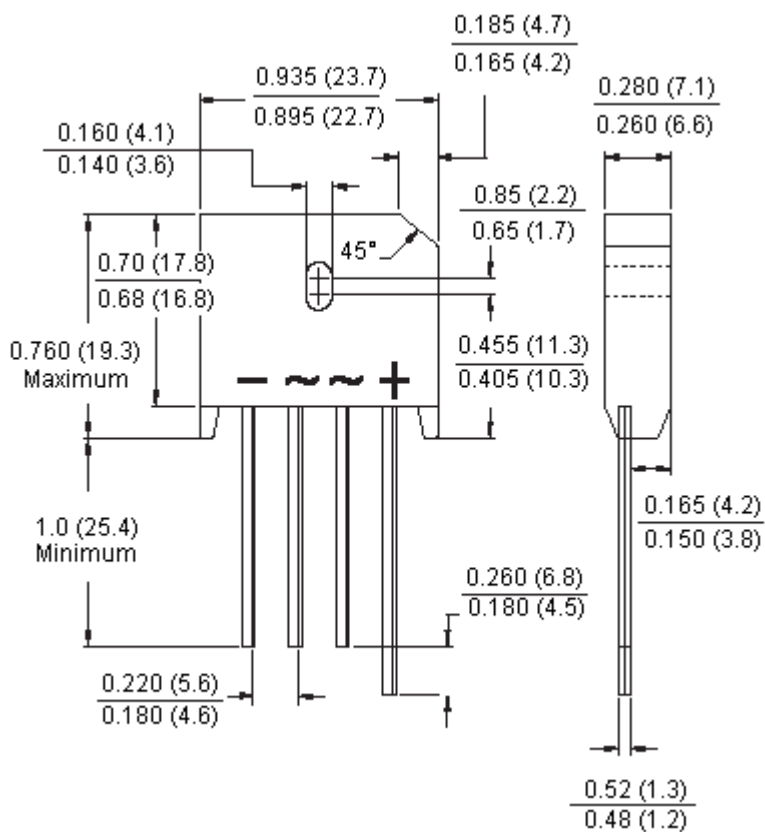




## Features:

- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction.
- Plastic material.
- Surge overload rating to 175 amperes peak.
- High temperature soldering guaranteed: 260°C/10 seconds/0.375 inch, (9.5mm) lead lengths at 5lbs., (2.3kg) tension.
- Weight: 0.3 ounce, 8.0 grams.
- Mounting torque: 5in. lb. Maximum.

## KBU



Dimensions : Inches (Millimetres)

## 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%.

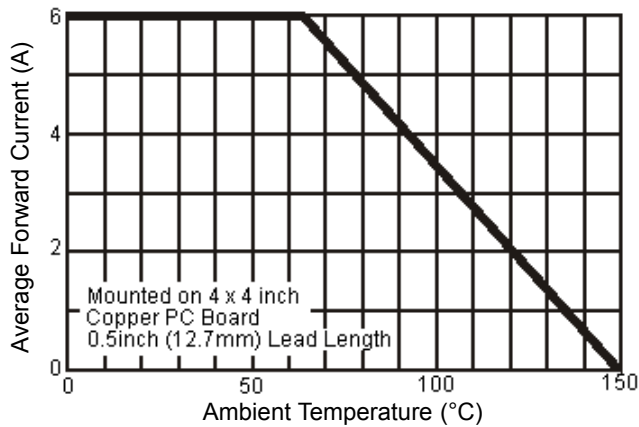
| Type Number                                                                                                   | Symbol                               | KBU603G     | KBU605G | KBU607G | Units    |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|---------|---------|----------|
| Maximum Recurrent Peak Reverse Voltage                                                                        | V <sub>RRM</sub>                     | 200         | 600     | 1000    | V        |
| Maximum RMS Voltage                                                                                           | V <sub>RMS</sub>                     | 140         | 420     | 700     |          |
| Maximum DC Blocking Voltage                                                                                   | V <sub>DC</sub>                      | 200         | 600     | 1000    |          |
| Maximum Average Forward Rectified Current at T <sub>A</sub> = 65°C                                            | I <sub>(AV)</sub>                    | 6.0         |         |         | A        |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )            | I <sub>FSM</sub>                     | 175         |         |         |          |
| Maximum Instantaneous Forward Voltage<br>at 3.0A<br>at 6.0A                                                   | V <sub>F</sub>                       | 1.0<br>1.1  |         |         | V        |
| Maximum DC Reverse Current at T <sub>A</sub> = 25°C<br>at Rated DC Blocking Voltage at T <sub>A</sub> = 125°C | I <sub>R</sub>                       | 5.0<br>500  |         |         | μA<br>μA |
| Typical Thermal Resistance (Note 1)<br>(Note 2)                                                               | R <sub>θJA</sub><br>R <sub>θJC</sub> | 8.6<br>3.1  |         |         | °C/W     |
| Operating Temperature Range                                                                                   | T <sub>J</sub>                       | -55 to +150 |         |         | °C       |
| Storage Temperature Range                                                                                     | T <sub>STG</sub>                     |             |         |         |          |

Notes: 1. Thermal Resistance from Junction to Ambient with units in Free Air, PCB Mounted on 0.5 x 0.5 inches (12mm x 12mm) Copper Pads, 0.375 inch (9.5mm) Lead Length.

