

## Silicon Bridge Rectifiers

**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 25 Amperes**

### Features

- Low forward voltage drop
- Electrically isolated base -2000 Volts
- High surge forward current capability
- Materials used carries U/L recognition

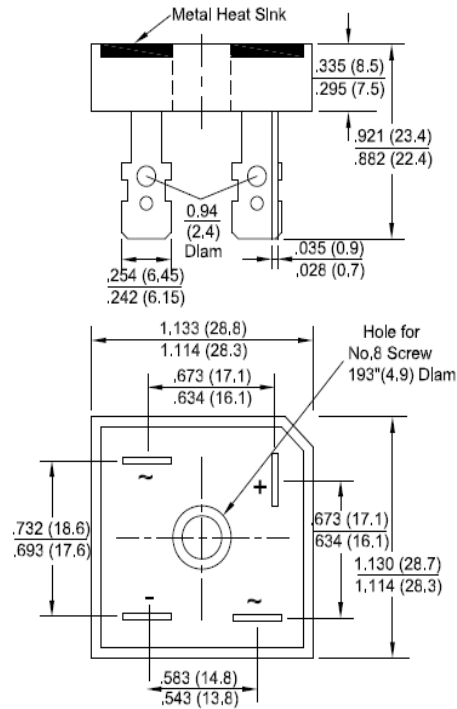
### Mechanical Data

- 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.

### MBR



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	MBR 25005	MBR 2501	MBR 2502	MBR 2504	MBR 2506	MBR 2508	MBR 2510	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 Average Forward Rectified Current @T <sub>c</sub> =55 °C	I <sub>(AV)</sub>	25							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							A <sup>2</sup> s
Peak Forward Voltage per Diode at 12.5A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @T <sub>J</sub> =25°C	I <sub>R</sub>	10							µA
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

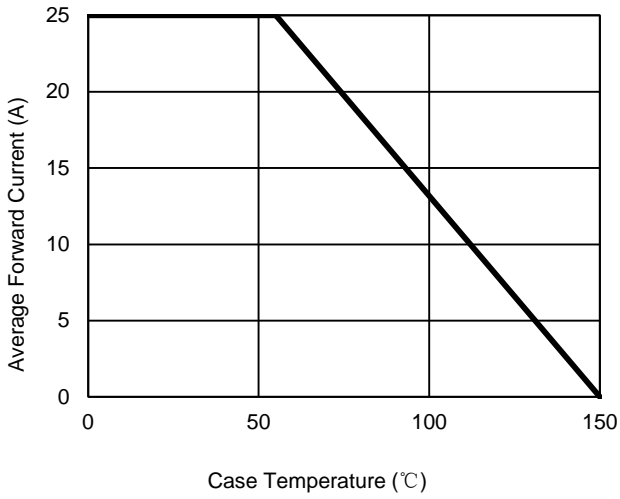


Fig. 2 - Maximum Non-Repetitive Surge Current

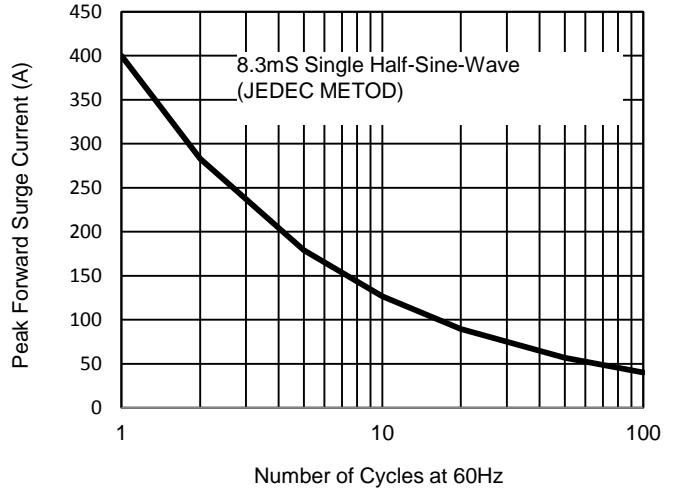


Fig. 3 - Typical Reverse Characteristics

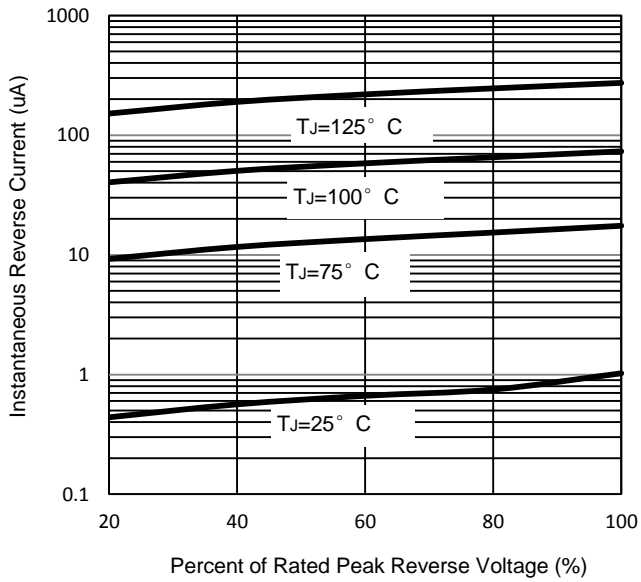
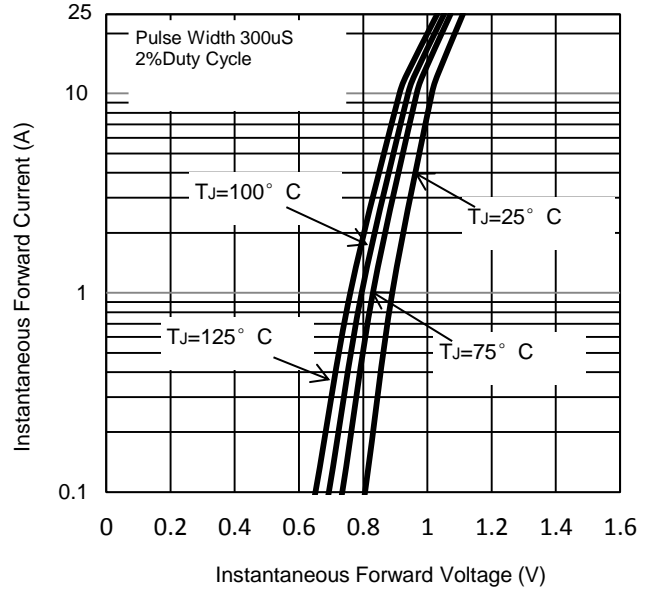


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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