

## Features

- $I_{F(AV)}$  2A
- $V_{RRM}$  20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

## Applications

- Rectifier

## Marking

- SS2X

X : From 2 To 20



SMA top view



Schematic diagram



Halogen-Free

## Limiting Values(Absolute Maximum Rating)

| Symbol             | Parameter                               | Test Conditions                         | SS2      |    |    |          |    |    |     |     |     | Unit |
|--------------------|-----------------------------------------|-----------------------------------------|----------|----|----|----------|----|----|-----|-----|-----|------|
|                    |                                         |                                         | 2        | 3  | 4  | 5        | 6  | 8  | 10  | 15  | 20  |      |
| V <sub>RRM</sub>   | Repetitive Peak Reverse Voltage         |                                         | 20       | 30 | 40 | 50       | 60 | 80 | 100 | 150 | 200 | V    |
| V <sub>RMS</sub>   | Maximum RMS voltage                     |                                         | 14       | 21 | 28 | 35       | 42 | 56 | 70  | 105 | 140 | V    |
| I <sub>F(AV)</sub> | Average Forward Current                 | 60Hz Half-sine wave<br>Resistance load  | 2.0      |    |    |          |    |    |     |     |     | A    |
| I <sub>FSM</sub>   | Surge(Non-repetitive)Forward<br>Current | 60Hz Half-sine wave,<br>1 cycle, Ta=25℃ | 50       |    |    |          |    |    |     |     |     | A    |
| T <sub>J</sub>     | Junction Temperature                    |                                         | -55~+125 |    |    | -55~+150 |    |    |     |     |     | ℃    |
| T <sub>stg</sub>   | Storage Temperature Range               |                                         | -55~+150 |    |    |          |    |    |     |     |     | ℃    |

## Electrical Characteristics (T=25°C Unless otherwise specified)

| Item                          | Symbol            | Test Condition                                          |          | SS2  |   |      |   |      |   |      |    | Unit |
|-------------------------------|-------------------|---------------------------------------------------------|----------|------|---|------|---|------|---|------|----|------|
|                               |                   |                                                         |          | 2    | 3 | 4    | 5 | 6    | 8 | 10   | 15 |      |
| Peak Forward Voltage          | V <sub>F</sub>    | I <sub>F</sub> =2.0A                                    |          | 0.55 |   | 0.70 |   | 0.85 |   | 0.95 |    | V    |
| Peak Reverse Current          | I <sub>RRM1</sub> | V <sub>RM</sub> =V <sub>RRM</sub>                       | Ta =25℃  | 0.5  |   |      |   | 0.1  |   |      |    | mA   |
|                               | I <sub>RRM2</sub> | V <sub>RM</sub> =V <sub>RRM</sub>                       | Ta =100℃ | 10   |   |      |   | 5.0  |   |      |    |      |
| Thermal Resistance(Typical)   | R <sub>θJ-A</sub> | Between junction and ambient                            |          | 88   |   |      |   |      |   |      |    | ℃/W  |
|                               | R <sub>θJ-L</sub> | Between junction and terminal                           |          | 28   |   |      |   |      |   |      |    |      |
| Juction Capacitance (Typical) | Cj                | Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C |          | 114  |   | 92   |   | 53   |   | 40   |    | pF   |

## Ordering Information (Example)

| Type  | Package | Marking | Minimum Package(pcs) | Inner Box Quantity(pcs) | Outer Carton Quantity(pcs) | Delivery Mode |
|-------|---------|---------|----------------------|-------------------------|----------------------------|---------------|
| SS22  | SMA     | SS22    | 2,000                | 10,000                  | 100,000                    | 7"reel        |
| SS23  |         | SS23    |                      |                         |                            |               |
| SS24  |         | SS24    |                      |                         |                            |               |
| SS25  |         | SS25    |                      |                         |                            |               |
| SS26  |         | SS26    |                      |                         |                            |               |
| SS28  |         | SS28    |                      |                         |                            |               |
| SS210 |         | SS210   |                      |                         |                            |               |
| SS215 |         | SS215   |                      |                         |                            |               |
| SS220 |         | SS220   |                      |                         |                            |               |

