



## Features

- Average Forward Current:  $I_{F(AV)}=5A$
- Polarity: Color band denotes cathode



SMB  
(DO-214AA)

## Package Marking and Ordering Information

| Product ID   | Pack              | Marking | Qty(PCS) |
|--------------|-------------------|---------|----------|
| SS52B~SS520B | SMB<br>(DO-214AA) | SS5x    | 3000     |

x: From 2-20



## Maximum Ratings (Ta=25°C unless otherwise noted)

| Item                                 | Symbol             | Unit | Test Conditions                                | SS5        |    |    |          |    |    |     |     |     |
|--------------------------------------|--------------------|------|------------------------------------------------|------------|----|----|----------|----|----|-----|-----|-----|
|                                      |                    |      |                                                | 2B         | 3B | 4B | 5B       | 6B | 8B | 10B | 15B | 20B |
| Repetitive Peak Reverse Voltage      | V <sub>RRM</sub>   | V    |                                                | 20         | 30 | 40 | 50       | 60 | 80 | 100 | 150 | 200 |
| Maximum RMS Voltage                  | V <sub>RMS</sub>   | V    |                                                | 14         | 21 | 28 | 35       | 42 | 56 | 70  | 105 | 140 |
| Average Forward Current              | I <sub>F(AV)</sub> | A    | 60Hz Half-sine wave,<br>Resistance load, FIG.1 | 5.0        |    |    |          |    |    |     |     |     |
| Surge(Non-repetitive)Forward Current | I <sub>FSM</sub>   | A    | 60Hz Half-sine wave,<br>1 cycle, Ta=25℃        | 150        |    |    |          |    |    |     |     |     |
| Junction Temperature                 | T <sub>J</sub>     | ℃    |                                                | -55~+125   |    |    | -55~+150 |    |    |     |     |     |
| Storage Temperature                  | T <sub>STG</sub>   | ℃    |                                                | -55 ~ +150 |    |    |          |    |    |     |     |     |

## Electrical Characteristics (Ta=25°C unless otherwise specified)

| Item                        | Symbol               | Unit | Test Condition                    |                     | SS5  |    |    |      |     |      |     |      |     |
|-----------------------------|----------------------|------|-----------------------------------|---------------------|------|----|----|------|-----|------|-----|------|-----|
|                             |                      |      |                                   |                     | 2B   | 3B | 4B | 5B   | 6B  | 8B   | 10B | 15B  | 20B |
| Peak Forward Voltage        | V <sub>F</sub>       | V    | I <sub>F</sub> =5.0A              |                     | 0.55 |    |    | 0.70 |     | 0.85 |     | 0.95 |     |
| Peak Reverse Current        | I <sub>RRM1</sub>    | mA   | V <sub>RM</sub> =V <sub>RRM</sub> | T <sub>a</sub> =25℃ | 0.5  |    |    |      | 0.1 |      |     |      |     |
|                             | T <sub>a</sub> =100℃ |      |                                   | 20                  |      |    |    | 10   |     |      |     |      |     |
| Thermal Resistance(Typical) | R <sub>θJ-A</sub>    | ℃/W  | Between junction and ambient      |                     | 60   |    |    |      |     |      |     |      |     |
|                             | R <sub>θJ-L</sub>    |      | Between junction and terminal     |                     | 20   |    |    |      |     |      |     |      |     |

## Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas



## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

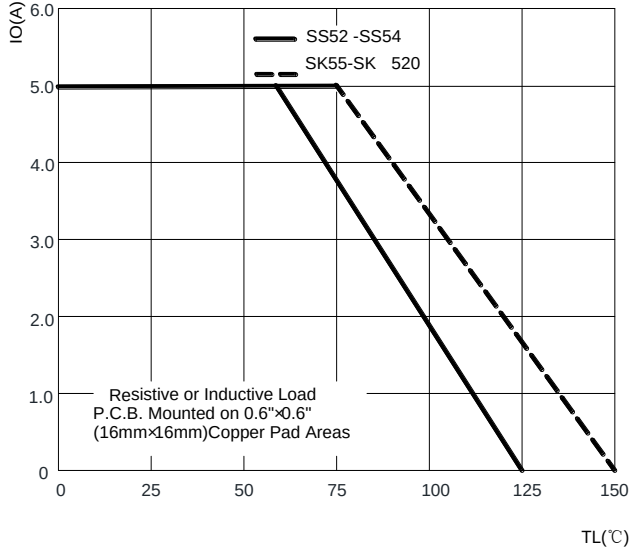


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

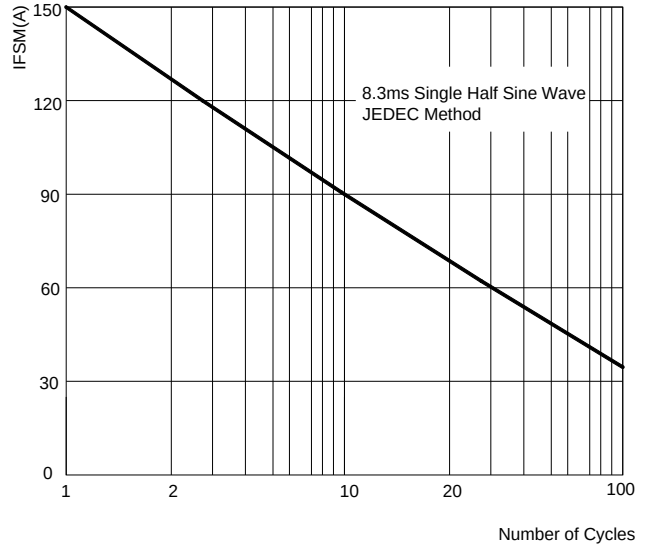


FIG.3: TYPICAL FORWARD CHARACTERISTICS

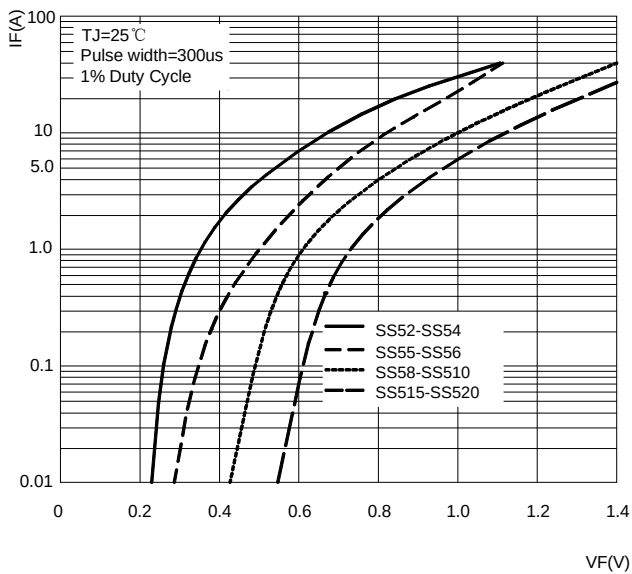
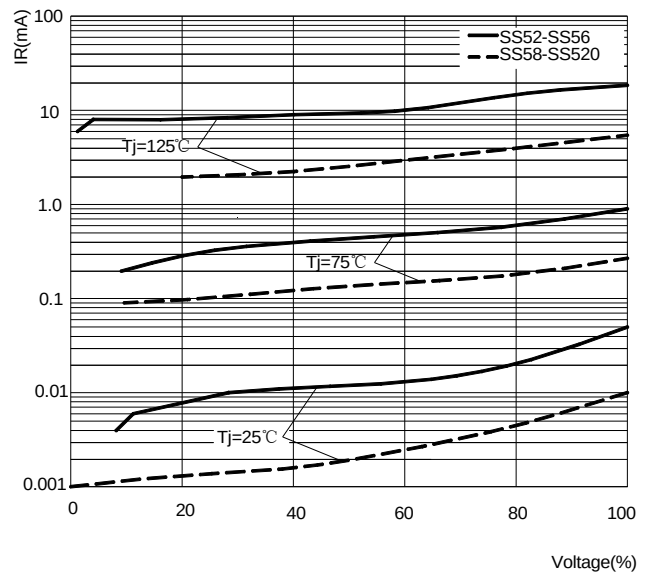


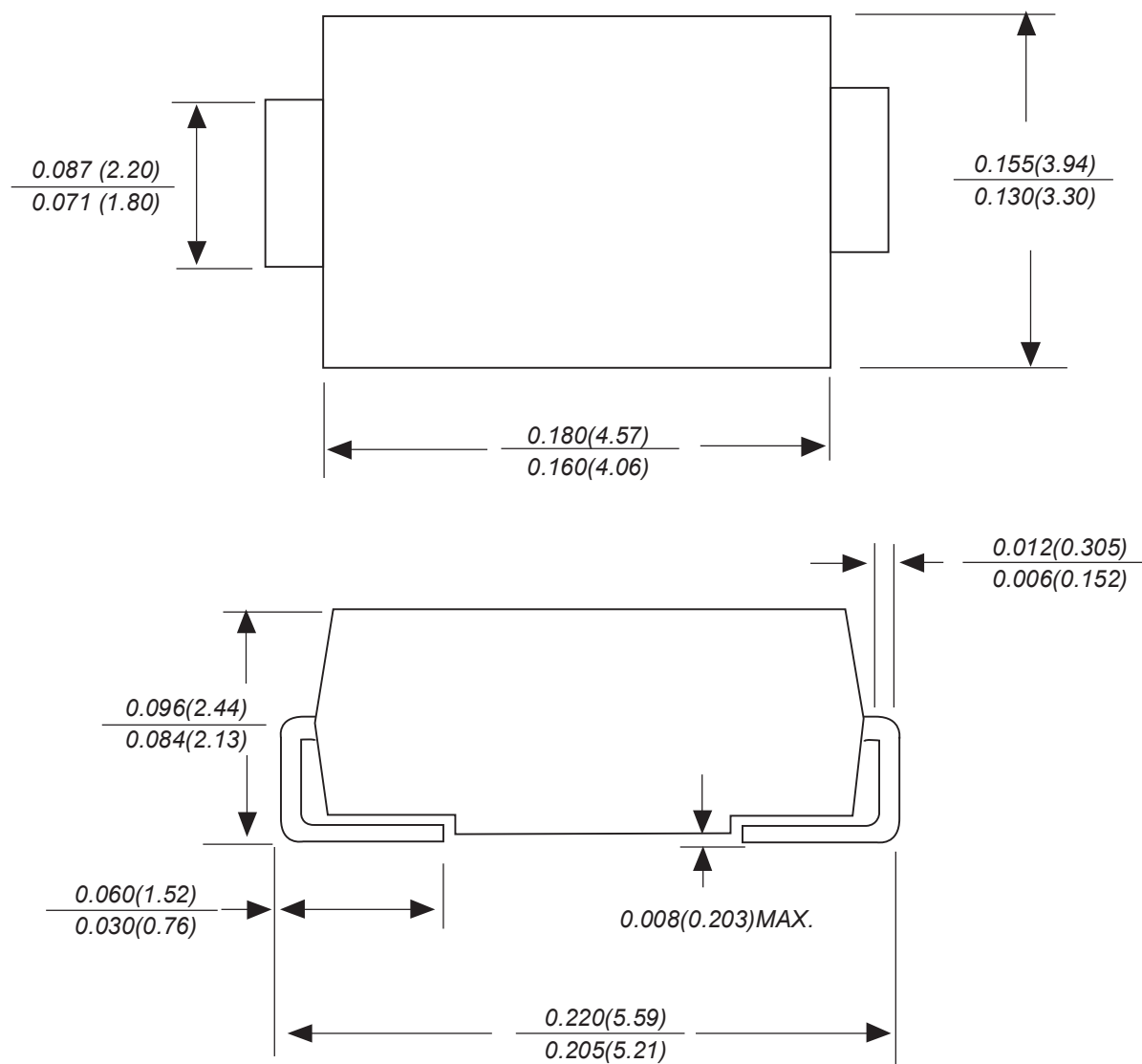
FIG.4: TYPICAL REVERSE CHARACTERISTICS





## Package Outline Dimensions

### SMB(DO-214AA)



*Dimensions in inches and (millimeters)*



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