



**SLDB101S  
THRU  
SLDB107S**

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

**FEATURES**

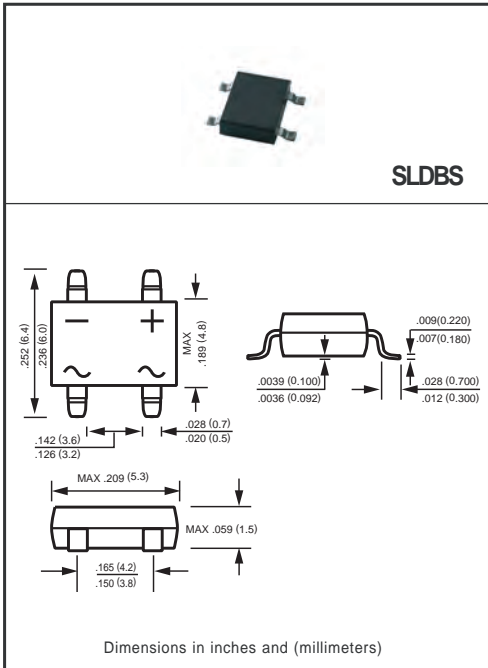
- \* Good for automation insertion
- \* Surge overload rating - 30 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body
- \* Mounting position: Any
- \* Weight: 0.33 gram

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-O

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
resistive or inductive load.



MAXIMUM RATINGS (At T<sub>A</sub> = 25°C unless otherwise noted)

| RATINGS   | SYMBOL                           | SLDB101S     | SLDB102S | SLDB103S | SLDB104S | SLDB105S | SLDB106S | SLDB107S | UNITS            |
|---|----------------------------------|--------------|----------|----------|----------|----------|----------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                 | 50           | 100      | 200      | 400      | 600      | 800      | 1000     | Volts            |
| Maximum RMS Bridge Input Voltage  | V <sub>RMS</sub>                 | 35           | 70       | 140      | 280      | 420      | 560      | 700      | Volts            |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>                  | 50           | 100      | 200      | 400      | 600      | 800      | 1000     | Volts            |
| Maximum Average Forward Output Current at T <sub>A</sub> = 40°C                                   | I <sub>O</sub>                   | 1.0          |          |          |          |          |          |          | Amps             |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                 | 30           |          |          |          |          |          |          | Amps             |
| Typical Current Squared Time  | i <sup>2</sup> t                 | 3.7          |          |          |          |          |          |          | A <sup>2</sup> S |
| Typical Thermal Resistance (Note 2)   | R <sub>θJA</sub>                 | 62.5         |          |          |          |          |          |          | °C/W             |
|   | R <sub>θJL</sub>                 | 25           |          |          |          |          |          |          |                  |
| Operating and Storage Temperature Range   | T <sub>J</sub> ,T <sub>STG</sub> | -55 to + 150 |          |          |          |          |          |          | °C               |

ELECTRICAL CHARACTERISTICS (At T<sub>A</sub> = 25°C unless otherwise noted)

| CHARACTERISTICS  | SYMBOL         | SLDB101S | SLDB102S | SLDB103S | SLDB104S | SLDB105S | SLDB106S | SLDB107S | UNITS |
|--|----------------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum Forward Voltage Drop per Bridge Element at 1.0A DC | V <sub>F</sub> | 1.1      |          |          |          |          |          |          | Volts |
| Maximum Reverse Current at Rated                           | I <sub>R</sub> | 5.0      |          |          |          |          |          |          | uAmps |
| DC Blocking Voltage per element                            |                | 0.5      |          |          |          |          |          |          | mAmps |

Note: 1. "Fully ROHS compliant", "100% Sn plating(Pb-free).  
2. Thermal Resistance: Mounted on PCB.  
3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

