



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

1N4148WS

SOD-323 Switching Diode 开关二极管

■Features 特点

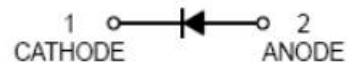
Fast Switching Speed 快的开关速度

Surface mount device 表面贴装器件

High Conductance 高电导率

Case 封装:SOD-323

Marking 印字: T4



■Maximum Rating 最大额定值

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

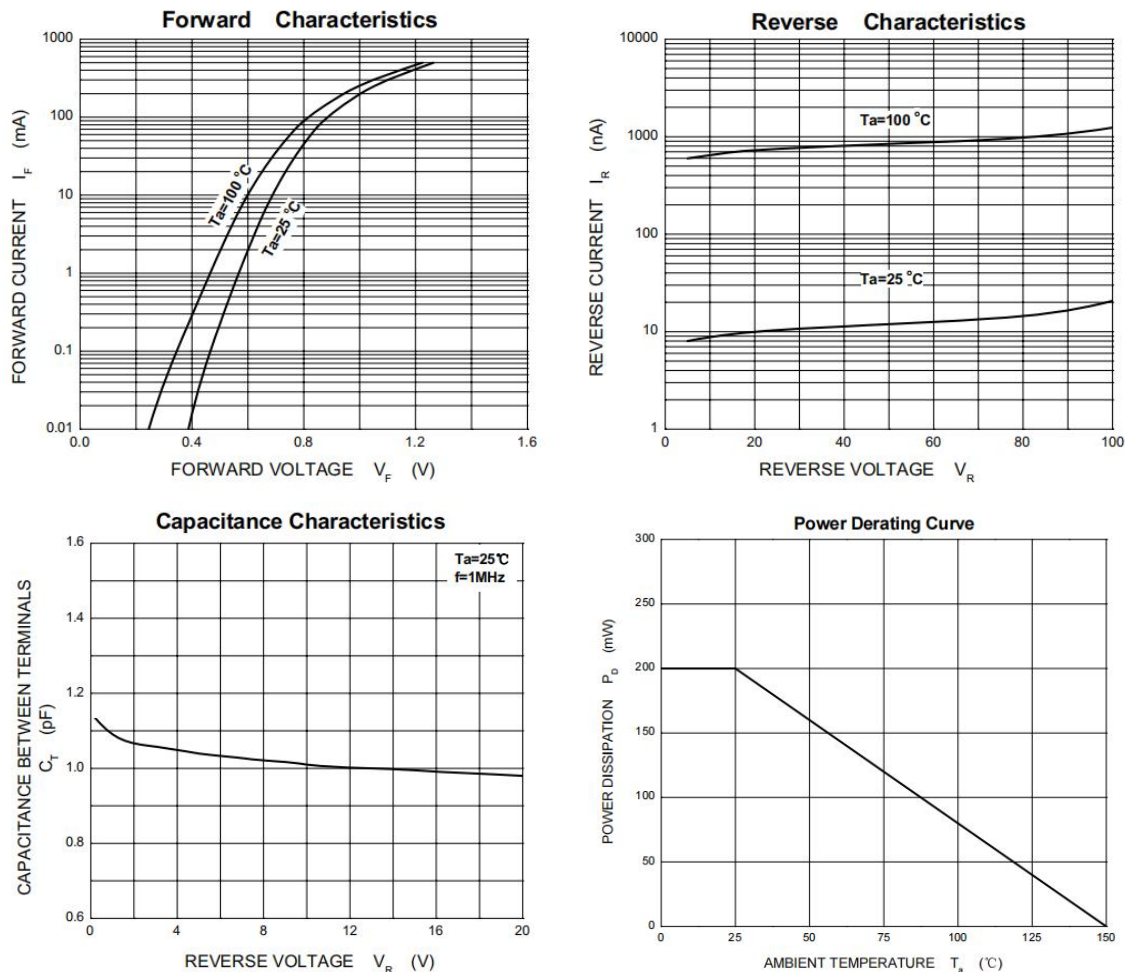
| Characteristic 特性参数 | Symbol 符号 | Rating 额定值 | Unit 单位 |
|---|-----------------|------------------------------|-----------------------------|
| DC Reverse Voltage 直流反向电压 | V_R | 100 | V |
| Peak Repetitive Reverse Voltage 峰值重复反向电压 | V_{RRM} | 100 | V |
| RMS Reverse Voltage 反向电压均方根值 | $V_{R(RMS)}$ | 70 | V |
| Forward Rectified Output Current 正向工作电流 | I_O | 150 | mA |
| Non-Repetitive Peak Surge Current@ $t=1\mu\text{S}$ 不重复峰值浪涌电流@ $t=1\text{S}$ | I_{FSM} | 2 1 | A |
| Power Dissipation 耗散功率 | P_D | 200 | mW |
| Thermal Resistance Junction-Ambient 结到环境热阻 | $R_{\theta JA}$ | 625 | $^{\circ}\text{C}/\text{W}$ |
| Junction/Storage Temperature 结温/储藏温度 | T_J, T_{stg} | -50to+150 $^{\circ}\text{C}$ | $^{\circ}\text{C}$ |

■Electrical Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

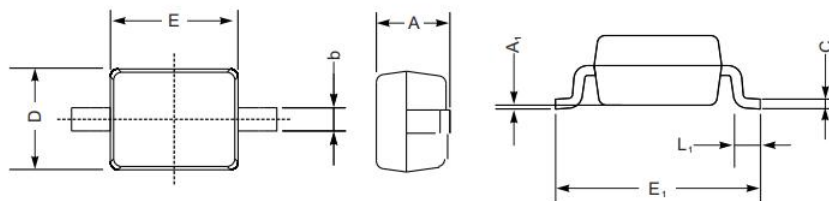
| Characteristic 特性参数 | Symbol 符号 | Min 最小值 | Max 最大值 | Unit 单位 | Condition 条件 |
|--------------------------------|-----------|---------|---------------------|---------------|--|
| Reverse Voltage 反向电压 | V_R | 100 | | V | $I_R=1\mu\text{A}$ |
| Forward Voltage 正向电压 | V_F | | 0.85 1.0 1.25 | V | $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$ |
| Reverse Current 反向电流 | I_R | | 1 | μA | $V_R=100\text{V}$ |
| Revers Recovery Time 反向恢复时间 | T_{rr} | | 4 | nS | $I_{tr} = 0.1 * I_R,$ $I_F = I_R = 10 \text{ mA},$ |
| Junction Capacitance 结电容 | C_J | | 1.15 | pF | $V_R=4\text{V},$ $f=1\text{MHz}$ |

■ Typical Characteristic Curve 典型特性曲线



■ Dimension 外形封装尺寸

SOD323



| UNIT | | A | C | D | E | E ₁ | b | L ₁ | A ₁ |
|------|-----|-----|------|-----|-----|----------------|------|----------------|----------------|
| mm | max | 1.1 | 0.15 | 1.4 | 1.8 | 2.75 | 0.4 | 0.45 | 0.2 |
| | min | 0.8 | 0.08 | 1.2 | 1.4 | 2.55 | 0.25 | 0.2 | — |
| mil | max | 43 | 5.9 | 55 | 70 | 108 | 16 | 16 | 8 |
| | min | 32 | 3.1 | 47 | 63 | 100 | 9.8 | 7.9 | — |