## Typical Characteristics

Fig.1 Forward Current Derating Curve

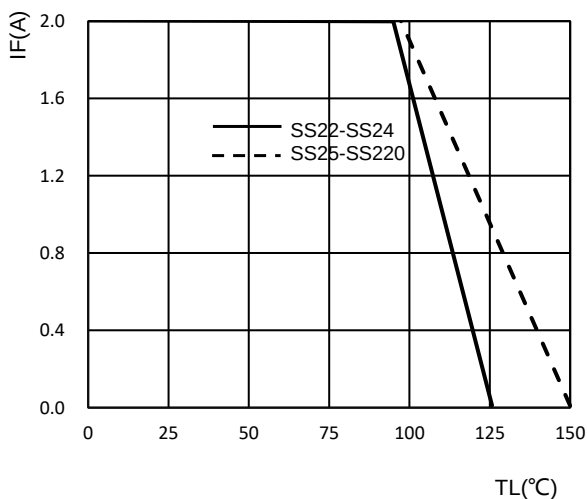
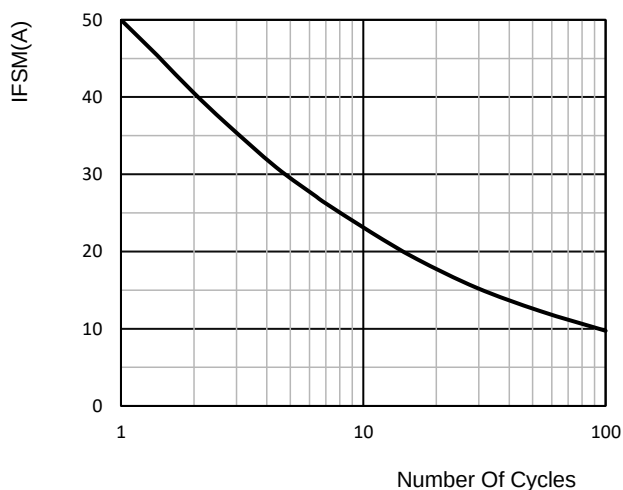
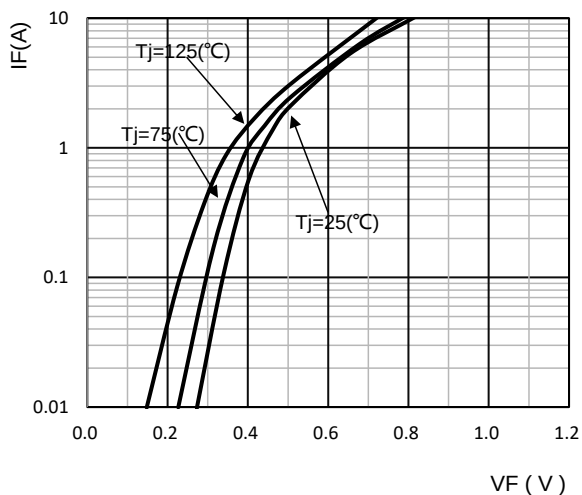


