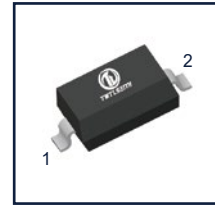


## Features

- Low Forward Voltage Drop.
- Guard Ring Construction for Transient Protection.
- Negligible Reverse Recovery Time.
- Low Reverse Capacitance.



SOD-123



Equivalent Circuit

## Absolute Maximum Ratings(T<sub>A</sub>=25℃)

| Symbol              | Parameter                                                                                                                          | Value    | Unit |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------|----------|------|
| V <sub>RM</sub>     | Non-repetitive Peak Reverse Voltage<br>Peak Repetitive Peak Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | 40       | V    |
| V <sub>RRM</sub>    |                                                                                                                                    |          |      |
| V <sub>RWM</sub>    |                                                                                                                                    |          |      |
| V <sub>R</sub>      |                                                                                                                                    |          |      |
| V <sub>R(RMS)</sub> | RMS Reverse Voltage                                                                                                                | 28       | V    |
| I <sub>FM</sub>     | Forward Continuous Current                                                                                                         | 350      | mA   |
| I <sub>FSM</sub>    | Non-repetitive Peak Forward Surge Current@8.3mS                                                                                    | 2.0      | A    |
| P <sub>d</sub>      | Power Dissipation                                                                                                                  | 200      | mW   |
| R <sub>θJA</sub>    | Thermal Resistance From Junction To Ambient                                                                                        | 500      | ℃/W  |
| T <sub>J</sub>      | Operation Junction Temperature Range                                                                                               | -40~+125 | ℃    |
| T <sub>STG</sub>    | Storage Temperature Range                                                                                                          | -55~+150 | ℃    |

## Electrical Characteristics (T<sub>A</sub>=25℃ unless otherwise specified)

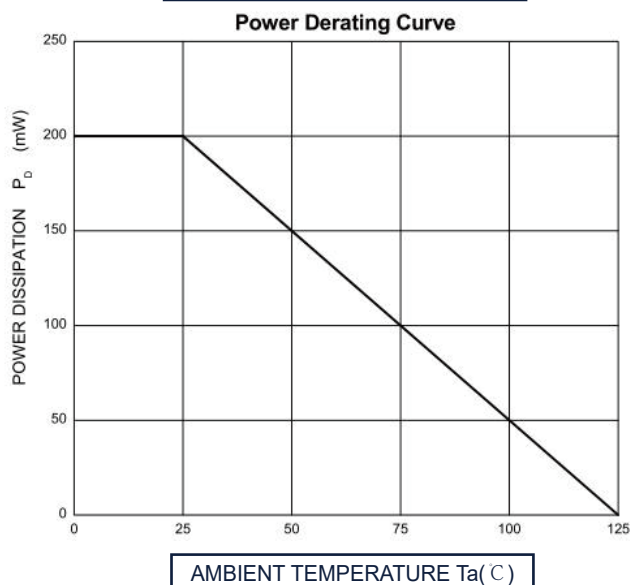
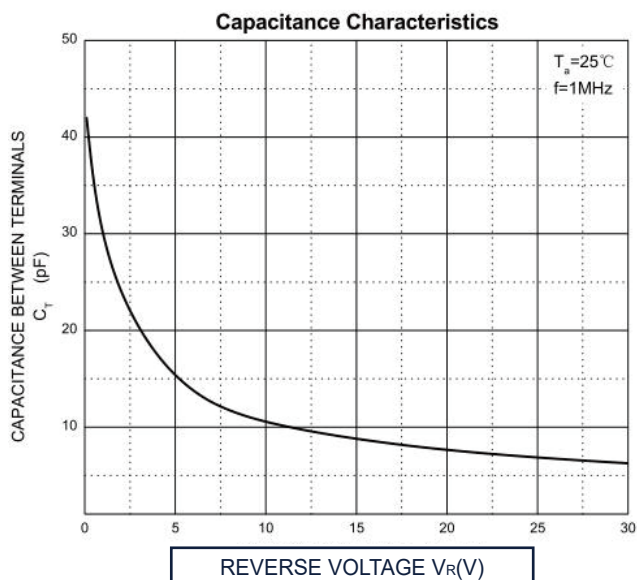
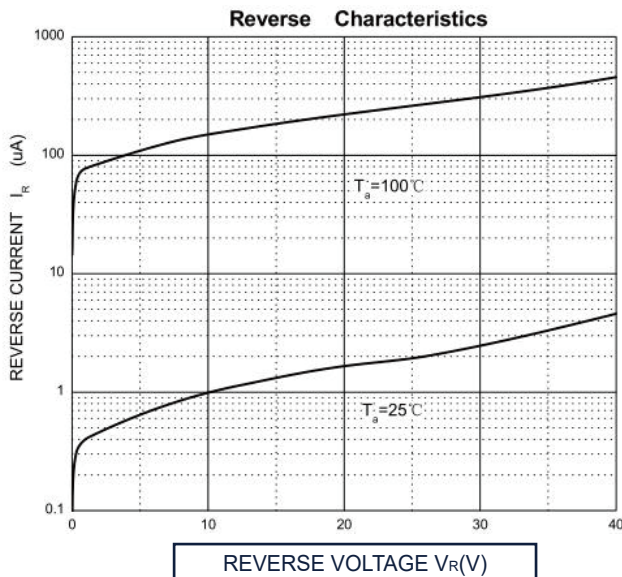
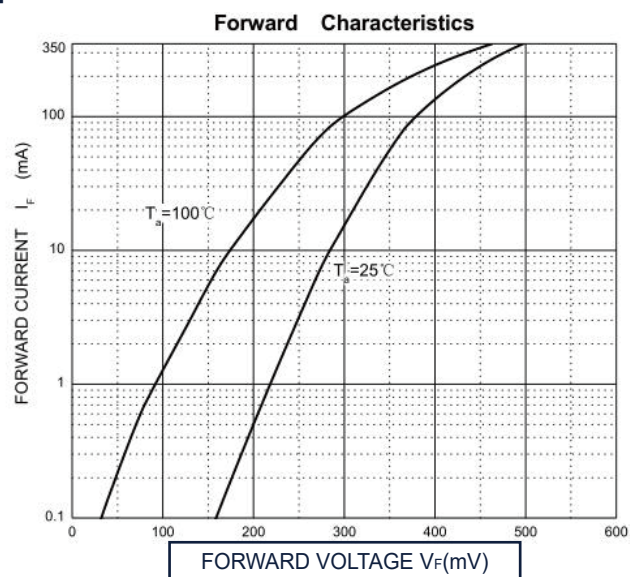
| Symbol            | Parameter                       | Test conditions                                                                                    | Min | Typ | Max  | Unit |
|-------------------|---------------------------------|----------------------------------------------------------------------------------------------------|-----|-----|------|------|
| V <sub>(BR)</sub> | Reverse breakdown voltage       | I <sub>R</sub> =1mA                                                                                | 40  |     |      | V    |
| I <sub>R</sub>    | Reverse voltage leakage current | V <sub>R</sub> =30V                                                                                |     |     | 5.0  | μA   |
| V <sub>F(1)</sub> | Forward voltage(1)              | I <sub>F</sub> =20mA                                                                               |     |     | 0.37 | V    |
| V <sub>F(2)</sub> | Forward voltage(2)              | I <sub>F</sub> =200mA                                                                              |     |     | 0.6  | V    |
| C <sub>T</sub>    | Capacitance between terminals   | V <sub>R</sub> =0V, f=1.0MHz                                                                       |     |     | 50   | pF   |
| t <sub>rr</sub>   | Reverse recovery time           | I <sub>F</sub> =I <sub>R</sub> =200mA, I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω |     | 10  |      | nS   |

