

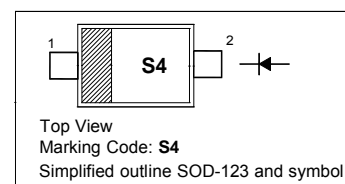
Surface Mount Schottky Barrier Diodes

Features

- Low Forward Voltage

PINNING

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

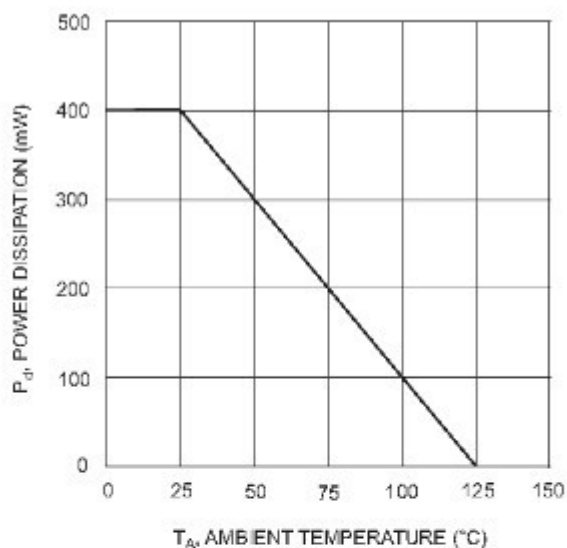


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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



T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve

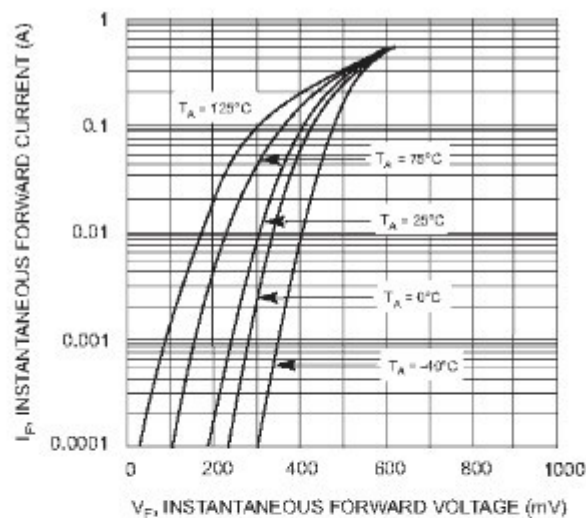


Fig. 2 Typical Forward Characteristics

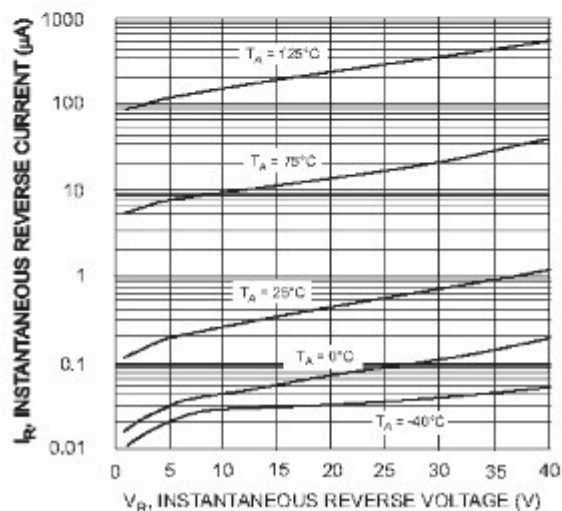


Fig. 3 Typical Reverse Characteristics

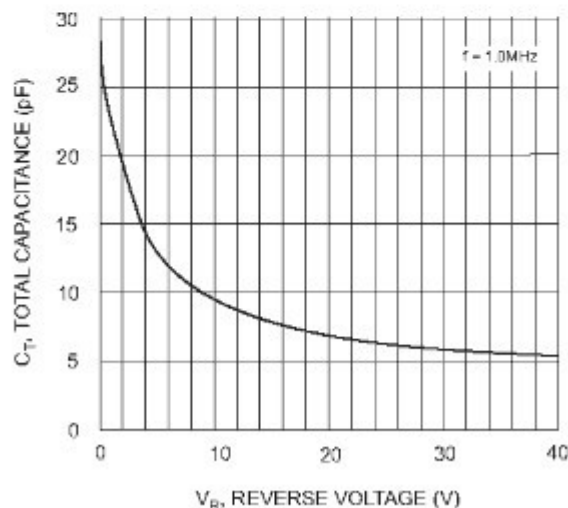


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123