Fig.2 Maximum Non-Repetitive Forward Surge Current



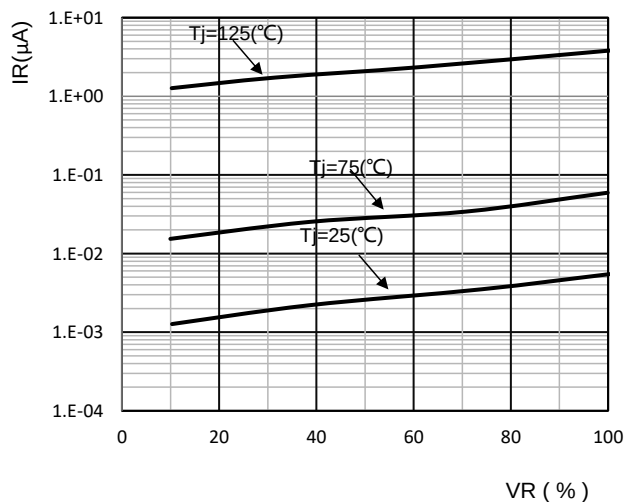
SS22-SS24

Fig.3 Typical Forward Characteristics



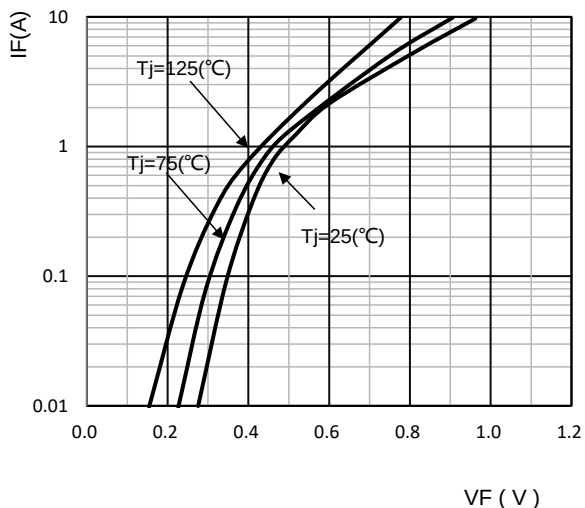
SS22-SS24

Fig.4 Typical Reverse Characteristics



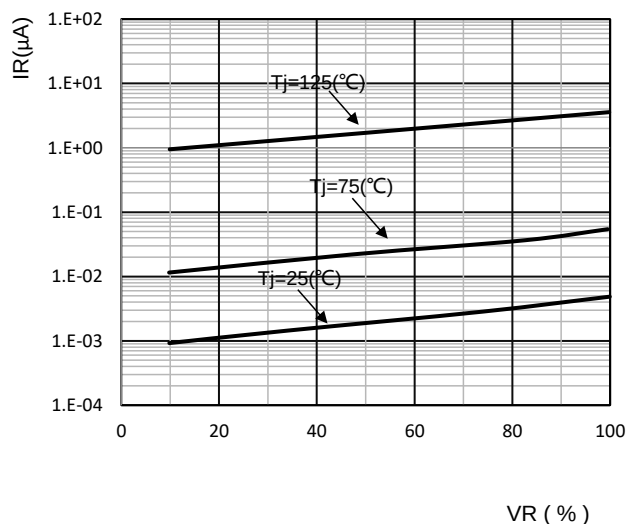
SS25-SS26

Fig.5 Typical Forward Characteristics



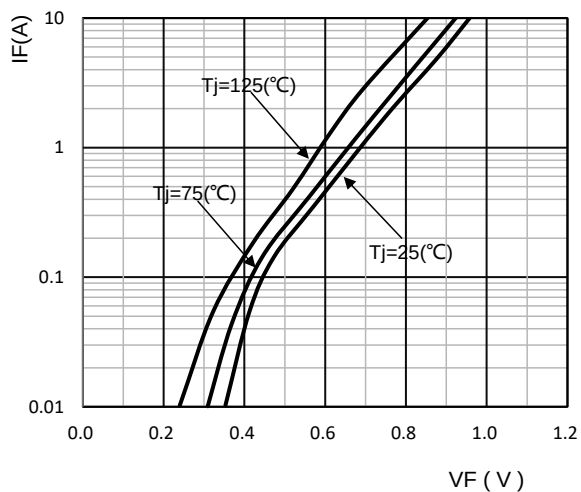
SS25-SS26

Fig.6 Typical Reverse Characteristics



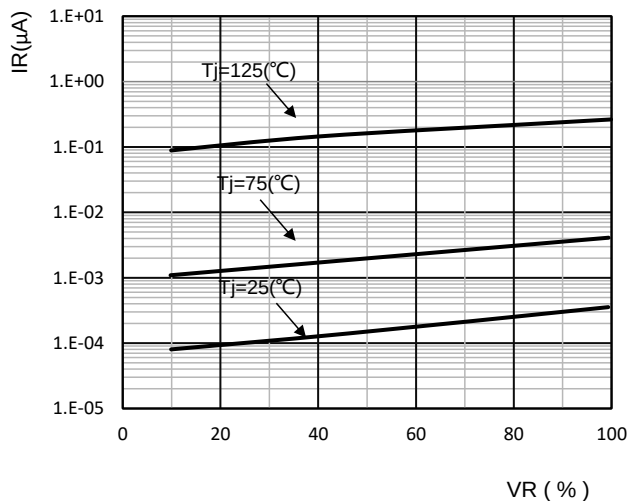
SS28-SS210

Fig.7 Typical Forward Characteristics



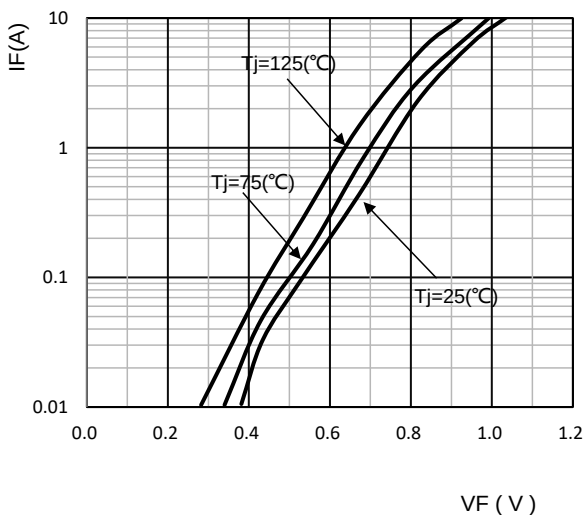
SS28-SS210

Fig.8 Typical Reverse Characteristics



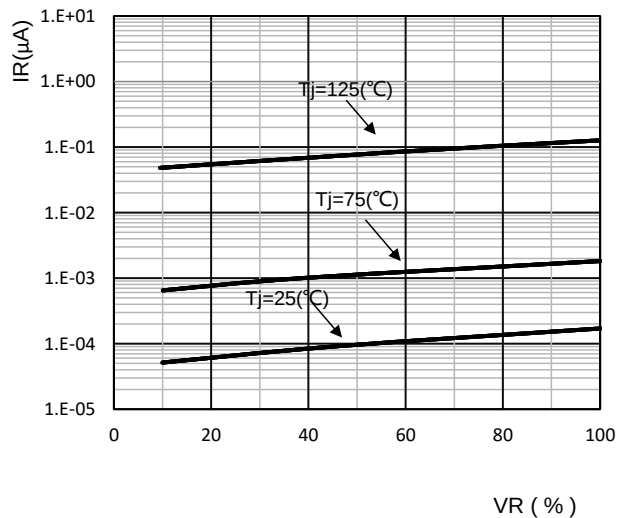
SS215

