

## SOD-323 Schottky Barrier Rectifier Diode 肖特基势垒整流二极管

### ■Features 特点

Low forward voltage drop 低正向压降

High current capability 高电流能力

Surface mount device 表面贴装器件

Case 封装:SOD-323

Marking 印字: S4



### ■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  $25^{\circ}\text{C}$ )

| Characteristic 特性参数                  | Symbol 符号       | Rating 额定值                         | Unit 单位                     |
|--------------------------------------|-----------------|------------------------------------|-----------------------------|
| Peak Reverse Voltage 反向峰值电压          | $V_{RRM}$       | 40                                 | V                           |
| DC Reverse Voltage 直流反向电压            | $V_R$           | 40                                 | V                           |
| RMS Reverse Voltage 反向电压均方根值         | $V_{R(RMS)}$    | 28                                 | V                           |
| Forward Rectified Current 正向整流电流     | $I_F$           | 0.35                               | A                           |
| Peak Surge Current 峰值浪涌电流            | $I_{FSM}$       | 2                                  | A                           |
| Power Dissipation 耗散功率               | $P_D$           | 310                                | mW                          |
| Thermal Resistance J-A 结到环境热阻        | $R_{\theta JA}$ | 400                                | $^{\circ}\text{C}/\text{W}$ |
| Junction/Storage Temperature 结温/储藏温度 | $T_J, T_{stg}$  | $-50\text{to}+150^{\circ}\text{C}$ | $^{\circ}\text{C}$          |

### ■Electrical Characteristics 电特性

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

| Characteristic 特性参数     | Symbol 符号 | Min 最小值 | Type 典型值 | Max 最大值   | Unit 单位 | Condition 条件                                                      |
|-------------------------|-----------|---------|----------|-----------|---------|-------------------------------------------------------------------|
| Reverse Voltage 反向电压    | $V_R$     | 40      |          |           | V       | $I_R=1\text{mA}$                                                  |
| Forward Voltage 正向电压    | $V_F$     |         |          | 0.6       | V       | $I_F=0.2\text{A}$                                                 |
| Reverse Current 反向电流    | $I_R$     |         |          | 0.05<br>8 | mA      | $V_R=40\text{V}(25^{\circ}\text{C})$<br>( $100^{\circ}\text{C}$ ) |
| Diode Capacitance 二极管电容 | $C_T$     |         | 20       |           | pF      | $V_R=4\text{V}, f=1\text{MHz}$                                    |

