15 | KBPC25 | KBPC35 | KBPC50 | Unit             |
|------------------------------------------------------------------------------------------|------------|-------------|--------|--------|--------|--------|------------------|
| Maximum Average Forward Rectified Output Current @ $T_c=55^\circ\text{C}$                | $I_{(AV)}$ | 10          | 15     | 25     | 35     | 50     | A                |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load      | $I_{FSM}$  | 240         | 300    | 400    | 400    | 500    | A                |
| Maximum Forward Voltage Drop Per Element at 5.0/7.5/12.5/17.5/25.0A Peak                 | $V_F$      | 1.1         |        |        |        |        | V                |
| Maximum Reverse Current at rate DC Blocking Voltage Per Element @ $T_J=25^\circ\text{C}$ | $I_R$      | 10.0        |        |        |        |        | $\mu\text{A}$    |
| Operating Temperature Range                                                              | $T_J$      | -55 to +150 |        |        |        |        | $^\circ\text{C}$ |
| Storage Temperature Range                                                                | $T_{STG}$  | -55 to +150 |        |        |        |        | $^\circ\text{C}$ |

Company reserves the right to improve product design, functions and reliability without notice.

REV: B

## Rating and Characteristics Curves (KBPC10005-G Thru. KBPC5010-G Series)

Fig.1 - Maximum Forward Surge Current



Fig.2 - Derating Curve Output Rectified Current



Fig.3 - Typical Forward Characteristics



Fig.4 - Typical Forward Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| KBPC10005-G | KBPC10005    |
| KBPC15005-G | KBPC15005    |
| KBPC25005-G | KBPC25005    |
| KBPC35005-G | KBPC35005    |
| KBPC50005-G | KBPC50005    |
| KBPC1001-G  | KBPC1001     |
| KBPC1501-G  | KBPC1501     |
| KBPC2501-G  | KBPC2501     |
| KBPC3501-G  | KBPC3501     |
| KBPC5001-G  | KBPC5001     |
| KBPC1002-G  | KBPC1002     |
| KBPC1502-G  | KBPC1502     |
| KBPC2502-G  | KBPC2502     |
| KBPC3502-G  | KBPC3502     |
| KBPC5002-G  | KBPC5002     |
| KBPC1004-G  | KBPC1004     |
| KBPC1504-G  | KBPC1504     |
| KBPC2504-G  | KBPC2504     |
| KBPC3504-G  | KBPC3504     |
| KBPC5004-G  | KBPC5004     |
| KBPC1006-G  | KBPC1006     |
| KBPC1506-G  | KBPC1506     |
| KBPC2506-G  | KBPC2506     |
| KBPC3506-G  | KBPC3506     |
| KBPC5006-G  | KBPC5006     |
| KBPC1008-G  | KBPC1008     |
| KBPC1508-G  | KBPC1508     |
| KBPC2508-G  | KBPC2508     |
| KBPC3508-G  | KBPC3508     |
| KBPC5008-G  | KBPC5008     |
| KBPC1010-G  | KBPC1010     |
| KBPC1510-G  | KBPC1510     |
| KBPC2510-G  | KBPC2510     |
| KBPC3510-G  | KBPC3510     |
| KBPC5010-G  | KBPC5010     |



**XXXXXX / XXXX = Product type marking code**  
**C = Compchip Logo**

## Standard Packaging

| Case Type | BULK PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| KBPC      | 50             | 500               |

# Mouser Electronics

Authorized Distributor

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