

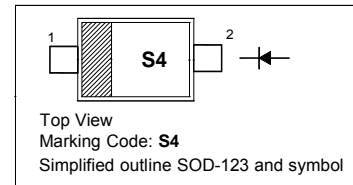
## SD103AW...SD103CW Surface Mount Schottky Barrier Diodes

### Features

- Low Forward Voltage

### PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

| Parameter   | Symbol         | Value                         | Unit                          |                  |    |
|---|----------------|-------------------------------|-------------------------------|------------------|----|
| Peak Repetitive Reverse Voltage                               | $V_{RRM}$      | SD103AW<br>SD103BW<br>SD103CW | 40<br>30<br>20                | V                |    |
| Reverse Voltage   |                | $V_R$                         | SD103AW<br>SD103BW<br>SD103CW | 40<br>30<br>20   | V  |
| Average Forward Rectified Current                             |                | $I_{F(AV)}$                   |                               | 350              | mA |
| Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$ | $I_{FSM}$      |                               | 2                             | A                |    |
| Power Dissipation   | $P_{tot}$      |                               | 400                           | mW               |    |
| Operating and Storage Temperature Range                       | $T_j, T_{stg}$ |                               | - 65 to + 125                 | $^\circ\text{C}$ |    |

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter  | Symbol      | Min.                          | Typ.                          | Max.        | Unit        |               |
|--|-------------|-------------------------------|-------------------------------|-------------|-------------|---------------|
| Reverse Breakdown Voltage<br>at $I_R = 10\text{ }\mu\text{A}$  | $V_{(BR)R}$ | SD103AW<br>SD103BW<br>SD103CW | 40<br>30<br>20                | -<br>-<br>- | V           |               |
| Reverse Leakage Current<br>at $V_R = 30\text{ V}$<br>at $V_R = 20\text{ V}$<br>at $V_R = 10\text{ V}$    |             | $I_R$                         | SD103AW<br>SD103BW<br>SD103CW | -<br>-<br>- | 5<br>5<br>5 | $\mu\text{A}$ |
| Forward Voltage<br>at $I_F = 20\text{ mA}$<br>at $I_F = 200\text{ mA}$                                   |             |                               | $V_F$                         |             | -<br>-      | 0.37<br>0.6   |
| Total Capacitance<br>at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$  | $C_T$       |                               |                               | -           | 50          | -             |
| Reverse Recovery Time<br>at $I_F = I_R = 200\text{ mA}$ , $I_{rr} = 0.1 I_R$ , $R_L = 100\text{ }\Omega$ | $t_{rr}$    | -                             | 10                            | -           | ns          |               |

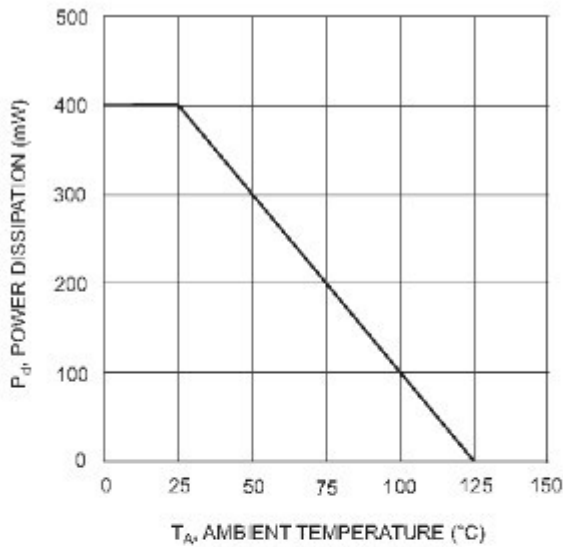


Fig. 1 Power Derating Curve

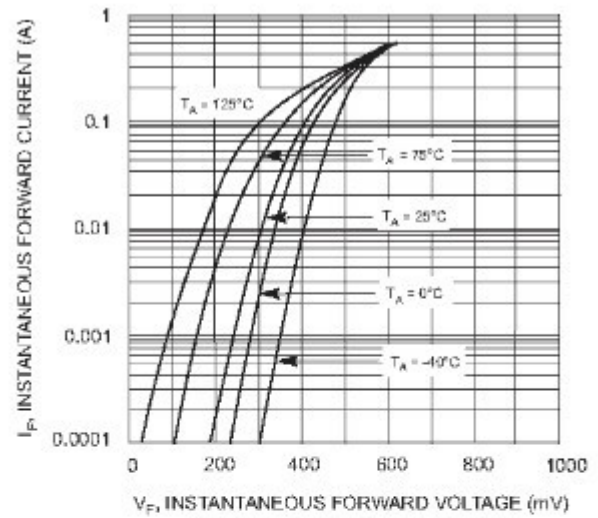


Fig. 2 Typical Forward Characteristics

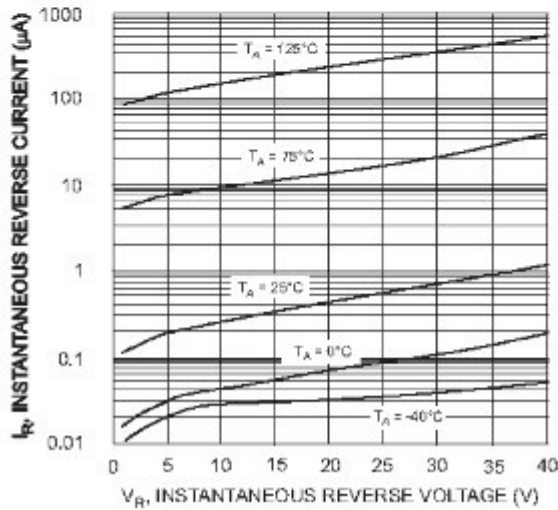


Fig. 3 Typical Reverse Characteristics

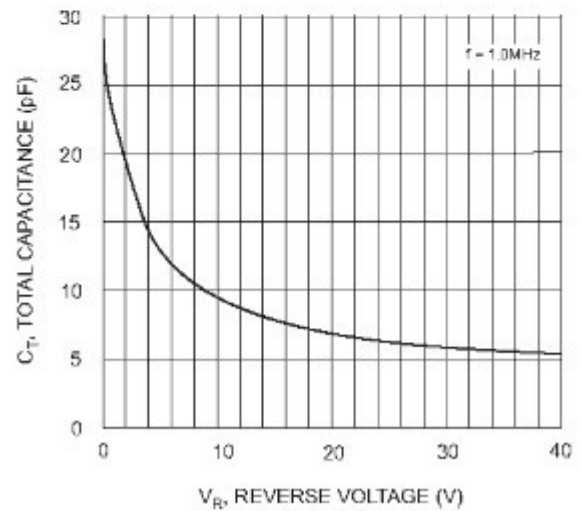


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123

