

# KBP2005G-G Thru. KBP210G-G

Reverse Voltage: 50 to 1000V

Forward Current: 2.0 Amp

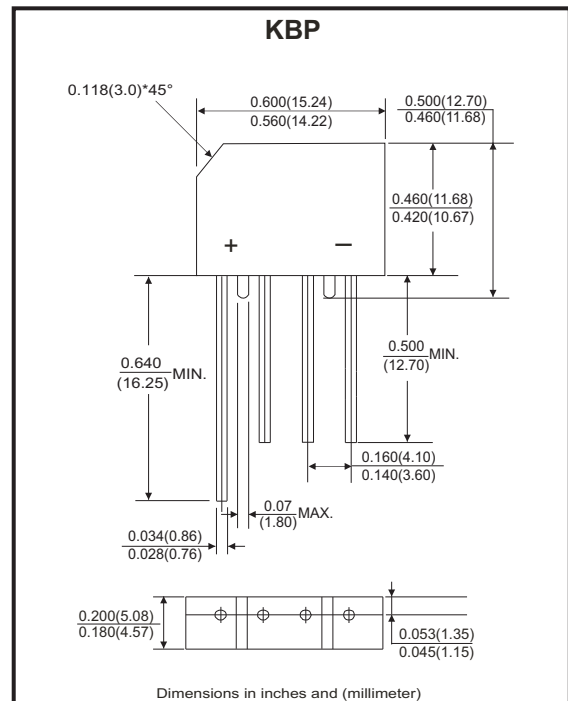
RoHS Device

## Features

- Surge overload rating -60 amperes peak.
- Ideal for printed circuit board.
- UL recognized file # E349301 

## Mechanical Data

- Case: Molded plastic body over passivated junctions.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: Polarity symbols marked on case.
- Mounting position: Any



## 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     | KBP<br>2005G-G | KBP<br>201G-G | KBP<br>202G-G | KBP<br>204G-G | KBP<br>206G-G | KBP<br>208G-G | KBP<br>210G-G | Unit        |
|--------------------------------------------------------------------------------------------|------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| 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           |
| Maximum Average Forward Rectified Output Current @ $T_A=50^{\circ}C$                       | $I_{(AV)}$ | 2.0            |               |               |               |               |               |               | A           |
| Peak Forward Surge Current ,<br>8.3ms Single Half Sine-Wave<br>Super Imposed On Rated Load | $I_{FSM}$  | 60             |               |               |               |               |               |               | A           |
| Maximum Forward Voltage Drop<br>Per Bridge Element at 2.0A Peak                            | $V_F$      | 1.1            |               |               |               |               |               |               | V           |
| Maximum Reverse Current at Rated<br>DC Blocking Voltage Per Element                        | $I_R$      | 10.0           |               |               |               |               |               |               | $\mu A$     |
| Maximum Reverse Current at Rated<br>DC Blocking Voltage Per Element @ $T_J=100^{\circ}C$   | $I_R$      | 1.0            |               |               |               |               |               |               | mA          |
| Operating Temperature Range                                                                | $T_J$      | -55 to +150    |               |               |               |               |               |               | $^{\circ}C$ |
| Storage Temperature Range                                                                  | $T_{STG}$  | -55 to +150    |               |               |               |               |               |               | $^{\circ}C$ |

