



# SS315B thru SS320B

## Schottky Barrier Rectifiers

Reverse Voltage - 150 to 200 Volts

Forward Current - 3.0 Amperes

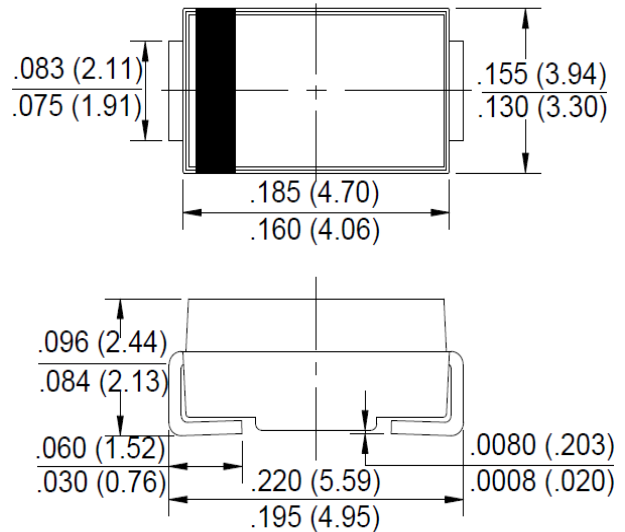
### FEATURES

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering :  
260 °C /10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic  
body over glass passivated chip
  - Terminals: Solder plated, solderable per  
J-STD-002B and JESD22-B102D
  - Polarity: Laser band denotes cathode end
- Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

### SMB



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

| CHARACTERISTICS                                                                                  | SYMBOL             | SS315B       | SS320B | UNIT |
|--------------------------------------------------------------------------------------------------|--------------------|--------------|--------|------|
| Maximum Recurrent Peak Reverse Voltage                                                           | V <sub>RRM</sub>   | 150          | 200    | V    |
| Maximum RMS Voltage                                                                              | V <sub>RMS</sub>   | 105          | 140    | V    |
| Maximum DC Blocking Voltage                                                                      | V <sub>DC</sub>    | 150          | 200    | V    |
| Maximum Average Forward Rectified Current                                                        | I <sub>F(AV)</sub> | 3.0          |        | A    |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed On Rated Load         | I <sub>FSM</sub>   | 100          |        | A    |
| Instantaneous forward voltage at 3.0A DC (Note2)                                                 | V <sub>F</sub>     | 0.95         |        | V    |
| Voltage rate of change (rated V <sub>R</sub> )                                                   | dv/dt              | 10000        |        | V/μs |
| Reverse Current V <sub>R</sub> =V <sub>DC</sub><br>@T <sub>J</sub> =25℃<br>@T <sub>J</sub> =100℃ | I <sub>R</sub>     | 0.5          |        | mA   |
|                                                                                                  |                    | 5            |        |      |
| Thermal Resistance From Junction to Lead (Note1)                                                 | R <sub>θJL</sub>   | 25           |        | ℃/W  |
| Operating Temperature Range                                                                      | T <sub>J</sub>     | -65 to + 150 |        | ℃    |
| Storage Temperature Range                                                                        | T <sub>STG</sub>   | -65 to + 150 |        | ℃    |

NOTES:1. Mounted on P.C.B. with 0.28 x 0.28" (7.0 x 7.0mm) copper pad areas.

2. Pulse test:300 μ s pulse width,1% duty cycle.

3.The typical data above is for reference only.



