



# SS32B THRU SS3200B

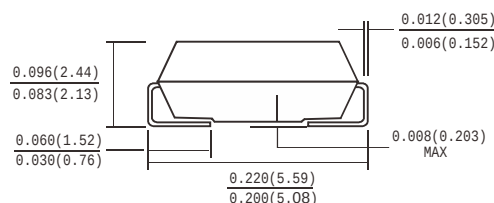
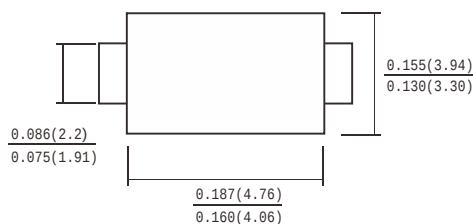
## Surface Mount Schottky Rectifiers

### Features

- Low profile package
- Ideal for automated placement
- Fast switching for high efficiency
- High forward surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC



SMB(DO-214AA)



Dimensions in inches and (millimeters)

### Mechanical Date

- **Case:** JEDEC DO-214AA molded plastic body
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end

### Maximum Ratings and Electrical Characteristics Rating at 25 °C

ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

| Type Number                                                                                            | SYMBOL                      | SS 32B      | SS 34B | SS 345B | SS 36B | SS 38B | SS 310B | SS 3150B | SS 3200B | Unit             |
|--------------------------------------------------------------------------------------------------------|-----------------------------|-------------|--------|---------|--------|--------|---------|----------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                 | V <sub>RRM</sub>            | 20          | 40     | 45      | 60     | 80     | 100     | 150      | 200      | V                |
| Maximum RMS Voltage                                                                                    | V <sub>RMS</sub>            | 14          | 28     | 31      | 42     | 56     | 70      | 105      | 140      | V                |
| Maximum DC Blocking Voltage                                                                            | V <sub>DC</sub>             | 20          | 40     | 45      | 60     | 80     | 100     | 150      | 200      | V                |
| Average Rectified Output Current<br>@T <sub>L</sub> =100°C                                             |                             | 3.0         |        |         |        |        |         |          |          | A                |
| Peak Forward Surge Current 8.3ms Single<br>half sine-wave superimposed on rated load<br>(JEDEC Method) | I <sub>FSM</sub>            | 80          |        |         |        |        |         |          |          | A                |
| Forward Voltage @IF=3.0A (Note 1)                                                                      | V <sub>FM</sub>             | 0.55        |        |         | 0.7    | 0.85   |         | 0.92     |          | V                |
| Peak Reverse Current @T <sub>A</sub> =25 °C                                                            | I <sub>R</sub>              | 0.1         |        |         |        | 0.05   |         |          |          | mA               |
| At Rated DC Blocking Voltage @T <sub>A</sub> =100 °C                                                   |                             | 10          |        |         |        | 5      |         |          |          |                  |
| I <sup>2</sup> t Rating for fusing (t <8.3ms)                                                          | I <sup>2</sup> <sub>t</sub> | 26.56       |        |         |        |        |         |          |          | A <sup>2</sup> s |
| Typical Junction Capacitance (Note 2)                                                                  | C <sub>J</sub>              | 12          |        |         |        |        |         |          |          | pF               |
| Typical Thermal Resistance per leg (Note3)                                                             | R <sub>θJA</sub>            | 70          |        |         |        |        |         |          |          | °C/W             |
| Operating Temperature Range                                                                            | T <sub>J</sub>              | -55 to+150  |        |         |        |        |         |          |          | °C               |
| Storage Temperature Range                                                                              | T <sub>STG</sub>            | -55 to +150 |        |         |        |        |         |          |          | °C               |

Note: 1. Pulse Test with  $PW = 300\mu\text{s}$ , 1% Duty Cycle.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.



