



KBP2005G THRU KBP210G

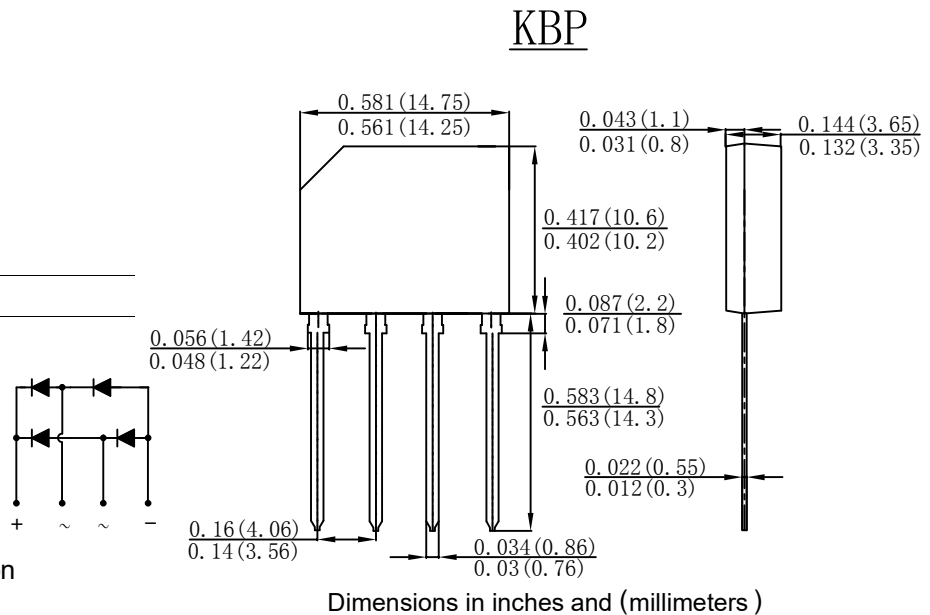
SINGLE PHASE 2.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

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
- Marking: type number
- Lead Free: For RoHS / Lead Free Version



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 | KBP 2005G | KBP 201G | KBP 202G | KBP 204G | KBP 206G | KBP 208G | KBP 210G | UNITS |
|---|-----------------------------------|------------|----------|----------|----------|----------|----------|----------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | | | | | | | | |
| Working Peak Reverse Voltage | V_{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | V_{DC} | | | | | | | | |
| RMS Reverse Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1) @T _c =100°C | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 60 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | I ² t | 14.94 | | | | | | | A ² s |
| Forward Voltage per element @I _F =2.0A | V_{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =125°C | I_R | 5.0 500 | | | | | | | uA |
| Typical Thermal Resistance per leg (Note 2) | R _{θJA} | 25 | | | | | | | °C/W |
| | R _{θJL} | 8 | | | | | | | |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55to+150 | | | | | | | °C |

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..



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Fig. 1 Forward Current Derating Curve

