

## Silicon Bridge Rectifiers

### FEATURES

- Rating to 1000V PRV
- Surge overload rating to 50 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Plastic material has UL flammability classification 94V-O
- Weight: 2.04g
- Glass passivated chip junctions



Lead-free

### Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

| Characteristic                                                                          | Symbol             | 2KBP02 | UNITS |
|-----------------------------------------------------------------------------------------|--------------------|--------|-------|
| Maximum recurrent peak reverse voltage                                                  | V <sub>RRM</sub>   | 200    | V     |
| Maximum RMS voltage                                                                     | V <sub>RMS</sub>   | 140    | V     |
| Maximum DC blocking voltage                                                             | V <sub>DC</sub>    | 200    | V     |
| Maximum average forward Output current<br>@T <sub>A</sub> =25°C                         | I <sub>F(AV)</sub> | 2.0    | A     |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load | I <sub>FSM</sub>   | 50     | A     |

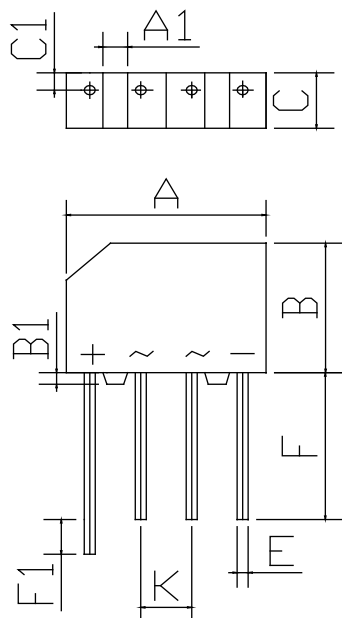
### Thermal Characteristics

| Characteristic                       | Symbol           | 2KBP02          | UNITS |
|--------------------------------------|------------------|-----------------|-------|
| Operating junction temperature range | T <sub>J</sub>   | - 55 ---- + 125 | °C    |
| Storage temperature range            | T <sub>STG</sub> | - 55 ---- + 150 | °C    |

### Electrical Characteristics (@T<sub>A</sub> = 25°C unless otherwise specified)

| Characteristic                                                                                       | Symbol         | 2KBP02    | UNITS     |
|------------------------------------------------------------------------------------------------------|----------------|-----------|-----------|
| Maximum instantaneous forward voltage<br>@2.0A                                                       | V <sub>F</sub> | 1.1       | V         |
| Maximum reverse current @T <sub>A</sub> =25°C<br>at rated DC blocking voltage @T <sub>A</sub> =100°C | I <sub>R</sub> | 10<br>1.0 | μ A<br>mA |

## PACKAGE OUTLINE DIMENSIONS

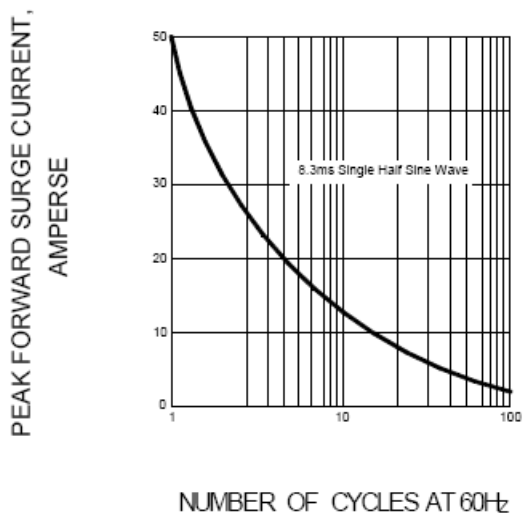


| KBP                  |              |       |
|----------------------|--------------|-------|
| Dim                  | Min          | Max   |
| A                    | 14.50        | 14.90 |
| A1                   | 1.60 Typical |       |
| B                    | 11.10        | 11.50 |
| B1                   | 1.00 Typical |       |
| C                    | 4.70         | 5.10  |
| C1                   | 1.20 Typical |       |
| E                    | Ø0.70        | Ø0.90 |
| F                    | 13.00min     |       |
| F1                   | 2.00min      |       |
| K                    | 3.40         | 4.00  |
| All Dimensions in mm |              |       |

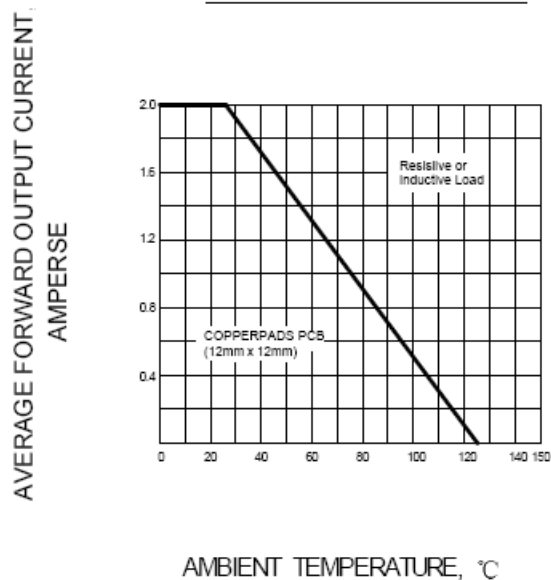
## PACKAGE INFORMATION

| Device | Package | Shipping      |
|--------|---------|---------------|
| 2KBP02 | KBP     | 500 Units/Box |

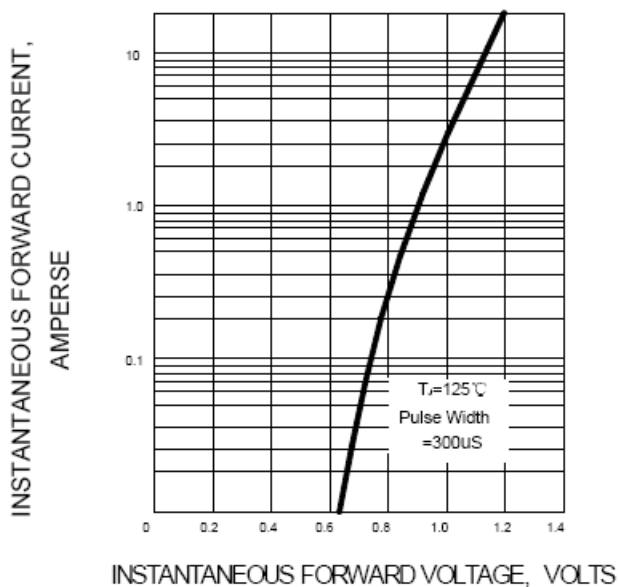
**FIG.1 -- PEAK FORWARD SURGE CURRENT**



**FIG.2 -- FORWARD DERATING CURVE  
OUTPUT RECTIFIED CURRENT**



**FIG.3 -- TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 -- TYPICAL REVERSE CHARACTERISTIC**

