



## SSCSSD103AD3

### Schottky Barrier Diode

#### ● Features

- ✧ Low Forward Voltage Drop (VF)
- ✧ Better Efficiency and Cooler Operation
- ✧ Guard Ring Construction for Transient Protection

#### ● PIN configuration



**SOD-523**

#### ● Applications

- ✧ Low Voltage Rectification
- ✧ High-Efficiency DC-DC Conversion
- ✧ Switch Mode Power Supply
- ✧ Inverse Polarity Protection



**Circuit Diagram**



**Marking(Top View)**

#### ● Absolute maximum rating @T<sub>A</sub>=25°C

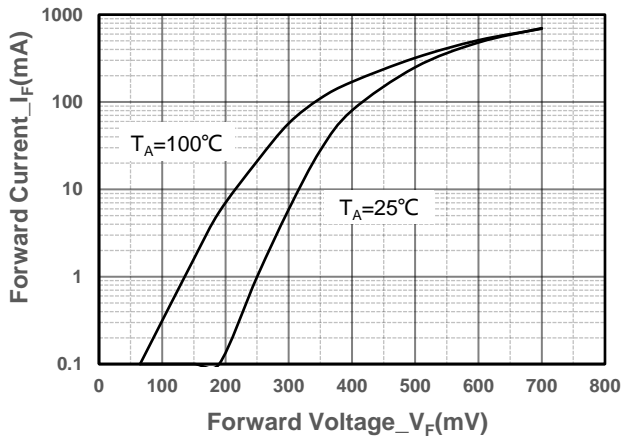
| Parameter  | Symbol           | Value      | Unit |
|--|------------------|------------|------|
| Peak Repetitive Peak Reverse Voltage               | V <sub>RRM</sub> | 40         | V    |
| Working Peak Reverse Voltage                       | V <sub>RWM</sub> |            |      |
| DC Blocking Voltage                                | V <sub>R</sub>   |            |      |
| Forward Continuous Current                         | I <sub>FM</sub>  | 350        | mA   |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I <sub>FSM</sub> | 2          | A    |
| Power Dissipation                                  | P <sub>D</sub>   | 400        | mW   |
| Operating Temperature                              | T <sub>J</sub>   | 125        | °C   |
| Storage Temperature                                | T <sub>STG</sub> | -40 ~ +125 | °C   |

#### ● Electrical Characteristics @T<sub>A</sub>=25°C

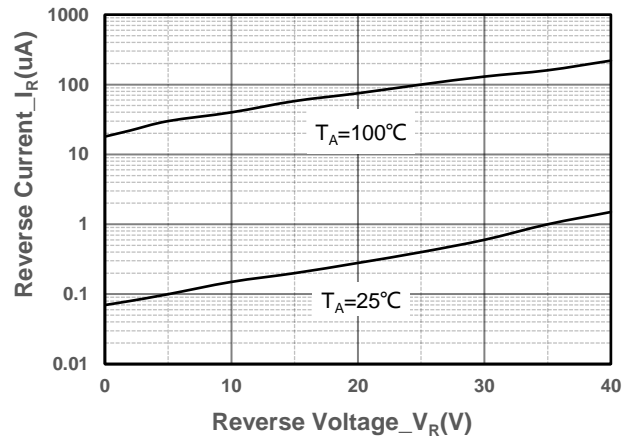
| Parameter             | Symbol          | Conditions  | Min. | Typ. | Max. | Unit |
|-----------------------|-----------------|---|------|------|------|------|
| Reverse Voltage       | V <sub>R</sub>  | I <sub>R</sub> = 10μA   | 40   |      |      | V    |
| Forward Voltage       | V <sub>F</sub>  | I <sub>F</sub> = 20mA   |      |      | 0.37 | V    |
|                       |                 | I <sub>F</sub> = 200mA  |      |      | 0.6  |      |
| Reverse Current       | I <sub>R</sub>  | V <sub>R</sub> = 30V  |      |      | 5    | uA   |
| Junction Capacitance  | C <sub>J</sub>  | V <sub>R</sub> = 0V, f = 1MHz   |      |      | 50   | pF   |
| Reverse recovery time | t <sub>rr</sub> | I <sub>R</sub> =I <sub>F</sub> =200mA, R <sub>L</sub> =100Ω, I <sub>rr</sub> =0.1I <sub>R</sub> |      |      | 10   | ns   |



