



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





KBP



MECHANICAL DATA

Case: KBP

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: 1.5 g (approximately)

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25℃ unless otherwise noted) | | | | | | | | | |
|--|---------------------------------|--------------|------|------|-----------|------|------|------|------------------|
| PARAMETER | SYMBOL | KBP | KBP | KBP | KBP | KBP | KBP | KBP | UNIT |
| PARAIVIE I ER | | 201G | 202G | 203G | 204G | 205G | 206G | 207G | CIVIT |
| 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 | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | I _{F(AV)} | 2 | | | | | | Α | |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 60 | | | | | Α | | |
| Rating for fusing (t<8.3ms) | l ² t | | | | 15 | | | | A ² s |
| Maximum instantaneous forward voltage (Note 1) I_F = 2 A | | 1.2 | | | | | > | | |
| Maximum DC reverse current T_J =25 $^{\circ}$ C at rated DC blocking voltage T_J =125 $^{\circ}$ C | I _R | 10 500 | | | | μA | | | |
| Typical thermal resistance | $R_{	heta j L} \ R_{	heta j A}$ | | | | °C/W | | | | |
| Operating junction temperature range T _J | | - 55 to +150 | | | | | | оС | |
| Storage temperature range | T _{STG} | | | - | 55 to +15 | 50 | | | оС |

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

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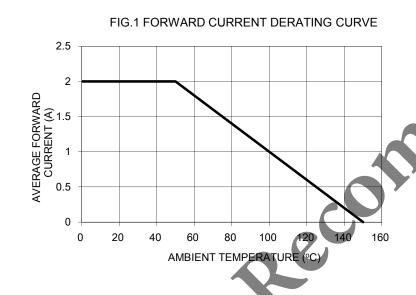
| ORDERING INFORMATION | | | | | | |
|----------------------|--------------|------------------------|---------|-----------|--|--|
| PART NO. | PACKING CODE | GREEN COMPOUND CODE | PACKAGE | PACKING | | |
| KBP20xG (Note 1) | C2 | Suffix "G" | KBP | 25 / TUBE | | |

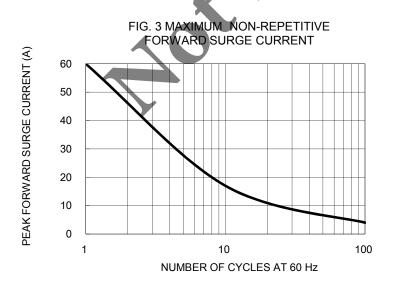
Note 1: "x" defines voltage from 50V (KBP201G) to 1000V (KBP207G)

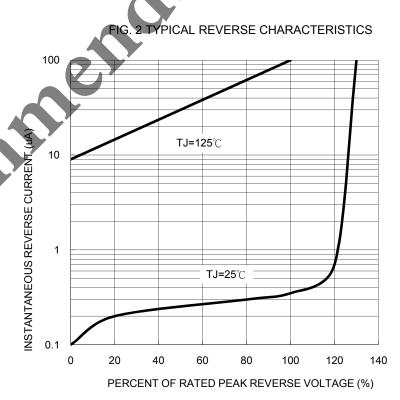
| EXAMPLE | | | | | | |
|---------------|----------|--------------|------------------------|--|----------------|--|
| PREFERRED P/N | PART NO. | PACKING CODE | GREEN COMPOUND CODE | | DESCRIPTION | |
| KBP207G C2 | KBP207G | C2 | | | | |
| KBP207G C2G | KBP207G | C2 | G | | Green compound | |

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)









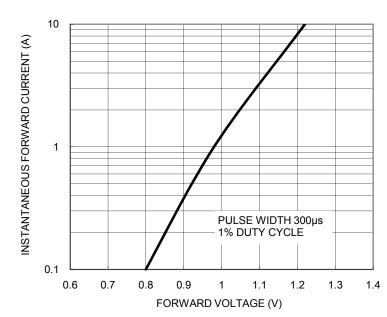
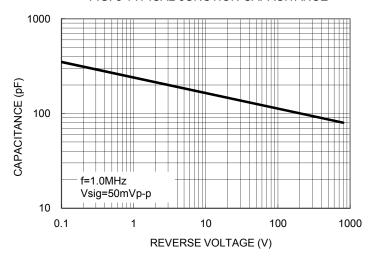
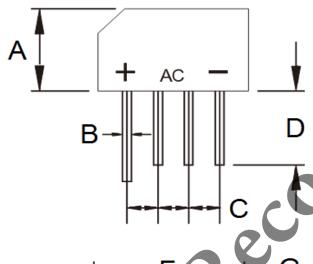




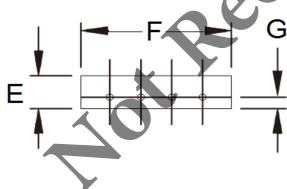
FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS



| DIM. | Unit | (mm) | Unit (inch) | | | |
|-------|---------|-------|-------------|-------|--|--|
| DIVI. | Min Max | | Min | Max | | |
| A | 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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