

Technical Data Data Sheet N1746, Rev. - Green Products

KBP2005G THRU KBP210G SINGLE PHASE 2.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

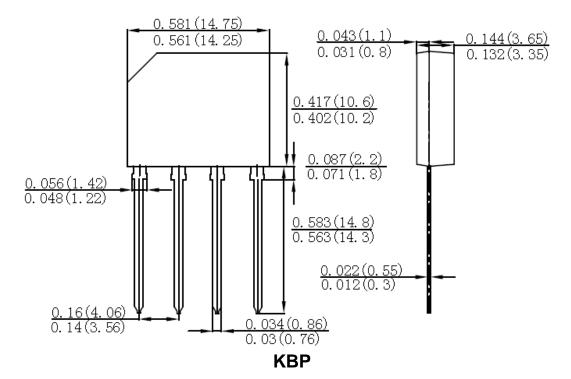
Features:

- · Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data:

- Case: KBP, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Lead Free: For RoHS / Lead Free Version

Mechanical Dimensions: In mm/Inches



MARKING, MOLDING RESIN

Marking for Type Number, 1st row SSG YYWWL, 2nd row Type Number Where YY is the manufacture year WW is the manufacture week code L is the wafer's Lot Number

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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%

Maximum Ratings:

| Type number | Symbol | KBP 2005G | KBP 201G | KBP 202G | KBP 204G | KBP 206G | KBP 208G | KBP 210G | Unit |
|--|------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ T_A =50 $^{\circ}$ C | Io | 2.0 | | | | | | | Α |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 60 | | | | | | | Α |

Electrical Characteristics:

| Type Number | Symbol | KBP 2005G | KBP 201G | KBP 202G | KBP 204G | KBP 206G | KBP 208G | KBP 210G | Unit |
|---|----------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| Forward Voltage per element @I _F =2.0A | V_{F} | 1.1 | | | | | | | V |
| Peak Reverse Current @T _A =25℃ At Rated DC Blocking Voltage @T _A =125℃ | I _R | 5.0 500 | | | | | | | μΑ |

Thermal-Mechanical Specifications:

| Thermal-mechanical opecinications. | | | | | | | | | | |
|---|------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|--|
| Type Number | Symbol | KBP 2005G | KBP 201G | KBP 202G | KBP 204G | KBP 206G | KBP 208G | KBP 210G | Unit | |
| Typical Thermal Resistance Junction to Ambient (Note 1) | $R_{\theta JA}$ | 25 | | | | | | | -°C/W | |
| Typical Thermal Resistance Junction to Lead (Note 1) | $R_{\theta JL}$ | 8 | | | | | | | | |
| Junction Temperature | TJ | -55 to +150 | | | | | | | °C | |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C | |
| Case Style | | KBP | | | | | | | | |

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

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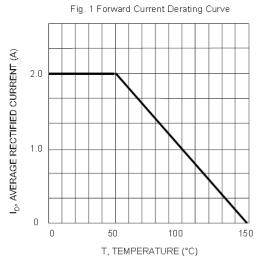


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

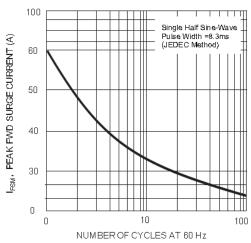
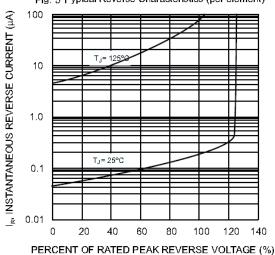


Fig. 5 T ypical Reverse Characteristics (per element)



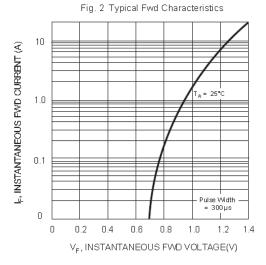
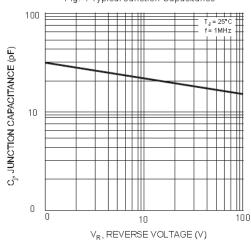


Fig. 4 Typical Junction Capacitance



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