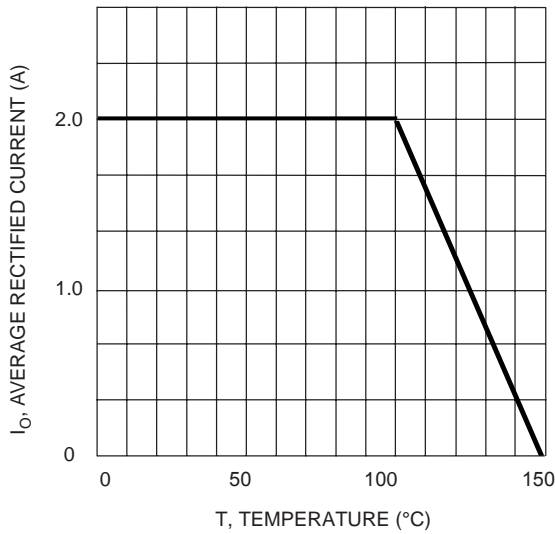


Fig. 2 Typical Fwd Characteristics

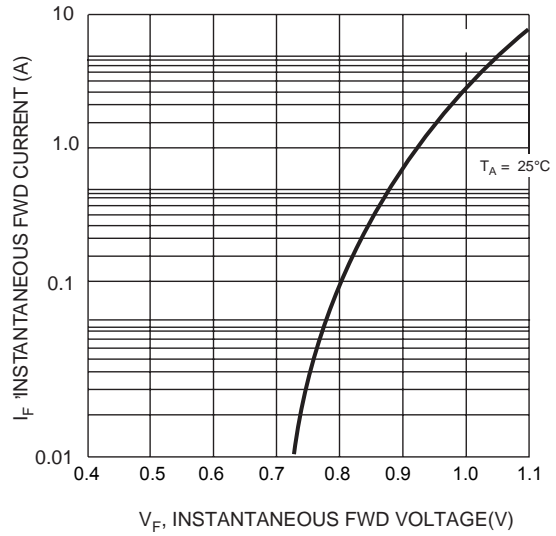


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

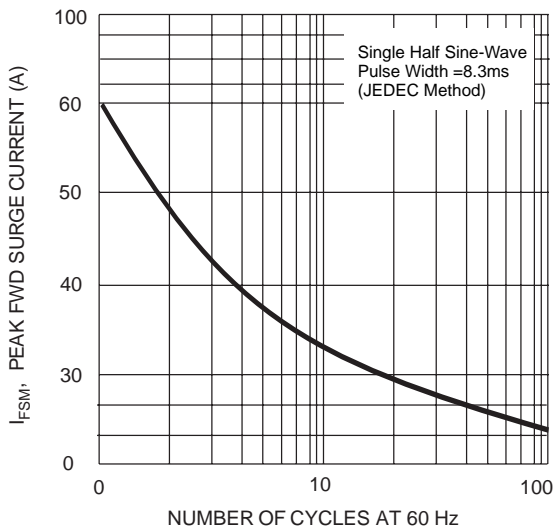


Fig. 4 Typical Junction Capacitance

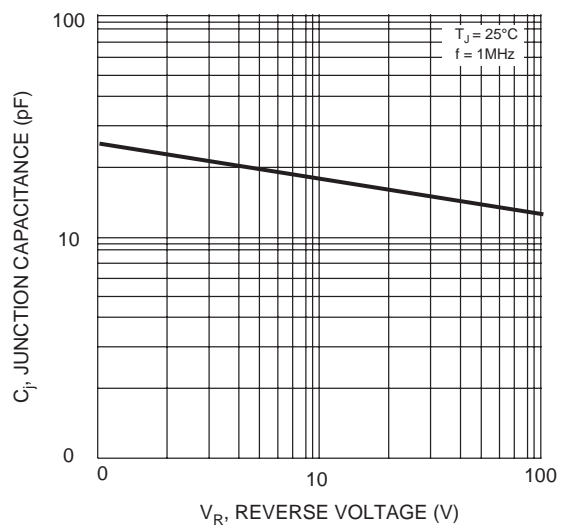
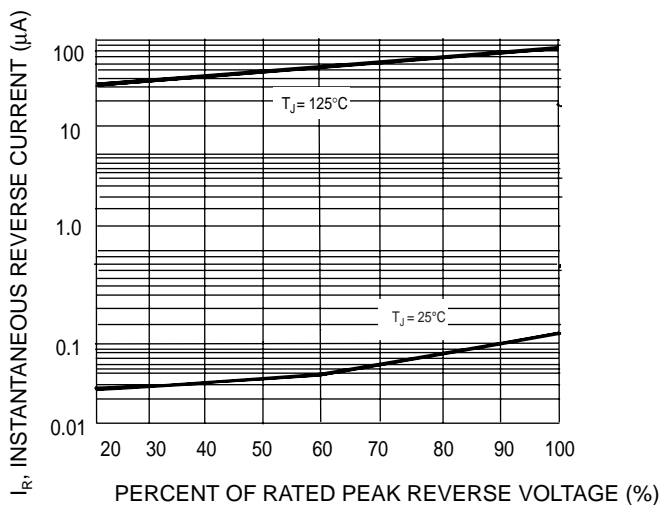


Fig. 5 Typical Reverse Characteristics (per element)





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