## ■ Typical Characteristic Curve 典型特性曲线

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

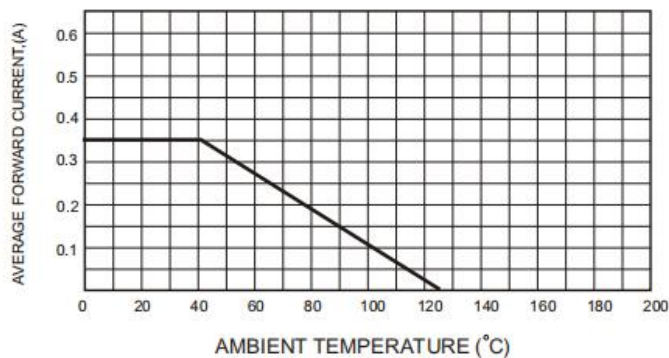


FIG.3 - Power Derating Curve

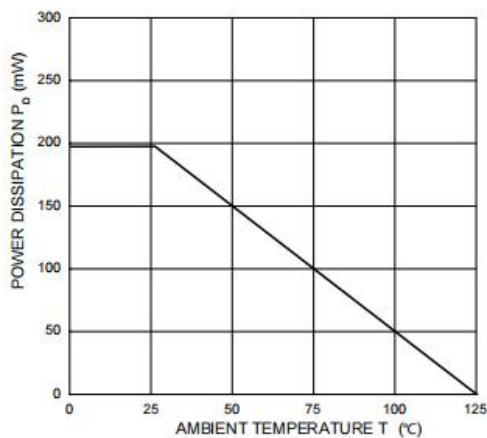


FIG.4-TYPICAL JUNCTION CAPACITANCE

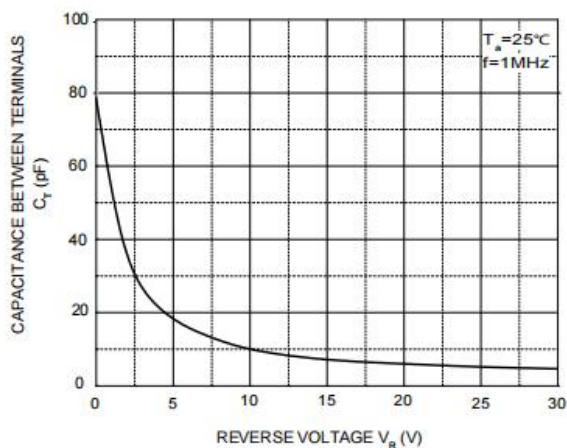


FIG.2-TYPICAL FORWARD CHARACTERISTICS

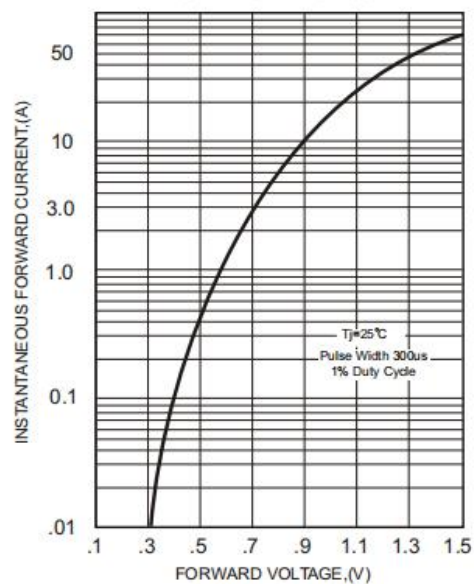
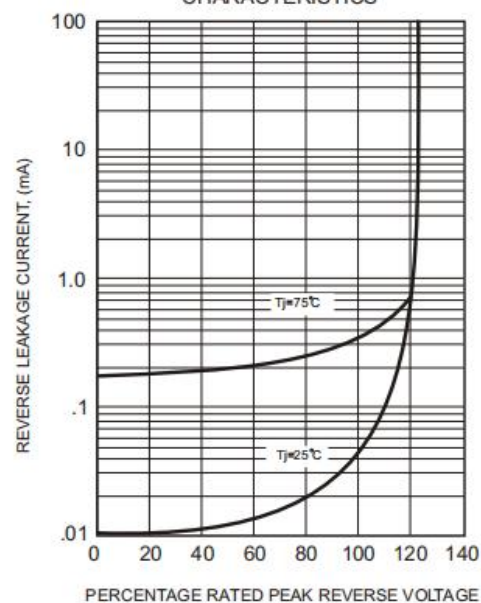
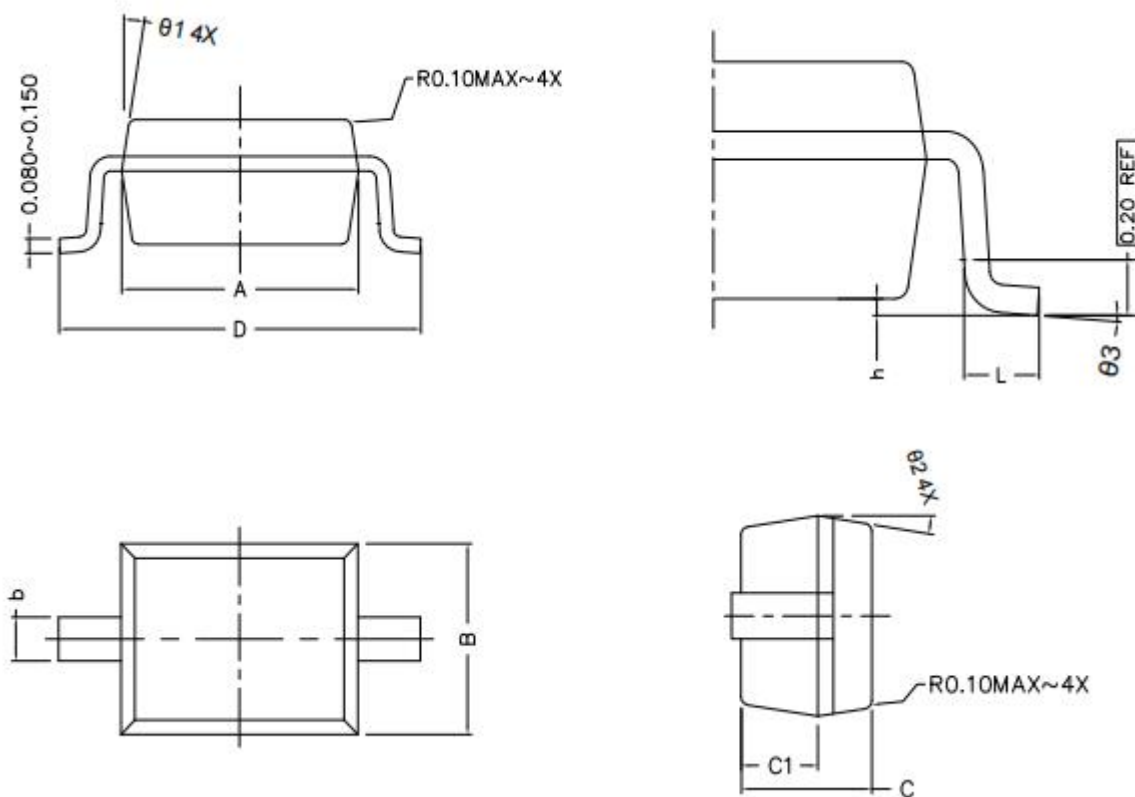


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



■ **Dimension** 外形封装尺寸



| Symbol      | Dimensions In Millimeters |       | Dimensions In Inches |       |
|-------------|---------------------------|-------|----------------------|-------|
|             | Min                       | Max   | Min                  | Max   |
| A           | 1.600                     | 1.800 | 0.063                | 0.071 |
| B           | 1.200                     | 1.400 | 0.047                | 0.055 |
| C           | 0.750                     | 0.950 | 0.030                | 0.037 |
| C1          | 0.450                     | 0.550 | 0.018                | 0.022 |
| D           | 2.450                     | 2.800 | 0.096                | 0.110 |
| L           | 0.200                     | 0.400 | 0.008                | 0.016 |
| b           | 0.200                     | 0.400 | 0.008                | 0.016 |
| h           | 0.020                     | 0.120 | 0.001                | 0.005 |
| $\ominus 3$ | 0°                        | 8°    | 0°                   | 8°    |