## RATING AND CHARACTERISTICS CURVES ( SLDB101S THRU SLDB107S )

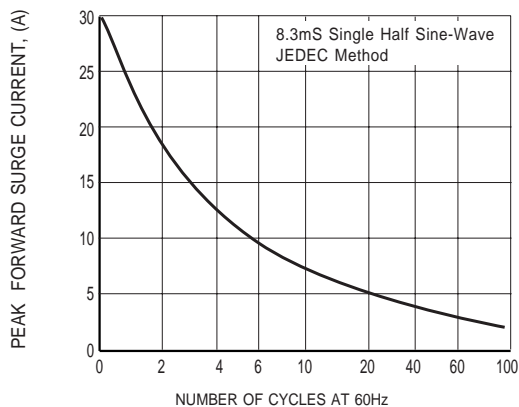


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

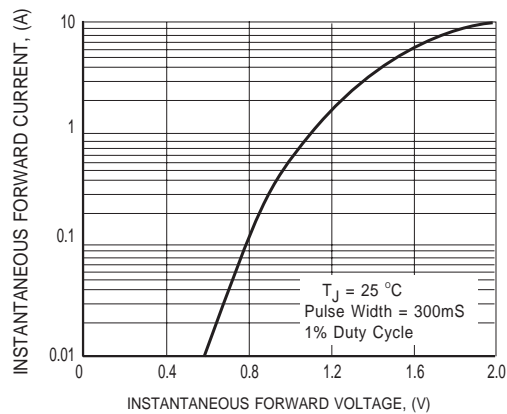


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

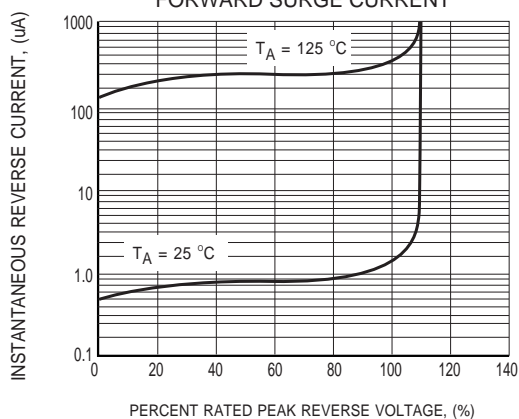


FIG.3 TYPICAL REVERSE CHARACTERISTICS

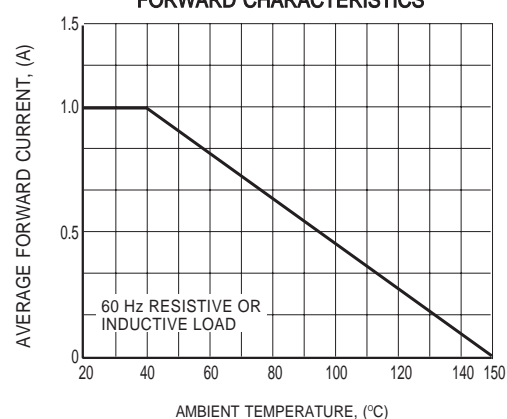
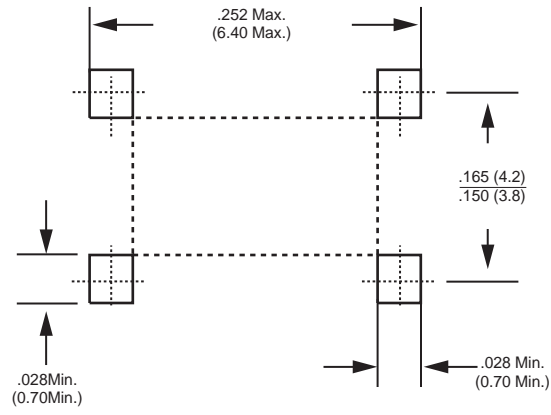


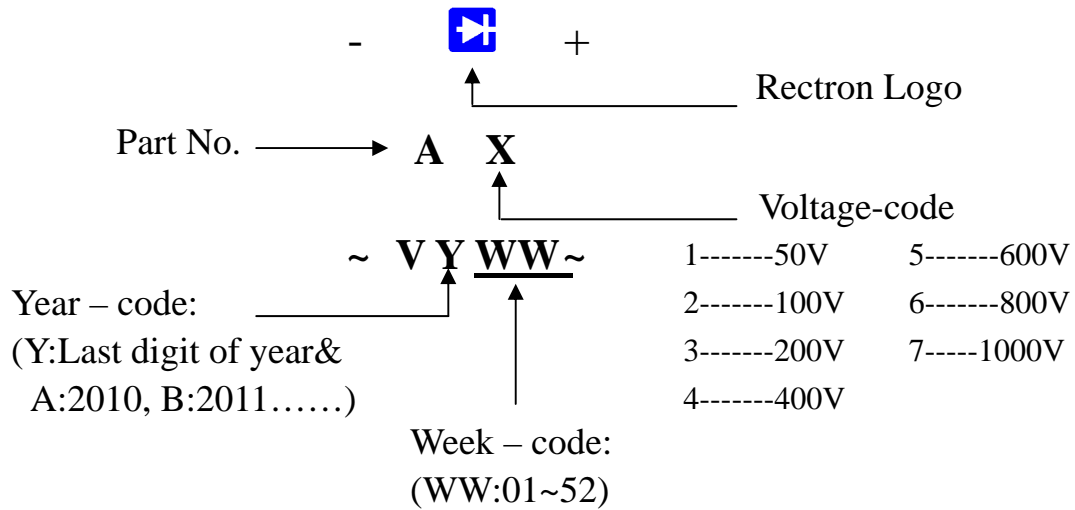
FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

## Mounting Pad Layout



Dimensions in inches and (millimeters)

## Marking Description



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