## 3.0A GLASS PASSIVATED BRIDGE RECTIFIER

**Reverse Voltage - 100 to 1000 V**

**Forward Current – 3.0A**

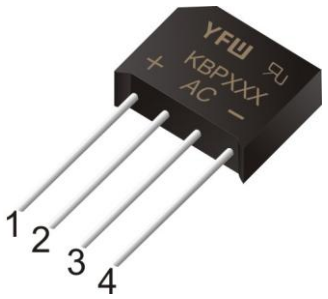
lead-free ROHS

### FEATURES

- High current capability
- Low forward voltage drop
- Glass Passivated Chip Junction
- Low power loss, high efficiency
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- Case: KBP
- Terminals: Solderable per MIL-STD-202, Method 208
- Approx. Weight: 0.33g /0.012oz




**1.Input pin(+)**
**2.Input pin(~)**
**3.Output Anode(~)**
**4.Output Cathode(-)**

**KBP**

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter | Symbols | KBP302 | KBP303 | KBP304 | KBP305 | KBP306 | KBP307 | Units |
|---|---|---|---|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Average Rectified Output Current | $I_{(AV)}$ | 3 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$ | 80 | | | | | | A |
| Forward Voltage per element @$I_F$ =3.0A and 25°C | $V_F$ | 1.1 | | | | | | V |
| Maximum DC Reverse Current @Tj=25°C<br>at Rated DC Blocking Voltage @Tj=125°C | $I_R$ | 10<br>500 | | | | | | μA |
| Typical Junction Capacitance (Note1) | $C_j$ | 25 | | | | | | pF |
| Typical Thermal Resistance (Note2) | $R_{\theta JA}$/ $R_{\theta JC}$ | 30/11 | | | | | | °C/W |
| Operating and Storage Temperature Range | $T_j$, $T_{stg}$ | -55 ~ +150 | | | | | | °C |

**（1）Measured at 1 MHz and applied reverse voltage of 4 V D.C**

**（2）Thermal Resistance Junction to Case, Lead and Ambient.**



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## *RATINGS AND CHARACTERISTIC CURVES*