## Rating and Characteristics Curves (KBP2005G-G Thru. KBP210G-G)

Fig.1 - Derating Curve Output Rectified Current

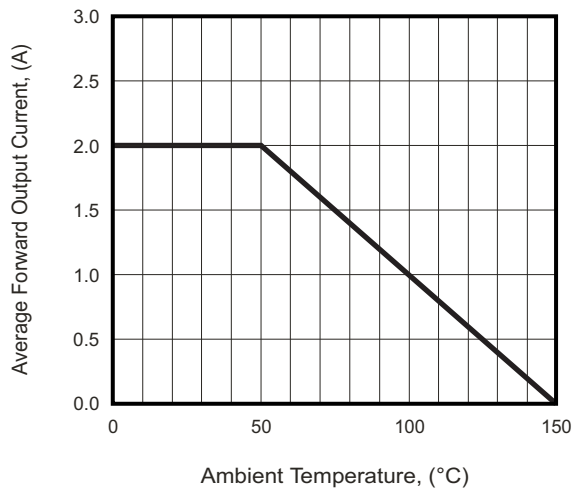


Fig.2 - Max. Forward Surge Current

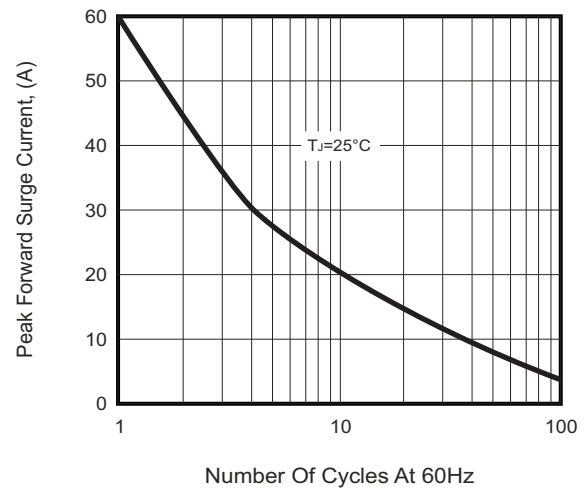


Fig.3 - Typical Forward Characteristics

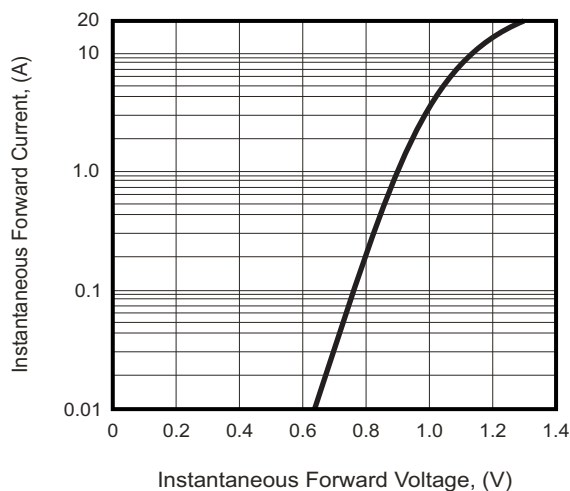
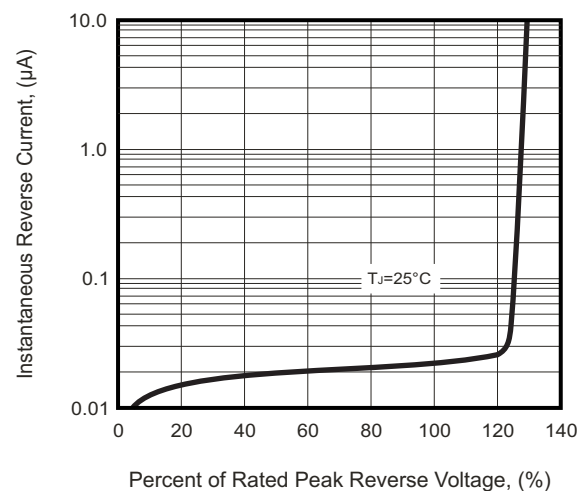
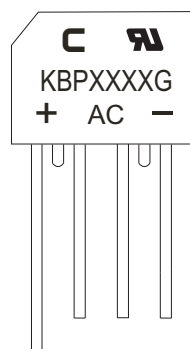


Fig.4 - Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| KBP2005G-G  | KBP2005G     |
| KBP201G-G   | KBP201G      |
| KBP202G-G   | KBP202G      |
| KBP204G-G   | KBP204G      |
| KBP206G-G   | KBP206G      |
| KBP208G-G   | KBP208G      |
| KBP210G-G   | KBP210G      |



XXX / XXXX = Product type marking code

C = Comchip Logo

## Standard Packaging

| Case Type | BULK PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| KBP       | 500            | 5,000             |

| Case Type | TUBE PACK       |                |
|-----------|-----------------|----------------|
|           | TUBE<br>( pcs ) | BOX<br>( pcs ) |
| KBP       | 30              | 1,200          |