

**Glass Passivated Bridge Rectifiers**

**Reverse Voltage - 50 to 1000 Volts**

**Forward Current - 3.0 Amperes**

**Features**

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- Meet UL flammability classification 94V-0

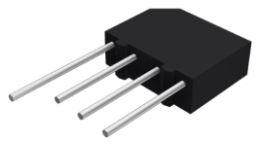
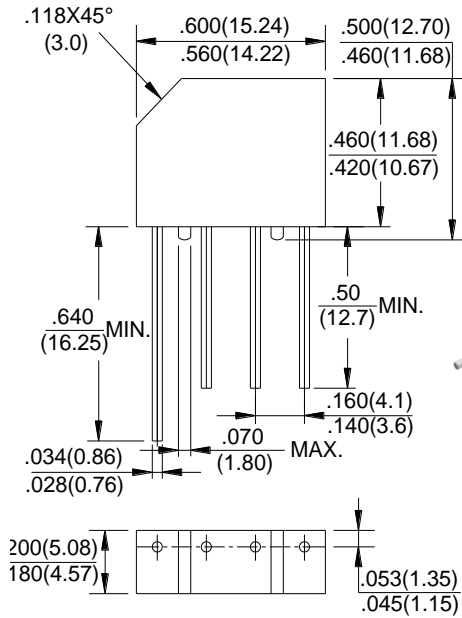
**Mechanical Data**

- Polarity: Symbol marked on body
- Mounting position: Any

**Applications**

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

**KBP**



Package Outline Dimensions in Inches (Millimeters)

**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%.

Characteristics	Symbol	KBP 3005G	KBP 301G	KBP 302G	KBP 304G	KBP 306G	KBP 308G	KBP 310G	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current @T <sub>A</sub> =50 °C (Note1)	I <sub>(AV)</sub>	3.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	80							A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	26.6							A <sup>2</sup> s
Peak Forward Voltage per Diode at 3A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C	I <sub>R</sub>	10.0							μA
DC Blocking Voltage per Diode @T <sub>J</sub> =100°C		1000							
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Fig. 1 - Forward Current Derating Curve

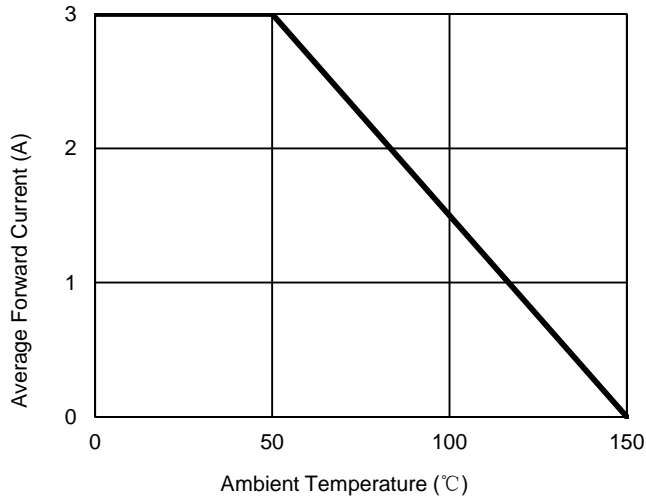


Fig. 2 - Maximum Non-Repetitive Surge Current

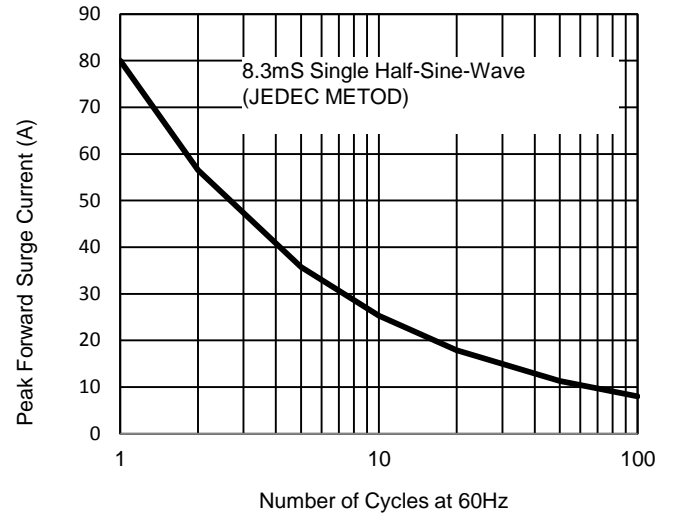


Fig. 3 - Typical Reverse Characteristics

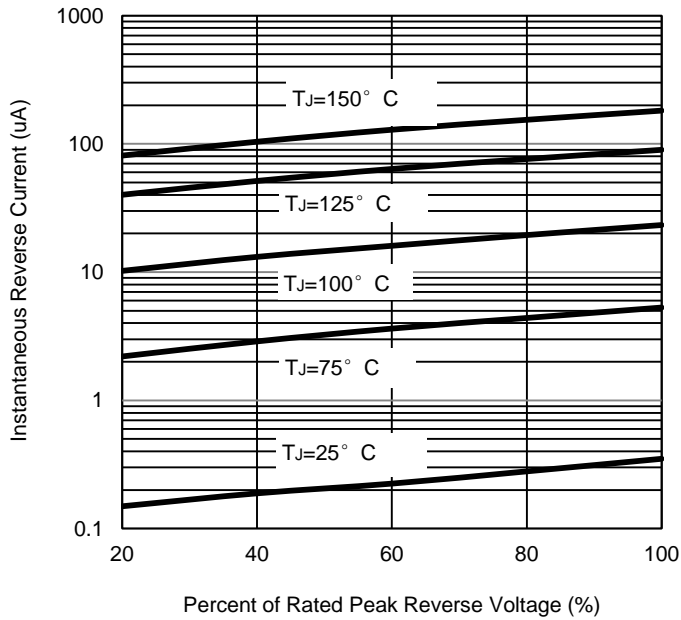
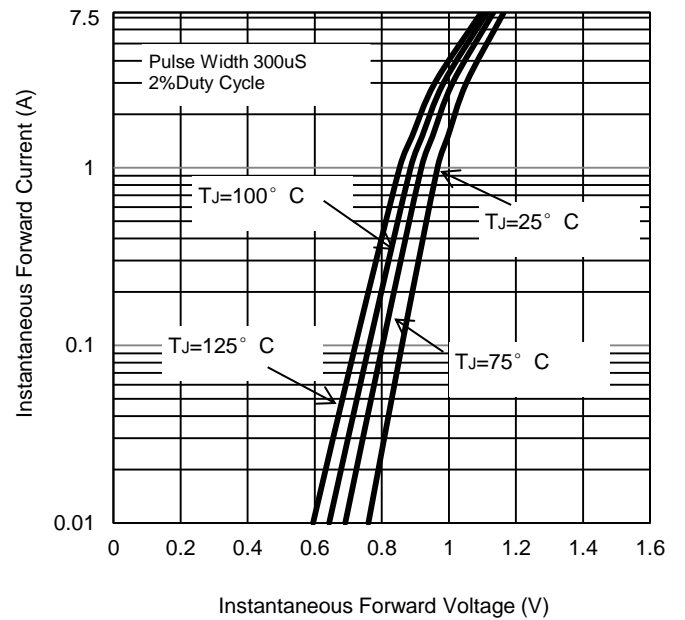


Fig. 4 - Typical Forward Characteristics



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