

**Silicon Bridge Rectifiers**

**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 4.0 Amperes**

**Features**

- Low forward voltage drop
- High surge forward current capability
- Small size, simple installation

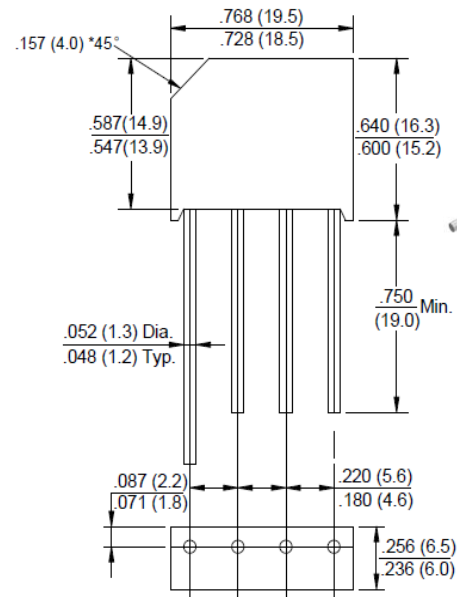
**Mechanical Data**

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

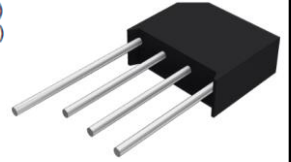
**Applications**

- General purpose use in AC/DC bridge full wave rectification, for power supply, industrial automation applications, etc.

**KBL**



**RoHS**  
COMPLIANT



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	KBL005	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10	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> =40 °C	I(AV)	4.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	150							A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	93.4							A <sup>2</sup> s
Peak Forward Voltage per Diode at 4A DC	V <sub>F</sub>	1.0							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> =150°C		1.0							mA
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

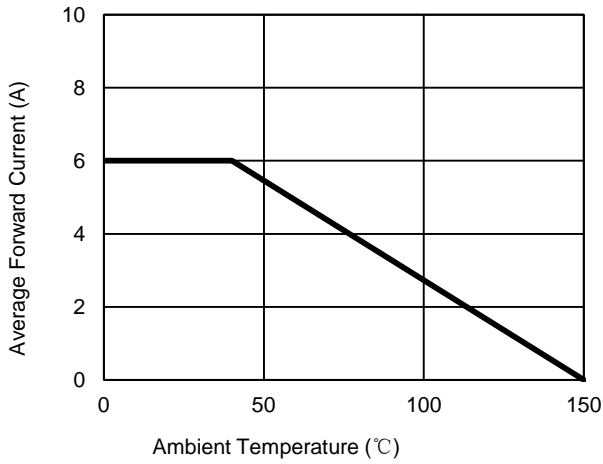


Fig. 2 - Maximum Non-Repetitive Surge Current

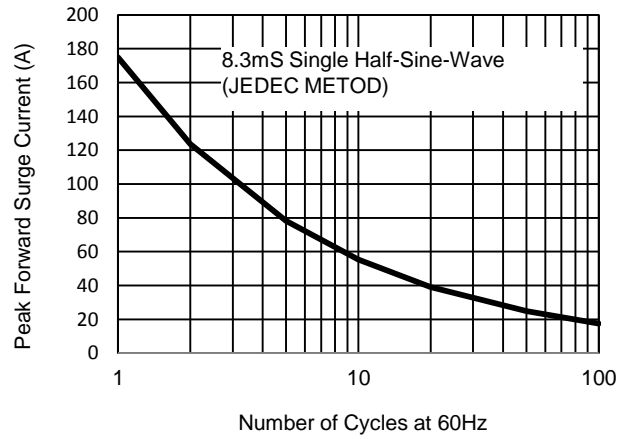


Fig. 3 - Typical Reverse Characteristics

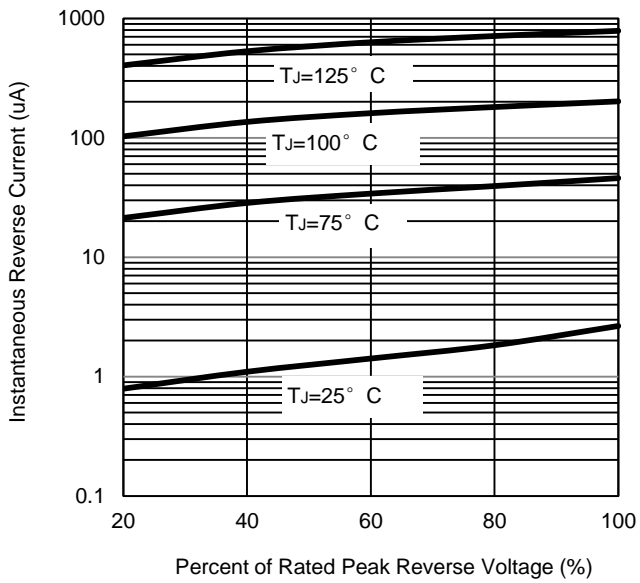
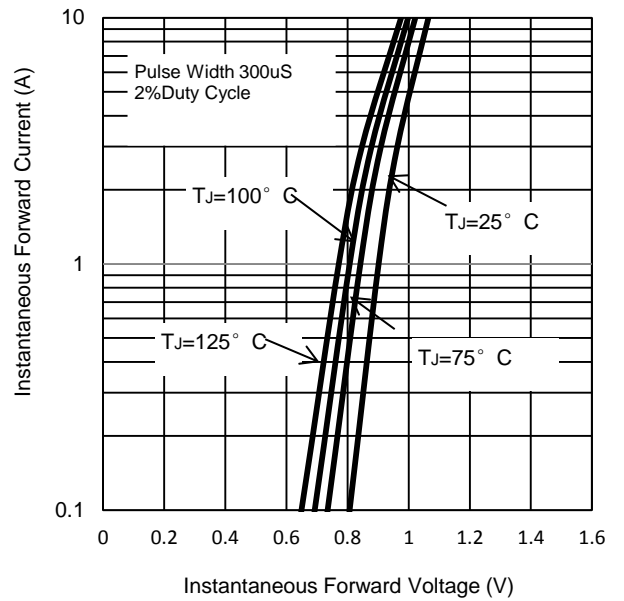


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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