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### Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Forward Current Derating Curve

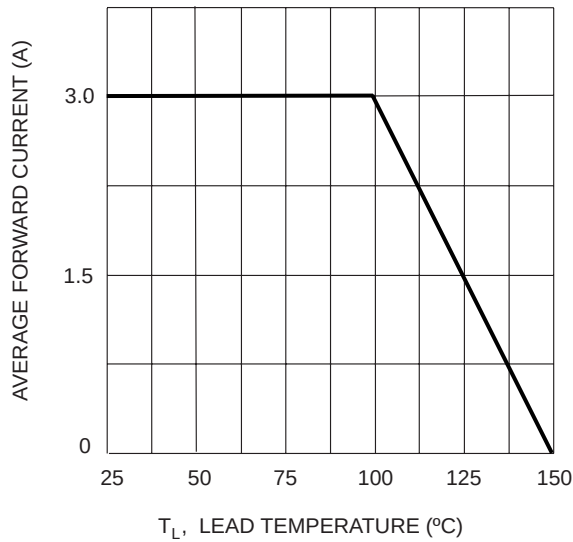


Fig. 2 Typ. Forward Characteristics

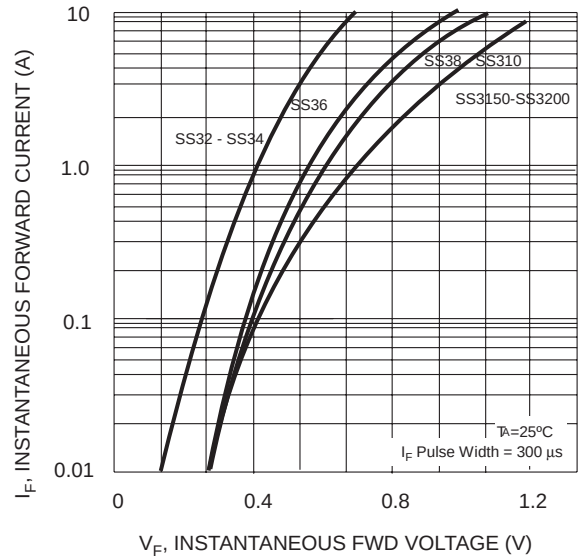


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

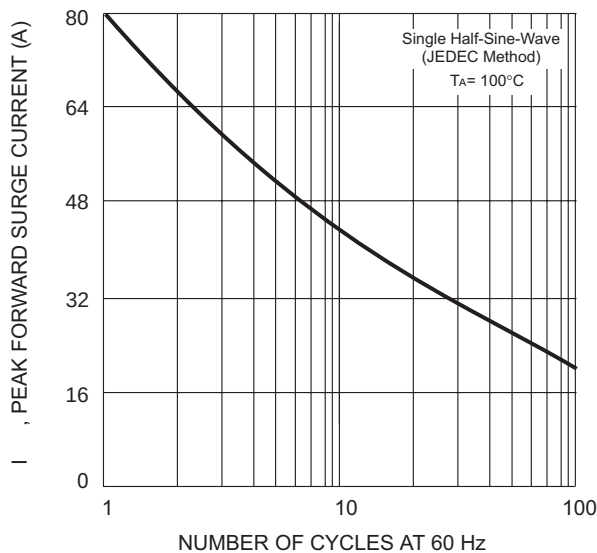


FIG.4 TYPICAL REVERSE CHARACTERISTIC

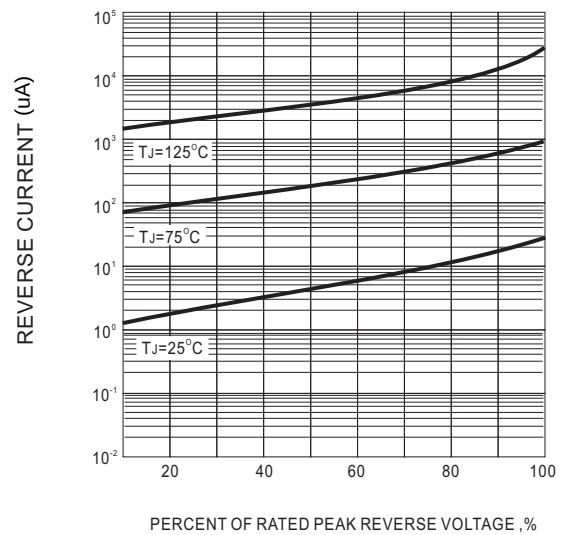


FIG.5 MOUNTING PAD LAYOUT

