



# **Glass Passivated Bridge Rectifiers**

### **FEATURES**

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



Case: Molded plastic body

Molding compound, UL flammability classification rating 94V-0  $\,$ 

Base P/N with suffix "G" on packing code - halogen-free

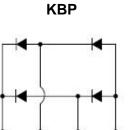
**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test **Polarity:** Polarity as marked on the body

Weight: 1.52 g (approximately)









| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)          |                        |              |      |      |      |      |      |                  |      |
|---|------------------------|--------------|------|------|------|------|------|------------------|------|
| PARAMETER   | SYMBOL                 | KBP          | KBP  | KBP  | KBP  | KBP  | KBP  | KBP              | UNIT |
| PARAIVIETER   | STIVIBOL               | 101G         | 102G | 103G | 104G | 105G | 106G | 107G             |      |
| Maximum repetitive peak reverse voltage   | $V_{RRM}$              | 50           | 100  | 200  | 400  | 600  | 800  | 1000             | V    |
| Maximum RMS 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 current   | I <sub>F(AV)</sub>     | 1            |      |      |      |      | Α    |                  |      |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load                   | I <sub>FSM</sub>       | 30           |      |      |      |      | Α    |                  |      |
| Rating for fusing (t<8.3mS)   | I <sup>2</sup> t       | 3.73         |      |      |      |      |      | A <sup>2</sup> s |      |
| Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 1 A                                   | V <sub>F</sub>         | 1.0          |      |      |      |      |      | V                |      |
| Maximum DC reverse current $T_J$ =25 $^{\circ}$ Cat rated DC blocking voltage $T_J$ =125 $^{\circ}$ C | I <sub>R</sub>         | 10<br>500    |      |      |      | μA   |      |                  |      |
| Typical thermal resistance  | R <sub>θjL</sub> 10 28 |              | °C/W |      |      |      |      |                  |      |
| Operating junction temperature range  | T <sub>J</sub>         | - 55 to +150 |      |      |      |      |      | οС               |      |
| Storage temperature range   | T <sub>STG</sub>       | - 55 to +150 |      |      |      |      | οС   |                  |      |

Note 1: Pulse Test with PW=300µs,1% Duty Cycle



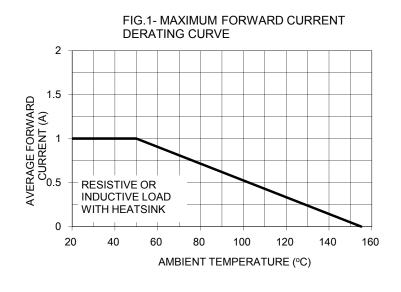
| ORDERING INFORMATION |              |                     |         |           |  |  |
|----------------------|--------------|---------------------|---------|-----------|--|--|
| PART NO.             | PACKING CODE | GREEN COMPOUND CODE | PACKAGE | PACKING   |  |  |
| KBP10xG<br>(Note 1)  | C2           | Suffix "G"          | KBP     | 25 / TUBE |  |  |

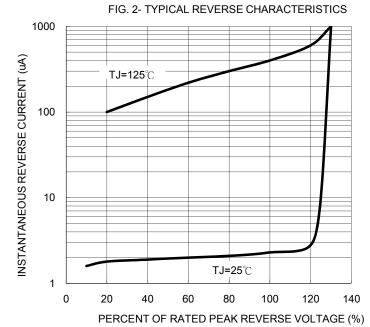
Note 1: "x" defines voltage from 50V (KBP101G) to 1000V (KBP107G)

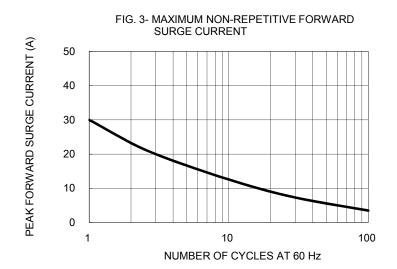
| EXAMPLE       |          |              |                     |                |  |  |
|---------------|----------|--------------|---------------------|----------------|--|--|
| PREFERRED P/N | PART NO. | PACKING CODE | GREEN COMPOUND CODE | DESCRIPTION    |  |  |
| KBP107G C2    | KBP107G  | C2           |                     |                |  |  |
| KBP107G C2G   | KBP107G  | C2           | G                   | Green compound |  |  |

#### RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)







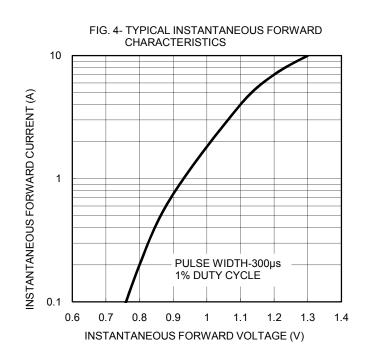
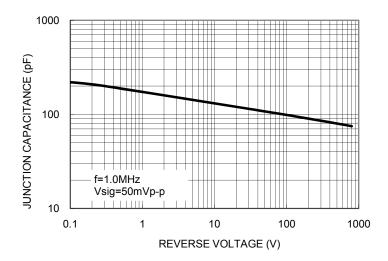
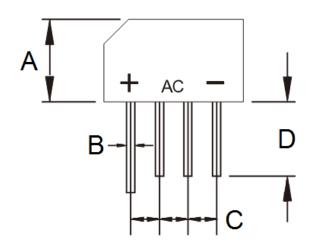


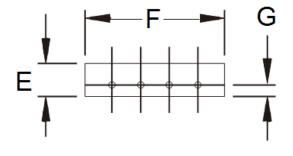


FIG. 5 TYPICAL JUNCTION CAPACITANCE



### PACKAGE OUTLINE DIMENSIONS





| DIM.  | Unit  | (mm)  | Unit (inch) |       |  |  |
|-------|-------|-------|-------------|-------|--|--|
| DIWI. | Min   | Max   | Min         | Max   |  |  |
| Α     | 10.60 | 11.68 | 0.417       | 0.460 |  |  |
| В     | 0.70  | 0.90  | 0.028       | 0.035 |  |  |
| С     | 3.60  | 4.10  | 0.142       | 0.161 |  |  |
| D     | 12.70 | -     | 0.500       | -     |  |  |
| Е     | 3.70  | 3.90  | 0.146       | 0.154 |  |  |
| F     | 14.22 | 15.24 | 0.560       | 0.600 |  |  |
| G     | 1.27  | -     | 0.050       | -     |  |  |

## MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YW = Date Code

F = Factory Code





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