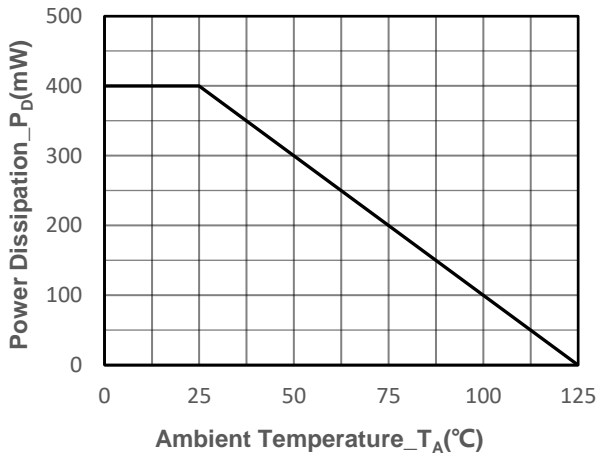
## ● Typical Performance Characteristics



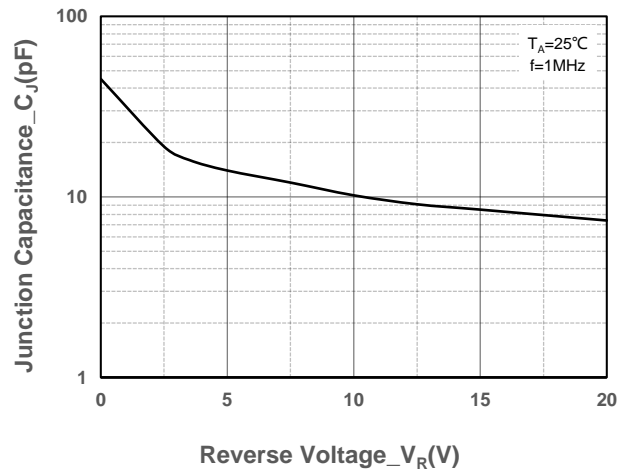
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage



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## ● Package Information

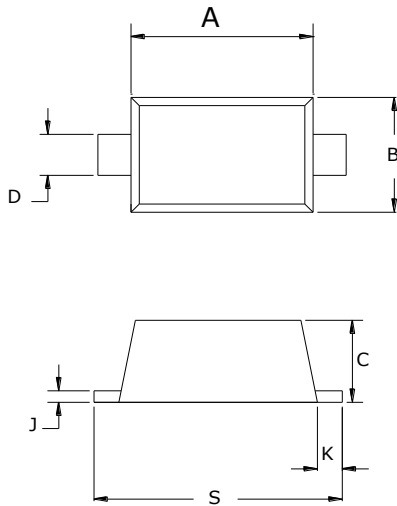
### Ordering Information

| Device       | Package | Marking | Qty per Reel | Reel Size |
|--------------|---------|---------|--------------|-----------|
| SSCSSD103AD3 | SOD-523 | S4      | 3000         | 7 Inch    |

### Mechanical Data

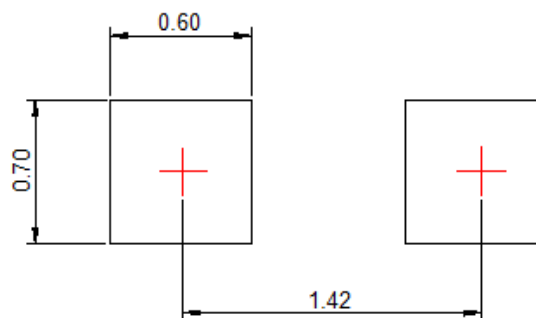
Case: SOD-523

Case Material: Molded Plastic. UL Flammability



| DIM | Millimeters |      |
|-----|-------------|------|
|     | Min         | Max  |
| A   | 1.10        | 1.30 |
| B   | 0.75        | 0.85 |
| C   | 0.51        | 0.70 |
| D   | 0.25        | 0.35 |
| J   | 0.08        | 0.15 |
| K   | 0.15        | 0.25 |
| S   | 1.50        | 1.70 |

### Recommended Pad outline (Unit:mm)





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