

## KBPC10005W-G Thru. KBPC5010W-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: 25.95 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_W-G | KBPC_W-G | KBPC_W-G | KBPC_W-G | KBPC_W-G | KBPC_W-G | KBPC_W-G | Unit |
|----------------------------------------|-----------|----------|----------|----------|----------|----------|----------|----------|------|
|                                        |           | 10005    | 1001     | 1002     | 1004     | 1006     | 1008     | 1010     |      |
| 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: C

## Rating and Characteristics Curves (KBPC10005W-G Thru. KBPC5010W-G Series)

Fig.1 - Max. Forward Surge Current



Fig.2 - Derating Curve Output Rectified Current



Fig.3 - Typical Forward Characteristics

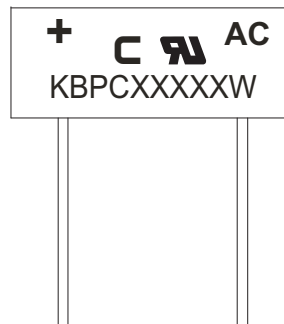


Fig.4 - Typical Forward Characteristics



## Marking Code

| Part Number  | Marking code |
|--------------|--------------|
| KBPC10005W-G | KBPC10005W   |
| KBPC15005W-G | KBPC15005W   |
| KBPC25005W-G | KBPC25005W   |
| KBPC35005W-G | KBPC35005W   |
| KBPC50005W-G | KBPC50005W   |
| KBPC1001W-G  | KBPC1001W    |
| KBPC1501W-G  | KBPC1501W    |
| KBPC2501W-G  | KBPC2501W    |
| KBPC3501W-G  | KBPC3501W    |
| KBPC5001W-G  | KBPC5001W    |
| KBPC1002W-G  | KBPC1002W    |
| KBPC1502W-G  | KBPC1502W    |
| KBPC2502W-G  | KBPC2502W    |
| KBPC3502W-G  | KBPC3502W    |
| KBPC5002W-G  | KBPC5002W    |
| KBPC1004W-G  | KBPC1004W    |
| KBPC1504W-G  | KBPC1504W    |
| KBPC2504W-G  | KBPC2504W    |
| KBPC3504W-G  | KBPC3504W    |
| KBPC5004W-G  | KBPC5004W    |
| KBPC1006W-G  | KBPC1006W    |
| KBPC1506W-G  | KBPC1506W    |
| KBPC2506W-G  | KBPC2506W    |
| KBPC3506W-G  | KBPC3506W    |
| KBPC5006W-G  | KBPC5006W    |
| KBPC1008W-G  | KBPC1008W    |
| KBPC1508W-G  | KBPC1508W    |
| KBPC2508W-G  | KBPC2508W    |
| KBPC3508W-G  | KBPC3508W    |
| KBPC5008W-G  | KBPC5008W    |
| KBPC1010W-G  | KBPC1010W    |
| KBPC1510W-G  | KBPC1510W    |
| KBPC2510W-G  | KBPC2510W    |
| KBPC3510W-G  | KBPC3510W    |
| KBPC5010W-G  | KBPC5010W    |



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

## Standard Packaging

| Case Type | TRAY PACK       |                   |
|-----------|-----------------|-------------------|
|           | TRAY<br>( pcs ) | CARTON<br>( pcs ) |
| KBPC-W    | 100             | 500               |