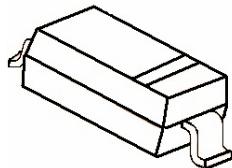


B0520WS/B0530WS/B0540WS

SOD-323



SOD-323 贴片塑封肖特基二极管

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

特征 Features

- 大电流承受能力。High Current Capability
- 正向压降低。Low Forward Voltage Drop

机械数据 Mechanical Data

Marking: B0520WS: SD

B0530WS: SE

B0540WS: SF

- 封装: SOD-323 封装 SOD-323 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性($T_A = 25^\circ\text{C}$ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

| 参数 Parameters | 符号 Symbol | B0520WS | B0530WS | B0540WS | 单位 Unit |
|----------------------------------------------------------------------------------|------------------|---------|----------|---------|------------|
| 最大可重复峰值反向电压 Maximum repetitive peak reverse voltage | VRRM | 20 | 30 | 40 | V |
| 最大均方根电压 Maximum RMS voltage | VRMS | 14 | 21 | 28 | V |
| 最大直流阻断电压 Maximum DC blocking voltage | VDC | 20 | 30 | 40 | V |
| 最大正向平均整流电流 Maximum average forward rectified current | IFM | | 0.5 | | A |
| 峰值正向浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave | IFSM | | 5.5 | | A |
| 典型热阻 Typical thermal resistance | R _{θJA} | | 500 | | °C/W |
| 功率消耗 Power Dissipation | PD | | 200 | | mW |
| 结温 Junction Temperature | T _j | | 125 | | °C |
| 存储温度 Storage temperature range | T _{STG} | | -50-+150 | | °C |
| Voltage rate of change | Dv/dt | | 1000 | | V/uS |

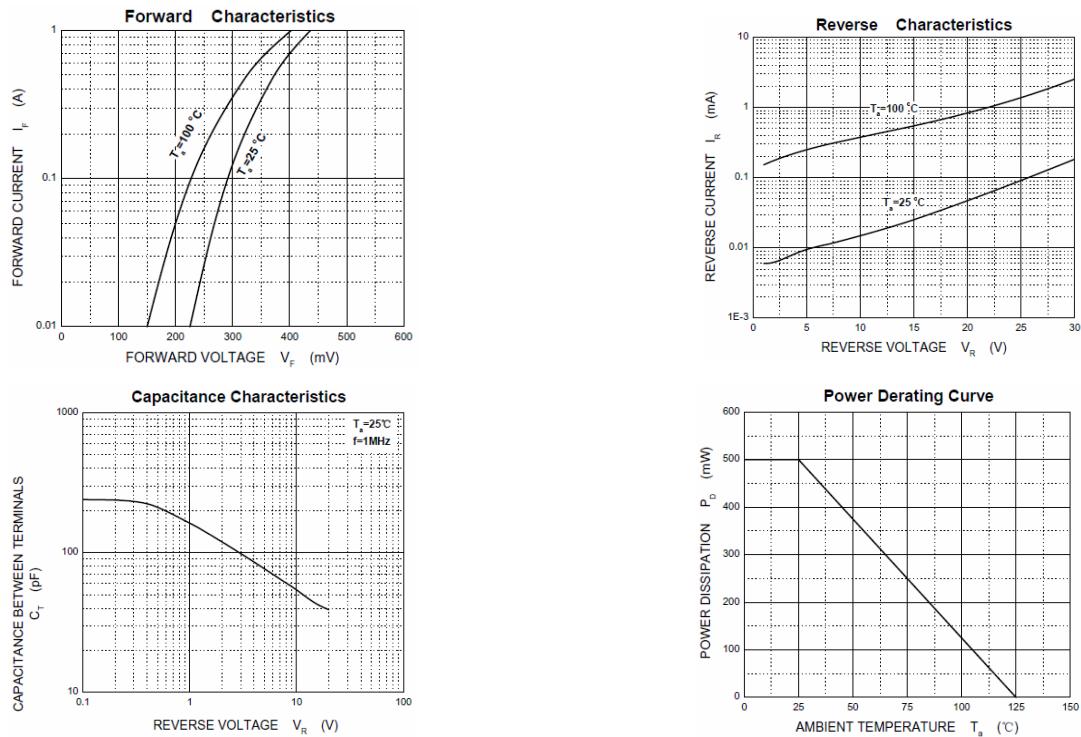
电特性 ($T_A = 25^\circ\text{C}$ 除非另有规定)

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

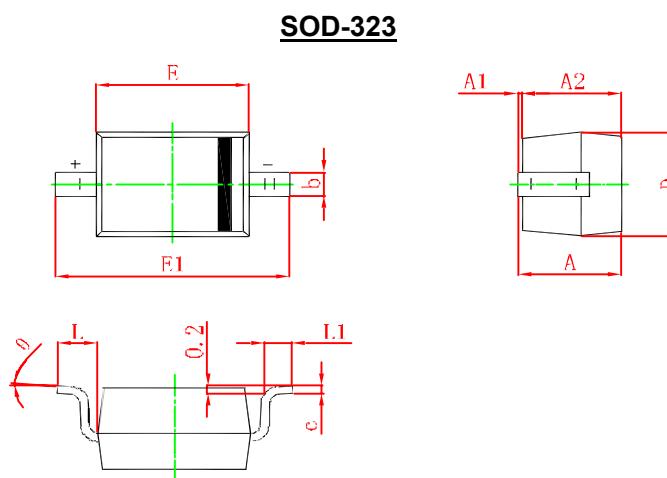
| 参数 Parameters | 符号 Symbol | 测试条件 Test conditions | B0520WS | B0530WS | B0540WS | 单位 Unit |
|---------------------------------------------|--------------|-------------------------|---------|---------|---------|------------|
| 最大正向电压 Maximum forward voltage | VF | IF = 0.1A | 0.330 | 0.375 | --- | V |
| | | IF = 0.5A | 0.390 | 0.450 | 0.510 | |
| | | IF = 1.0A | --- | --- | 0.620 | |
| 最大反向电压 Maximum reverse breakdown voltage | VR | IR=250uA | 20 | --- | --- | V |
| | | IR=200uA | --- | 30 | --- | |
| | | IR=20.0uA | --- | --- | 40 | |
| 最大反向电流 Maximum reverse current | IR | VR=10V | 75 | --- | --- | uA |
| | | VR=15V | --- | 80 | --- | |
| | | VR=20V | 250 | --- | 10 | |
| | | VR=30V | --- | 500 | --- | |
| | | VR=40V | --- | --- | 20 | |
| Capacitance between terminals | CT | VR = 0V, f = 1MHz | | 170 | | pF |

B0520WS/B0530WS/B0540WS

特性曲线Characteristic Curves



SOD-323 PACKAGE OUTLINE Plastic surface mounted package



| Symbol | Min.(mm) | Max.(mm) |
|-----------|----------|----------|
| A | | 1.000 |
| A1 | 0.000 | 0.100 |
| A2 | 0.800 | 0.900 |
| b | 0.250 | 0.350 |
| c | 0.080 | 0.150 |
| D | 1.200 | 1.400 |
| E | 1.600 | 1.800 |
| E1 | 2.500 | 2.700 |
| L | 0.475REF | |
| L1 | 0.250 | 0.400 |
| θ | 0° | 8° |