Fig.1 Forward Current Derating Curve

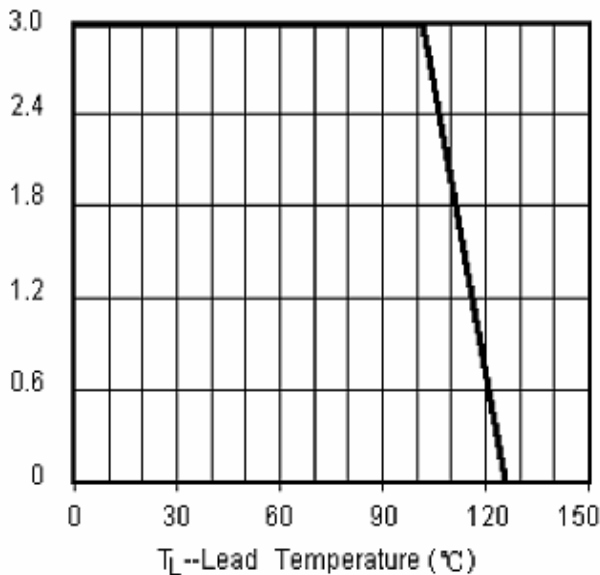


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

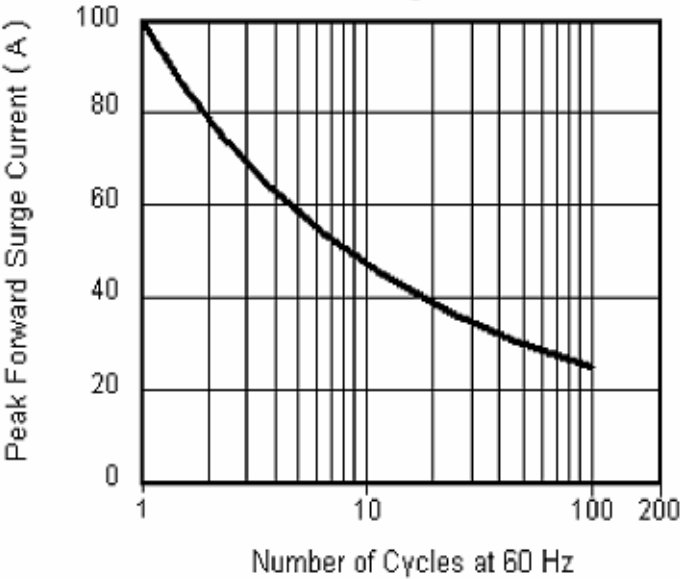


Fig.3 Typical Instantaneous Forward Characteristics

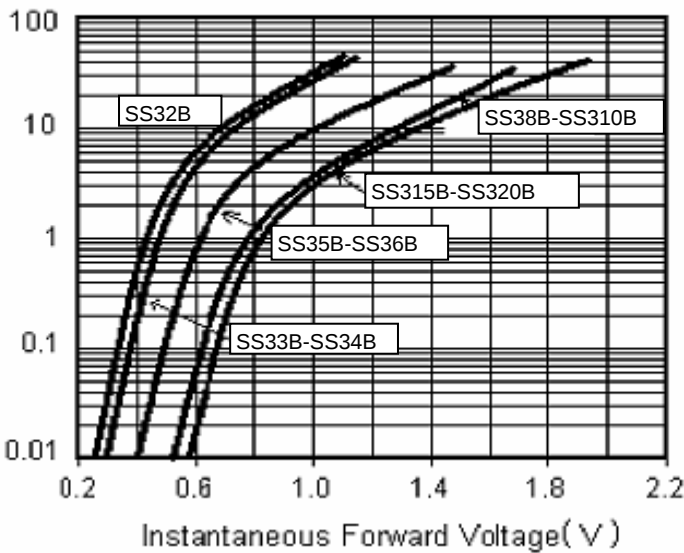
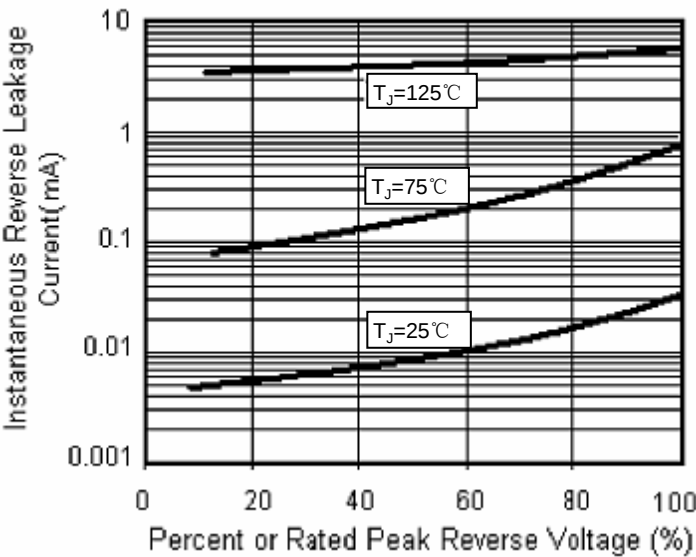


Fig.4 Typical Reverse Leakage Characteristics



The curve above is for reference only.



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