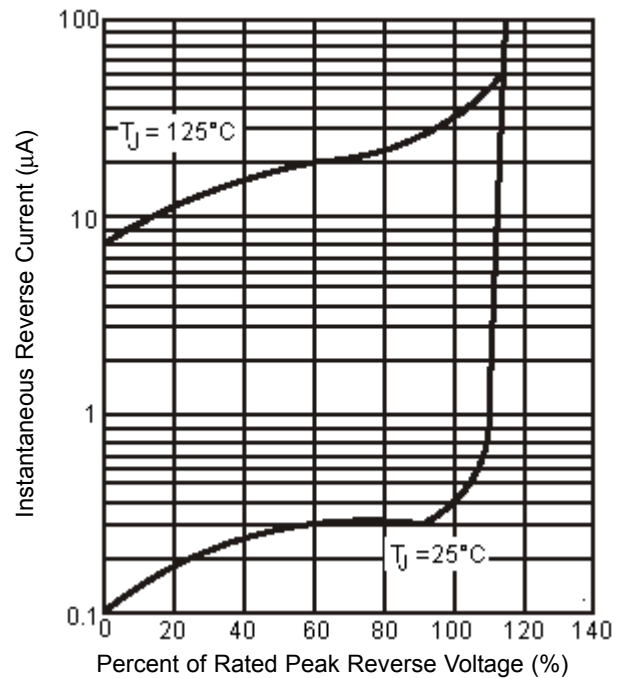
2. Thermal Resistance from Junction to Case with Units Mounted on 2 x 3 x 0.25 inch Al-Plate.

## Ratings and Characteristic Curves (KBU603G thru KBU607G)

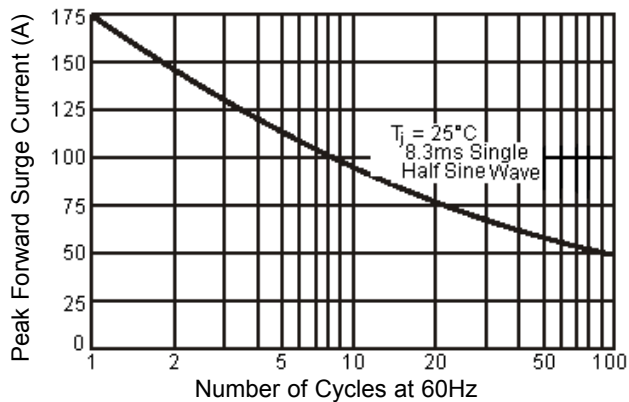
Maximum Forward Current Derating Curve



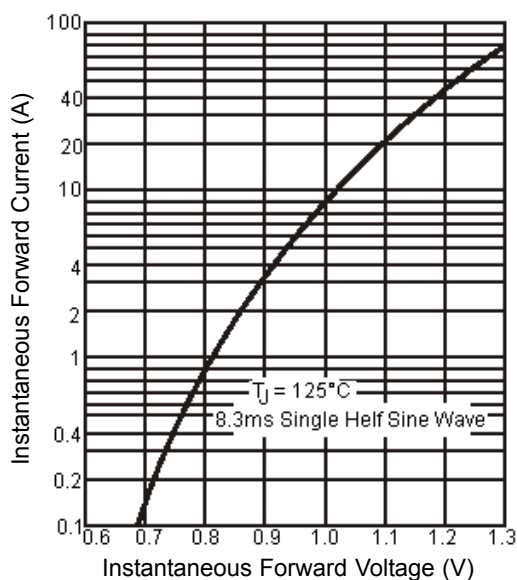
Typical Reverse Characteristics  
Per Bridge Element



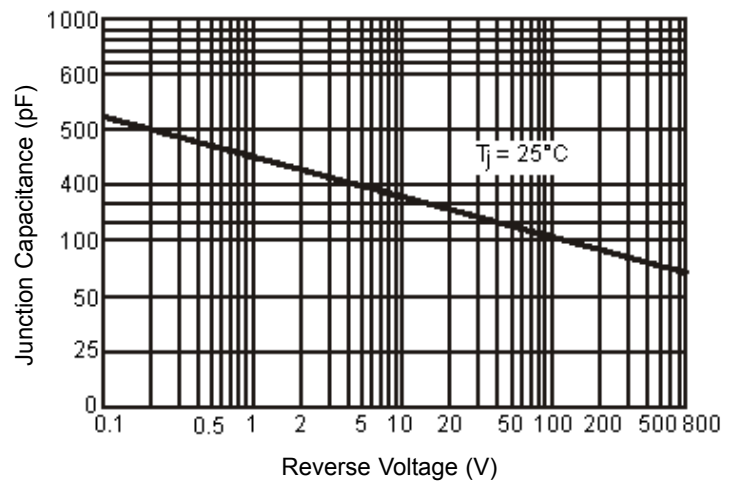
Maximum Non-Repetitive Forward Surge Current  
Per Bridge Element



Typical Forward Characteristics  
Per Bridge Element



Typical Junction Capacitance



## Part Number Table

| Description                 | Part Number |
|-----------------------------|-------------|
| Bridge Rectifier, 6A, 200V  | KBU603G     |
| Bridge Rectifier, 6A, 600V  | KBU604G     |
| Bridge Rectifier, 6A, 1000V | KBU607G     |

## Notes:

## International Sales Offices:

|                                                                                    |                                                                                             |                                                                                     |                                                                                           |                                                                                     |                                                                                            |                                                                                                                                                                                                                                                                 |                                                                                    |
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