

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

■ **Features 特点**

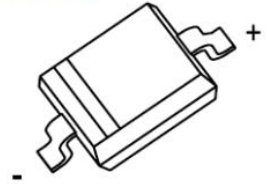
High current capability 高电流能力

Low forward voltage drop 低正向压降

Guard Ring Construction for Transient Protection 瞬态保护环结构

Case 封装:SOD-323

SOD-323



■ **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)

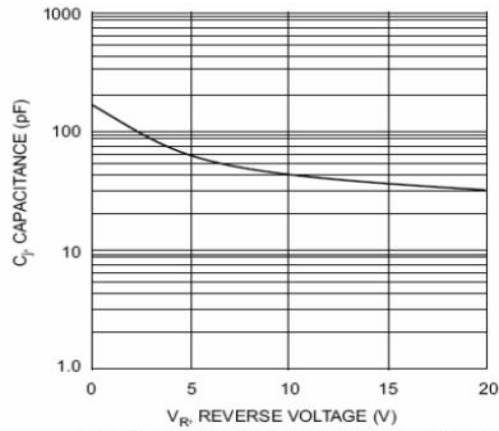
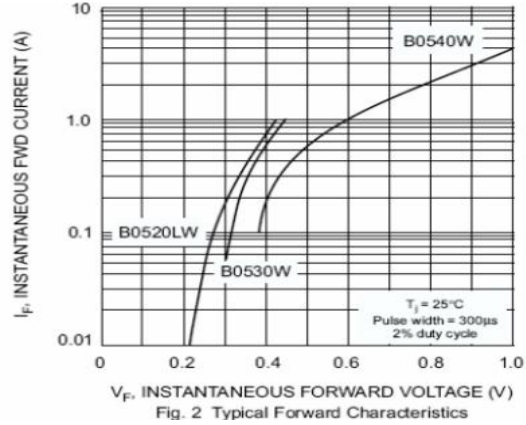
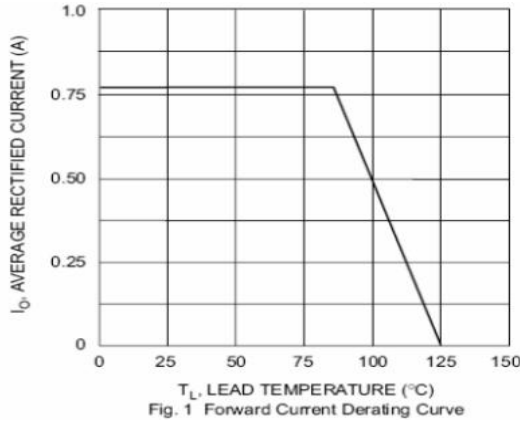
| Characteristic 特性参数 | Symbol 符号 | B0520WS | B0530WS | B0540WS | Unit 单位 |
|---------------------------------------|-----------------|-----------|---------|---------|---------------------------|
| Device Marking 产品印字 | | B2 | B3 | B4 | |
| Peak Reverse Voltage 反向峰值电压 | V_{RRM} | 20 | 30 | 40 | V |
| Peak Reverse Working Voltage 反向峰值工作电压 | V_{RWM} | 20 | 30 | 40 | V |
| DC Reverse Voltage 直流反向电压 | V_R | 20 | 30 | 40 | V |
| RMS Reverse Voltage 反向电压均方根值 | $V_{R(RMS)}$ | 14 | 21 | 28 | V |
| Forward Rectified Current 正向整流电流 | I_F | 0.5 | | | A |
| Peak Surge Current 峰值浪涌电流 | I_{FSM} | 5.5 | | | A |
| Power Dissipation 耗散功率 | P_D | 200 | | | mW |
| Thermal Resistance J-A 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 | | | $^\circ\text{C}$ |

■ **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)

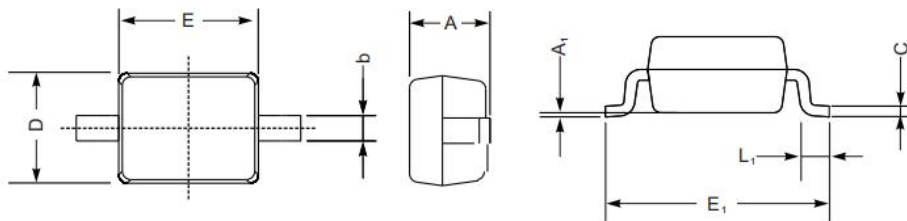
| Characteristic 特性参数 | Symbol 符号 | B0520WS | B0530WS | B0540WS | Unit 单位 | Condition 条件 |
|-------------------------|-----------|--------------|------------------|--------------|---------------|--|
| Reverse Voltage 反向电压 | V_R | 20 | 30 | 40 | V | $I_R=250\mu\text{A}$ $I_R=500\mu\text{A}$ $I_R=20\mu\text{A}$ |
| Forward Voltage 正向电压 | V_F | 0.3 0.385 | 0.36 0.45 | 0.51 0.62 | V | $I_F=0.1\text{A}$ $I_F=0.5\text{A}$ $I_F=1\text{A}$ |
| Reverse Current 反向电流 | I_R | 75 200 | 80 100 500 | 10 20 | μA | $V_R=10\text{V}$ $V_R=15\text{V}$ $V_R=20\text{V}$ $V_R=30\text{V}$ $V_R=40\text{V}$ |
| Diode Capacitance 二极管电容 | C_T | 170 | | | 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 | — |