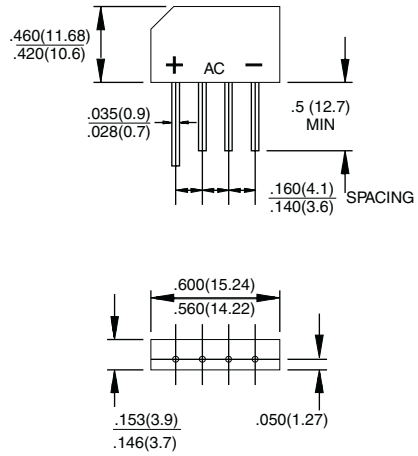
# 3.0 Amp. Glass Passivated Bridge Rectifiers

**Dimensions in mm.** **KBP**




| Voltage | Current |
|---|---|
| 400 V to 1000 V | 3.0 A |

- Glass passivated chip junction
- Ideal for printed circuit board
- Reliable low cost construction
- High temperature soldering guaranteed: 260 °C / 10 seconds at 5 lbs., (2.3 kg) tension.

**MECHANICAL DATA**

- Case: Molded plastic body.
- Mounting position: Any
- Leads solderable per MIL-STD-202, Method 208.

## Maximum Ratings and Electrical Characteristics at 25 ºC

| | | KBP 304G | KBP 305G | KBP 306G | KBP 307G |
|---|---|---|---|---|---|
| $V_{RRM}$ | Maximum Recurrent Peak Reverse Voltage (V) | 400 | 600 | 800 | 1000 |
| $V_{RMS}$ | Maximum RMS Voltage (V) | 280 | 420 | 560 | 700 |
| $V_{DC}$ | Maximum DC Blocking Voltage (V) | 400 | 600 | 800 | 1000 |
| $I_{F(AV)}$ | Maximum Average Forward Rectified Current @ $T_A$ = 50 °C | 3.0 A | | | |
| $I_{FSM}$ | Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method) | 80 A | | | |
| $T_j$ | Operating Temperature Range | -55 to +150 °C | | | |
| $T_{stg}$ | Storage Temperature Range | -55 to +150 °C | | | |

## Electrical Characteristics at Tamb = 25 °C

| | | |
|---|---|---|
| $V_F$ | Maximum Instantaneous Forward Voltage @ = 3.0 A | 1.1 V |
| $I_R$ | Maximum DC Reverse Current @ $T_A$ = 25°C<br>at Rated DC Blocking Voltage @ $T_A$ =125°C | 10.0 µA<br>500 µA |
| $R_{th\ (j-a)}$<br>$R_{th\ (j-l)}$ | Typical Thermal Resistance (Note) | 30°C/W<br>11°C/W |

Notes: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.4" x 0.4" (10mm x 10 mm) Copper Pads.

## Rating And Characteristic Curves

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

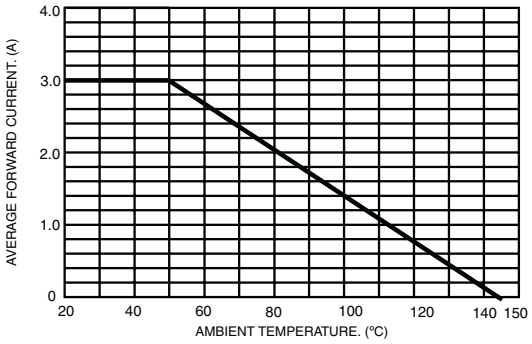



FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

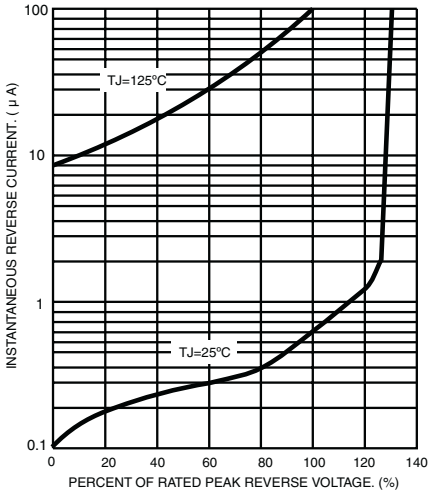



FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

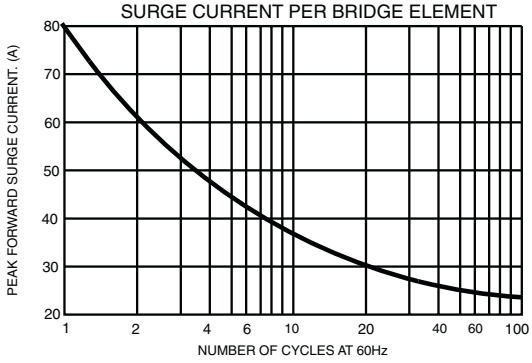



FIG.4- TYPICAL JUNCTION CAPACITANCE

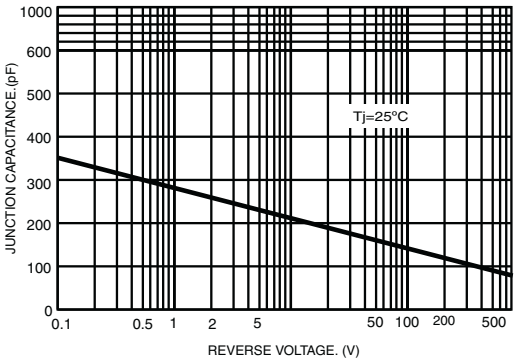



FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT