



## Features

- Average Forward Current:  $I_{F(AV)}=2A$
- Polarity: Color band denotes cathode

## Package Marking and Ordering Information

| Product ID | Pack              | Marking | Qty(PCS) |
|------------|-------------------|---------|----------|
| SS22~SS220 | SMB<br>(DO-214AA) | SS2x    | 3000     |

x: From 2-20



SMB  
(DO-214AA)



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

| Item                                 | Symbol             | Unit | Test Conditions                                     | SS2        |    |    |          |    |    |     |     |     |
|--------------------------------------|--------------------|------|-----------------------------------------------------|------------|----|----|----------|----|----|-----|-----|-----|
|                                      |                    |      |                                                     | 2          | 3  | 4  | 5        | 6  | 8  | 10  | 15  | 20  |
| Repetitive Peak Reverse Voltage      | V <sub>RRM</sub>   | V    |                                                     | 20         | 30 | 40 | 50       | 60 | 80 | 100 | 150 | 200 |
| MaximumRMS 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 , TL(Fig.1) | 2.0        |    |    |          |    |    |     |     |     |
| Surge(Non-repetitive)Forward Current | I <sub>FSM</sub>   | A    | 60Hz Half-sine wave,<br>1 cycle , Ta=25 ℃           | 50         |    |    |          |    |    |     |     |     |
| Junction    Temperature              | T <sub>J</sub>     | ℃    |                                                     | -55~+125   |    |    | -55~+150 |    |    |     |     |     |
| Storage Temperature                  | T <sub>STG</sub>   | ℃    |                                                     | -55 ~ +150 |    |    |          |    |    |     |     |     |

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

| Item                        | Symbol               | Unit  | Test Condition                    | SS2                 |      |     |      |   |      |    |      |    |
|-----------------------------|----------------------|-------|-----------------------------------|---------------------|------|-----|------|---|------|----|------|----|
|                             |                      |       |                                   | 2                   | 3    | 4   | 5    | 6 | 8    | 10 | 15   | 20 |
| Peak Forward Voltage        | V <sub>F</sub>       | V     | I <sub>F</sub> =2.0A              |                     | 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℃ |       |                                   | 10                  |      | 5.0 |      |   |      |    |      |    |
| Thermal Resistance(Typical) | R <sub>θJ-A</sub>    | ℃ / W | Between junction and ambient      |                     | 75   |     |      |   |      |    |      |    |
|                             | R <sub>θJ-L</sub>    |       | Between junction and terminal     |                     | 17   |     |      |   |      |    |      |    |

## Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

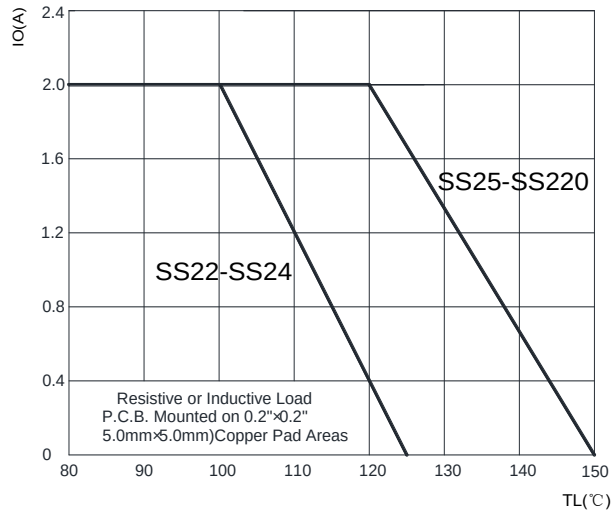


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

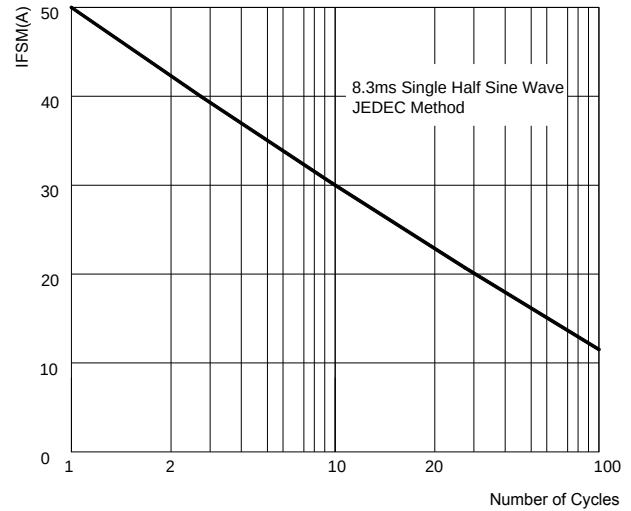


FIG.3: TYPICAL FORWARD CHARACTERISTICS

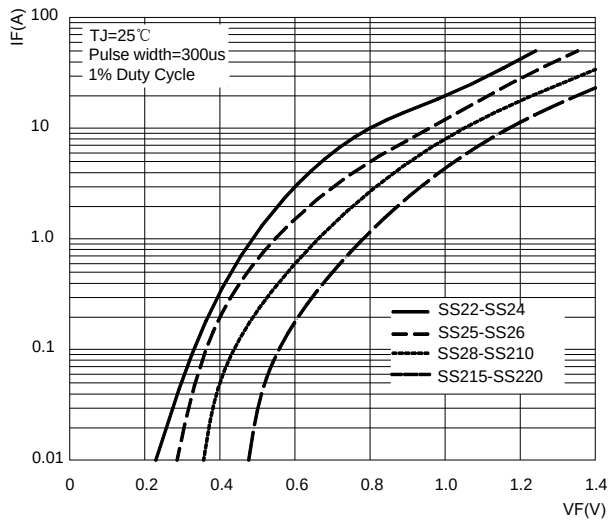
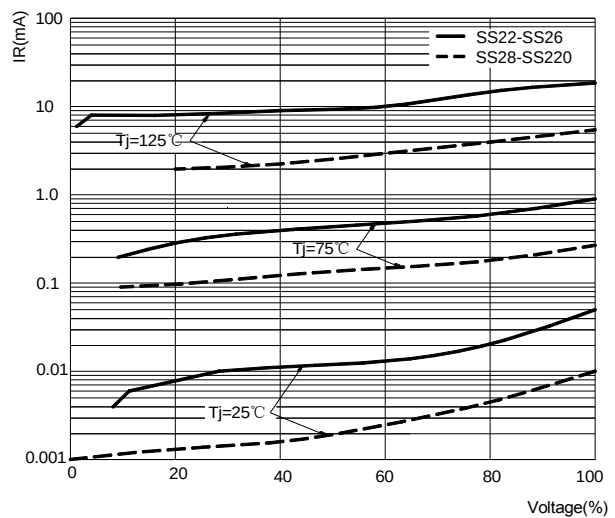


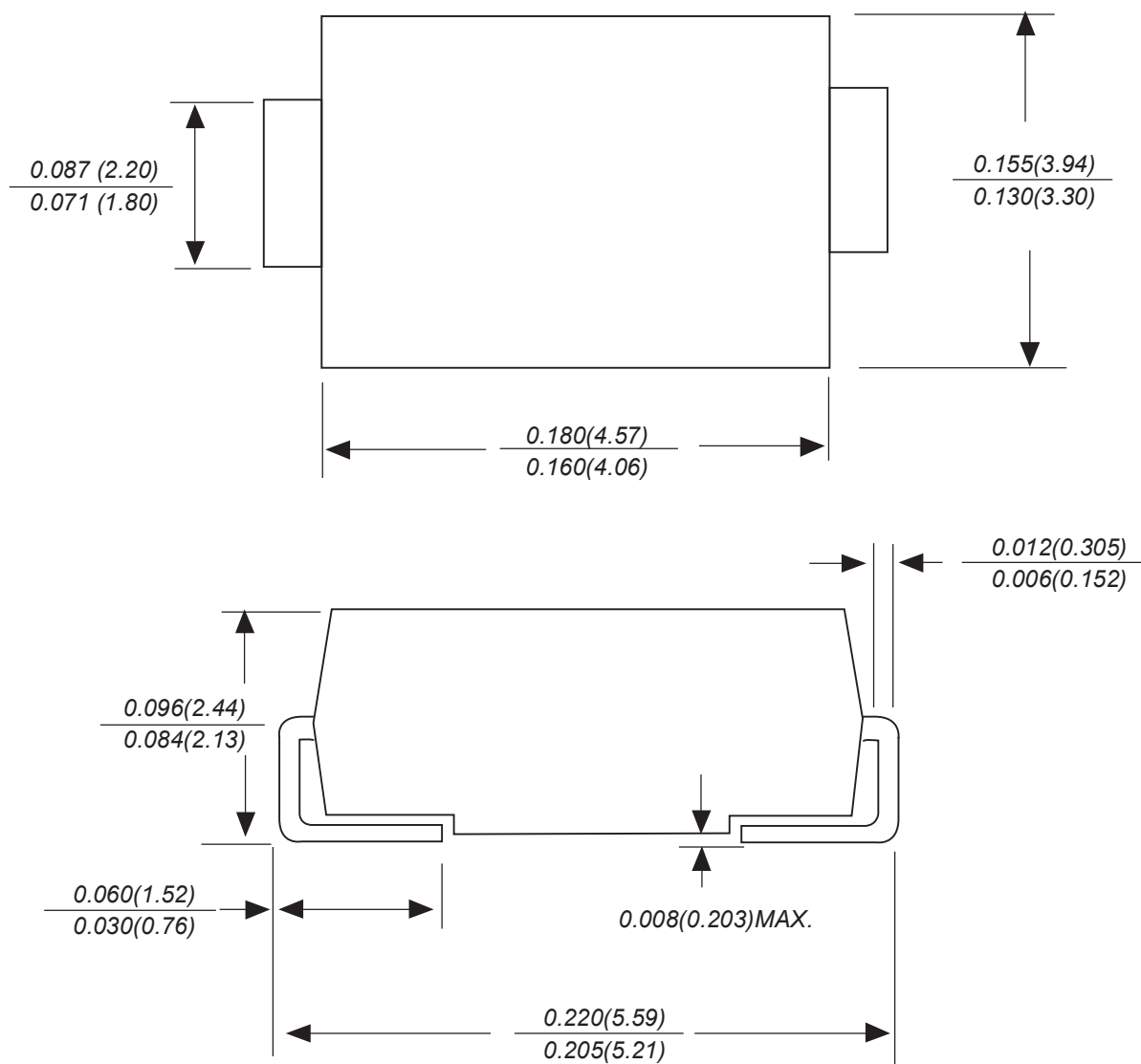
FIG.4: TYPICAL REVERSE CHARACTERISTICS





## Package Outline Dimensions

### SMB(DO-214AA)



*Dimensions in inches and (millimeters)*



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