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

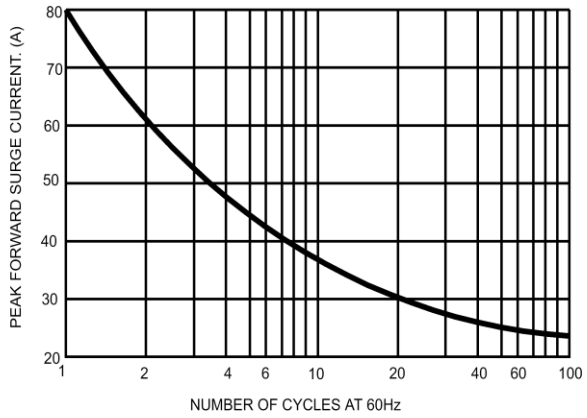



Fig.2 Average Rectified Output Current Derating Curve

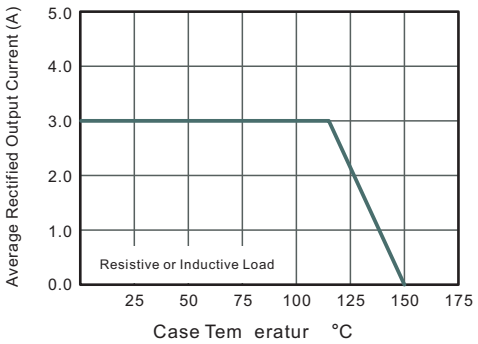



FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

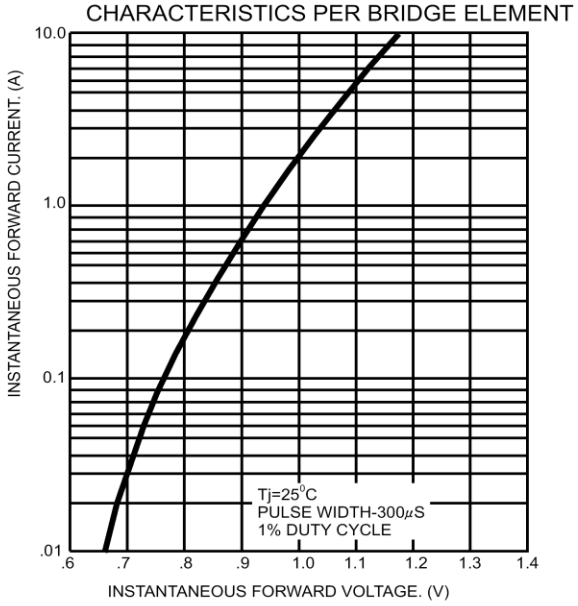
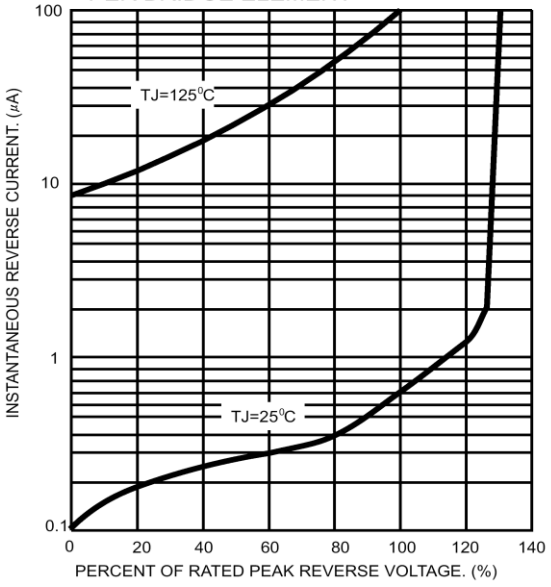


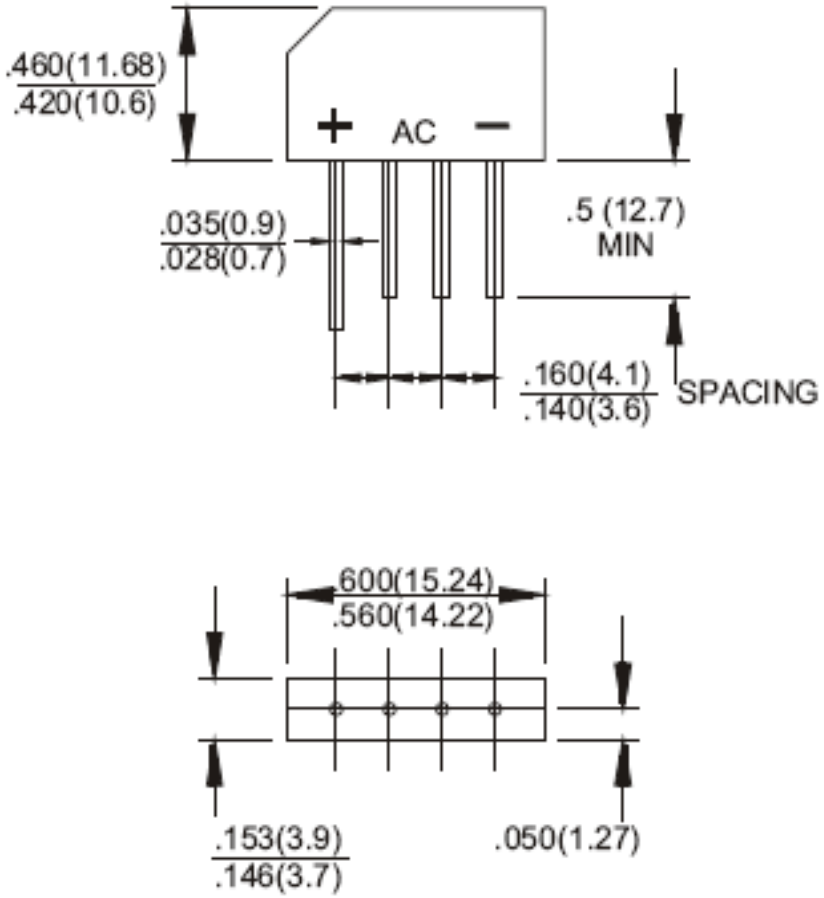

FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT






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## Package Outline KBP




## Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---|---|---|---|
| KBP | BOX | 500 | EIA-481-1 |


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