Fig.9 Typical Forward Characteristics



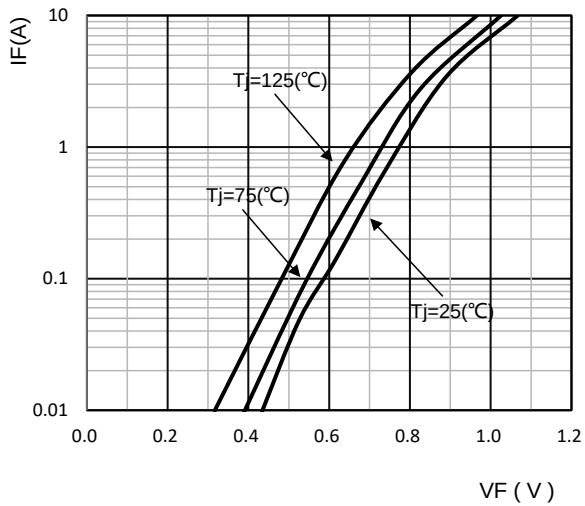
SS215

Fig.10 Typical Reverse Characteristics



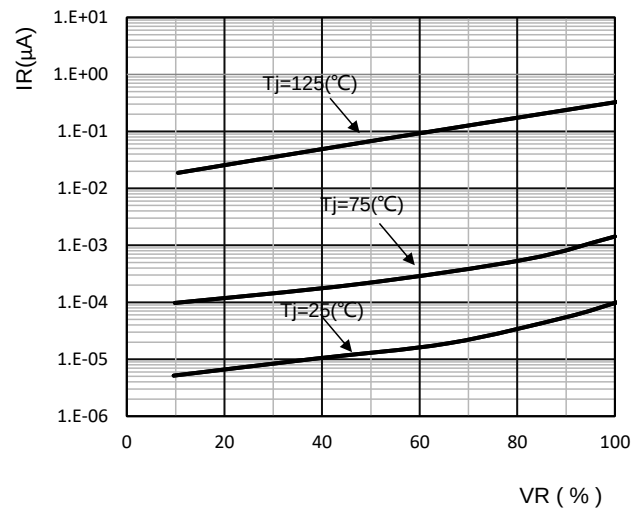
SS220

Fig.11 Typical Forward Characteristics



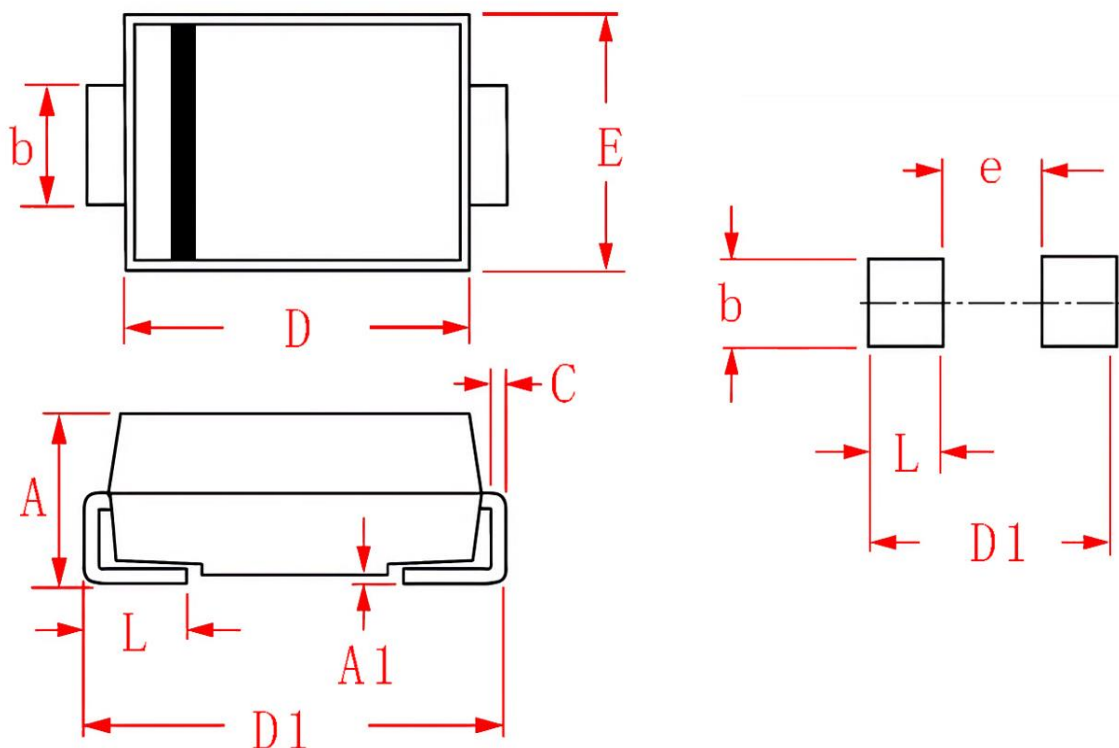
SS220

Fig.12 Typical Reverse Characteristics



**SMA Package information**

SMA (DO-214AC)



| Symbol | Dimensions in Millimeters(mm) |       | Dimensions In Inches |       |
|--------|-------------------------------|-------|----------------------|-------|
|        | Min                           | Max   | Min                  | Max   |
| A      | 1.900                         | 2.200 | 0.075                | 0.087 |
| A1     | 0.050                         | 0.200 | 0.002                | 0.008 |
| b      | 1.300                         | 1.600 | 0.051                | 0.063 |
| C      | 0.150                         | 0.310 | 0.006                | 0.012 |
| D      | 4.000                         | 4.500 | 0.157                | 0.177 |
| D1     | 4.700                         | 5.200 | 0.185                | 0.205 |
| E      | 2.300                         | 2.700 | 0.090                | 0.106 |
| e      | -                             | 1.880 | -                    | 0.074 |
| L      | 0.900                         | 1.500 | 0.035                | 0.059 |