

## Silicon Bridge Rectifiers

**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 35 Amperes**

### Features

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

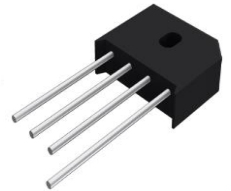
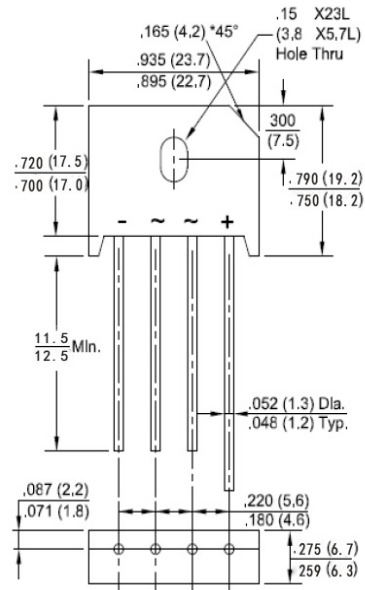
### Mechanical Data

- 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.

### KBU



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	KBU	KBU	KBU	KBU	KBU	KBU	KBU	Unit	
		35005	3501	3502	3504	3506	3508	3510		
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 (with heatsink Note 1) @ T <sub>c</sub> =100°C (without heatsink)	I <sub>(AV)</sub>	35.0							4.2	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	400								A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	664.0								A <sup>2</sup> s
Peak Forward Voltage per Diode at 17.5A 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								μA
DC Blocking Voltage per Diode @ T <sub>J</sub> =125°C		500								
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

Note: Device mounted on 100mm\*100mm\*1.6mm Cu plate heatsink.

Fig. 1 - Forward Current Derating Curve

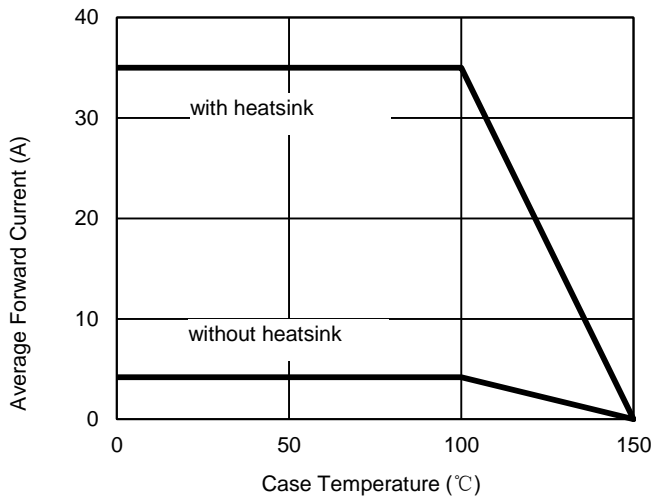


Fig. 2 - Maximum Non-Repetitive Surge Current

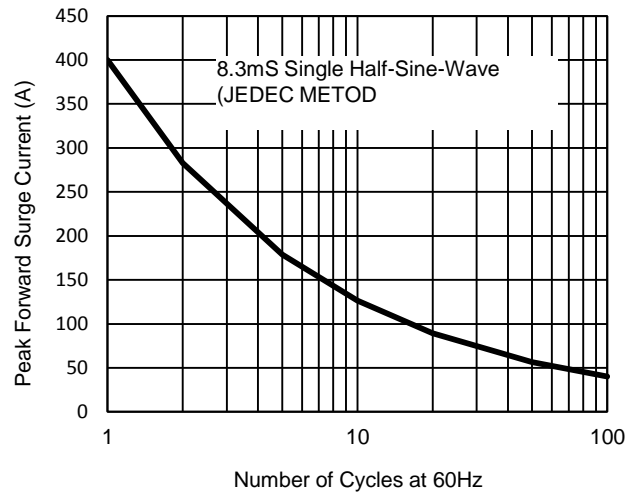


Fig. 3 - Typical Reverse Characteristics

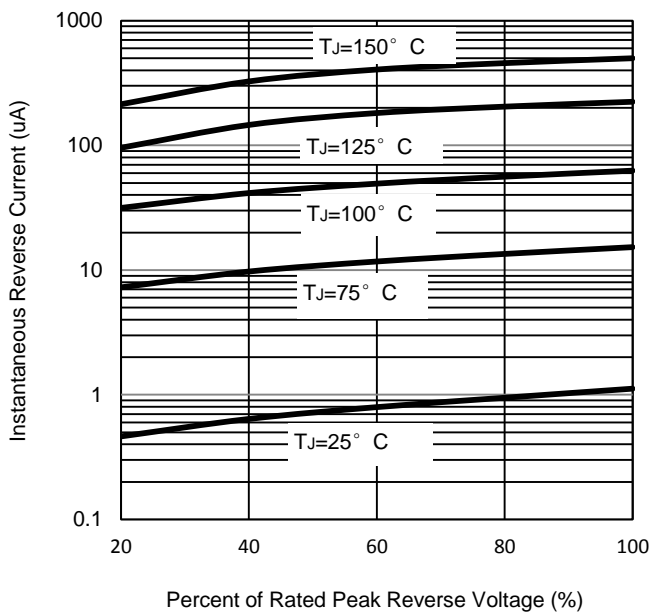


Fig. 4 - Typical Forward Characteristics

