

### FEATURES

- ◆ Glass passivated chip
- ◆ High surge forward current capability

### MECHANICAL DATA

Case: Molded plastic body  
Lead: Solder plated  
Polarity: As marked

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60HZ.

For capacitive load, derate current by 20%

| CHARACTERISTICS   | SYMBOL            | KBP 301     | KBP 302 | KBP 303 | KBP 304 | KBP 305 | KBP 306 | KBP 307 | UNIT |
|---|-------------------|-------------|---------|---------|---------|---------|---------|---------|------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>  | 50          | 100     | 200     | 400     | 600     | 800     | 1000    | V    |
| Maximum RMS Bridge Input Voltage  | V <sub>RMS</sub>  | 35          | 70      | 140     | 280     | 420     | 560     | 700     | V    |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>   | 50          | 100     | 200     | 400     | 600     | 800     | 1000    | V    |
| Maximum Average Forward Rectified Output Current @T <sub>A</sub> =50 °C                 | I <sub>(AV)</sub> | 3.0         |         |         |         |         |         |         | A    |
| Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed on Rated Load    | I <sub>FSM</sub>  | 60          |         |         |         |         |         |         | A    |
| Maximum Forward Voltage Drop Per Bridge Element at 1.5A Peak                            | V <sub>F</sub>    | 1.1         |         |         |         |         |         |         | V    |
| Maximum Reverse Current at Rated DC Blocking Voltage Per Element @T <sub>J</sub> =100°C | I <sub>R</sub>    | 10.0        |         |         |         |         |         |         | μA   |
| Maximum Reverse Current at Rated DC Blocking Voltage Per Element @T <sub>J</sub> =100°C | I <sub>R</sub>    | 1.0         |         |         |         |         |         |         | mA   |
| Operating Temperature Range   | T <sub>J</sub>    | -55 to +150 |         |         |         |         |         |         | °C   |
| Storage Temperature Range   | T <sub>STG</sub>  | -55 to +150 |         |         |         |         |         |         | °C   |

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

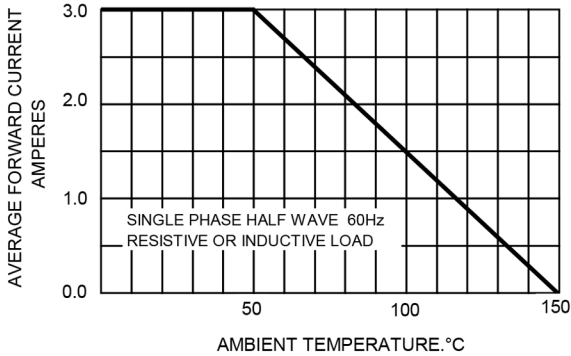


FIG.2-TYPICAL FORWARD CHARACTERISTICS

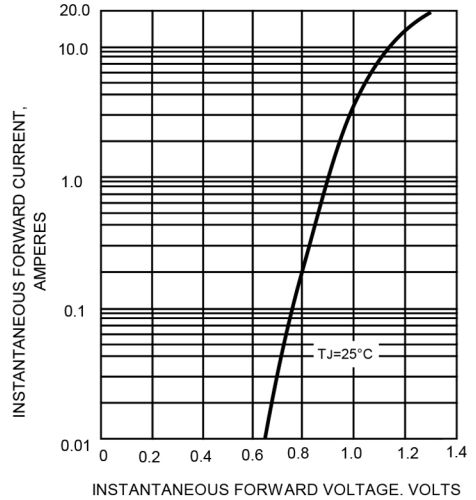


FIG.3-TYPICAL REVERSE CHARACTERISTICS

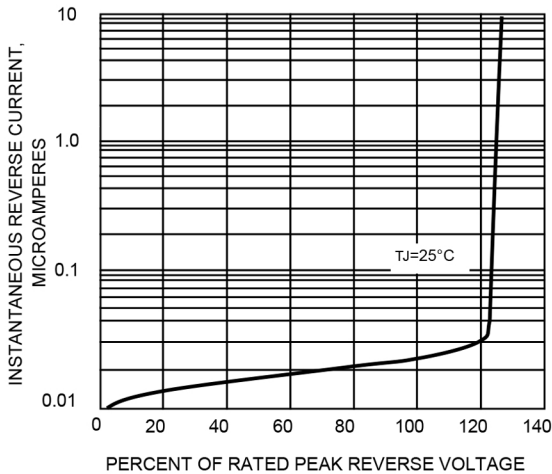


FIG.4-MAXIMUM FORWARD SURGE CURRENT

