

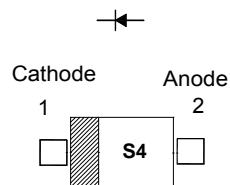


### SD103AWS...SD103CWS

#### Features

- Low Forward Voltage

Marking Code: **S4**



SOD-323

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

| Parameter   | Symbol         | Value         | Unit             |
|---|----------------|---------------|------------------|
| Peak Repetitive Reverse Voltage                               | $V_{RRM}$      | SD103AWS      | 40               |
|   |                | SD103BWS      | 30               |
|   |                | SD103CWS      | 20               |
| Reverse Voltage   | $V_R$          | SD103AWS      | 40               |
|   |                | SD103BWS      | 30               |
|   |                | SD103CWS      | 20               |
| 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   | $P_{tot}$      | 200           | 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 $I_R = 10\text{ }\mu\text{A}$  | $V_{(BR)R}$ | SD103AWS | 40   | -    | -    |
|  |             | SD103BWS | 30   | -    | -    |
|  |             | SD103CWS | 20   | -    | -    |
| Reverse Leakage Current<br>at $V_R = 30\text{ V}$<br>at $V_R = 20\text{ V}$<br>at $V_R = 10\text{ V}$    | $I_R$       | SD103AWS | -    | -    | 5    |
|  |             | SD103BWS | -    | -    | 5    |
|  |             | SD103CWS | -    | -    | 5    |
| Forward Voltage<br>at $I_F = 20\text{ mA}$<br>at $I_F = 200\text{ mA}$                                   | $V_F$       | -        | -    | 0.37 | V    |
|  |             | -        | -    | 0.6  |      |
| Total Capacitance<br>at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$  | $C_T$       | -        | 50   | -    | pF   |
| Reverse Recovery Time<br>at $I_F = I_R = 200\text{ mA}$ , $t_{rr} = 0.1 I_R$ , $R_L = 100\text{ }\Omega$ | $t_{rr}$    | -        | 10   | -    | ns   |

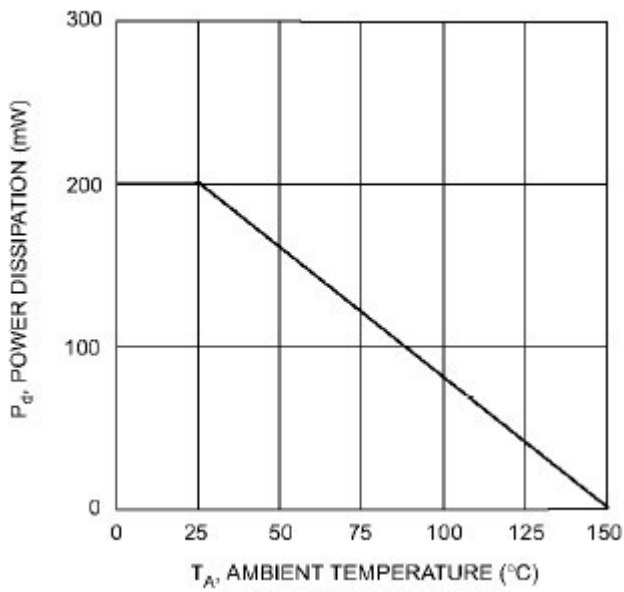


Fig. 1 Power Derating Curve

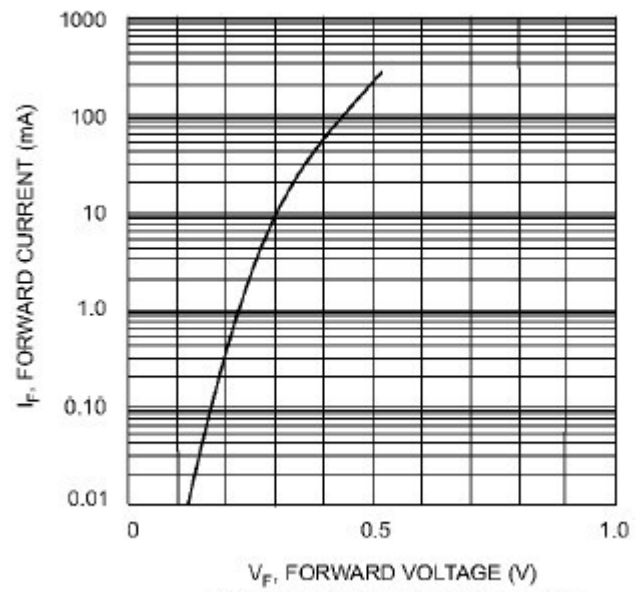


Fig. 2 Typical Forward Characteristics

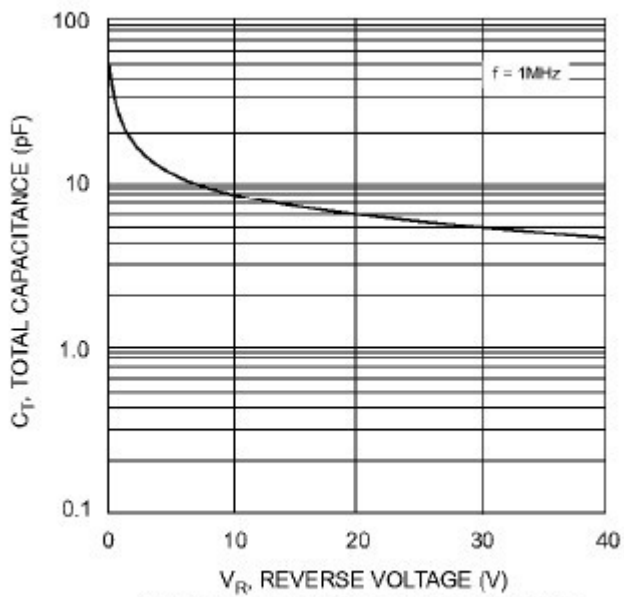


Fig. 3 Total Capacitance vs Reverse Voltage



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