## Ordering information

| Product ID | Pack    | Naming rule                                                                                                                                                                                                                                   | Marking | Qty(PCS) |
|------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|
| SD103AW    | SOD-123 | <div style="border: 1px solid black; padding: 5px; display: inline-block;">SD103AW</div><br><div style="text-align: center; margin-top: 5px;"> <div style="font-size: 8px;">产品名称</div> <div style="font-size: 8px;">product name</div> </div> | S4      | 3000     |

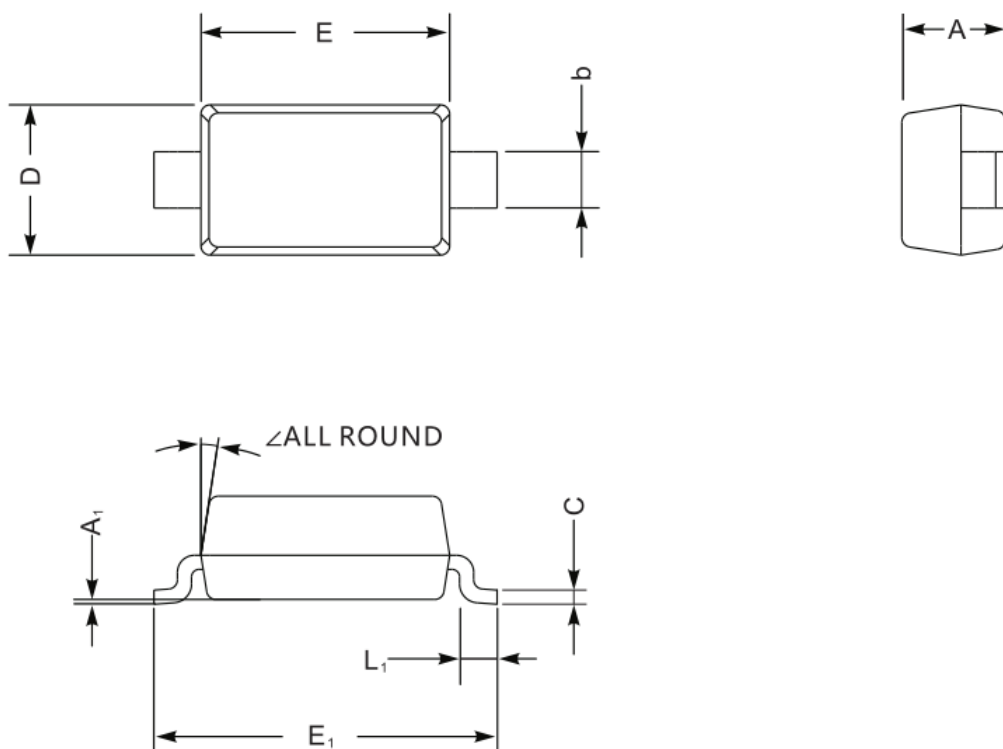


## Typical Characteristics





## SOD-123 Package Outline Dimensions



| Symbol         | mm   |      | mil |     |
|----------------|------|------|-----|-----|
|                | min  | max  | min | max |
| A              | 0.9  | 1.3  | 35  | 51  |
| C              | 0.09 | 0.22 | 3.5 | 8.7 |
| D              | 1.5  | 1.8  | 59  | 71  |
| E              | 2.5  | 2.8  | 98  | 110 |
| E <sub>1</sub> | 3.6  | 3.9  | 142 | 154 |
| L <sub>1</sub> | 0.25 | 0.45 | 10  | 18  |
| b              | 0.5  | 0.7  | 20  | 28  |
| A <sub>1</sub> |      | 0.2  |     | 8   |
| ∠              | 9°   |      |     |     |