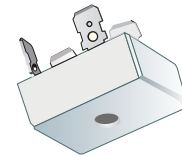


KBPC10005-G Thru. KBPC5010-G Series

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 | |
| 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 | | | | | μA |
| 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

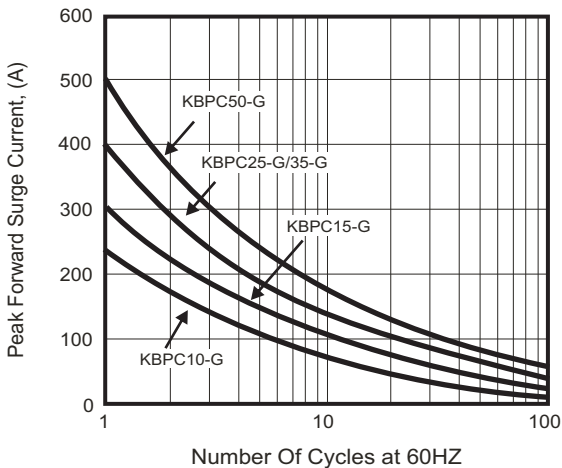


Fig.2 - Derating Curve Output Rectified Current

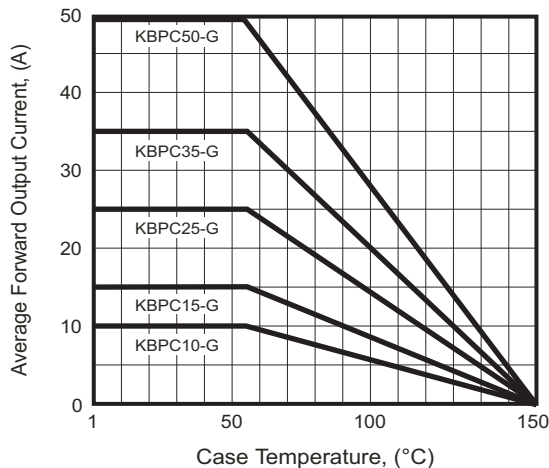


Fig.3 - Typical Forward Characteristics

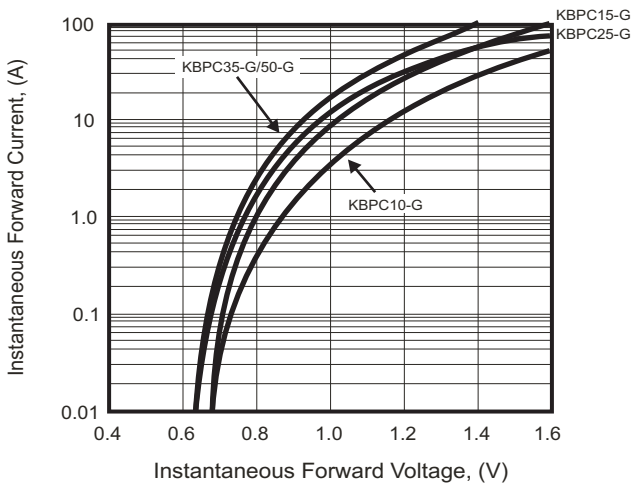


Fig.4 - Typical Forward Characteristics

