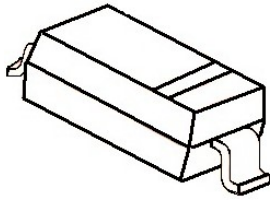


**SOD-323**

**SOD-323 贴片塑封开关二极管  
250mW SOD-323 Fast Switching Diode**



**特征 Features**

- 开关速度小于 50nS; Fast Switching Device (TRR <50nS)
- 最大功率耗散 250mW; Power Dissipation of 250mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage

**机械数据 Mechanical Data**

MARKING: BAV19WS: A8  
BAV20WS: T2  
BAV21WS: T3

- 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**(TA = 25℃ 除非另有规定)

**Maximum Ratings & Thermal Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified.)

| 参数 Parameters                                             | 符号<br>Symbol | 数值 Value |         |         | 单位<br>Unit |
|-----------------------------------------------------------|--------------|----------|---------|---------|------------|
|                                                           |              | BAV19WS  | BAV20WS | BAV21WS |            |
| 反向电压 Reverse Voltage                                      | VR           | 100      | 150     | 200     | V          |
| 反向峰值电压 Peak Reverse Voltage                               | VRM          | 120      | 200     | 250     | V          |
| 功率消耗 Power Dissipation                                    | Pd           | 250      |         |         | mW         |
| 工作结温 Operating junction temperature                       | Tj           | 150      |         |         | ℃          |
| 存储温度 Storage temperature range                            | Ts           | -65-+150 |         |         | ℃          |
| 热阻 Thermal Resistance Junction to Ambient Air             | RθJA         | 500      |         |         | ℃/W        |
| 平均整流电流 Average Rectified Current                          | IO           | 200      |         |         | mA         |
| 正向(不重复)电流 Non-repetitive Peak Forward Current             | IFM          | 400      |         |         | mA         |
| 正向(不重复)浪涌电流 Peak Forward Surge Current<br>@tp=1ms; TA=25℃ | IFSM         | 1.7      |         |         | A          |

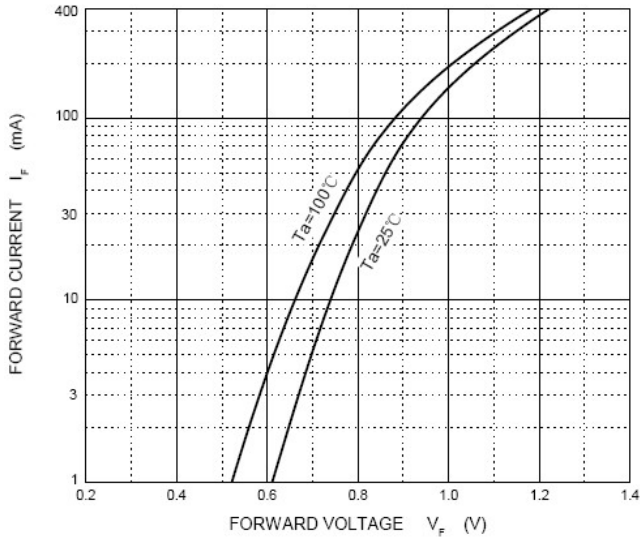
Valid provided that electrodes are kept at ambient temperature.

**电特性 Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

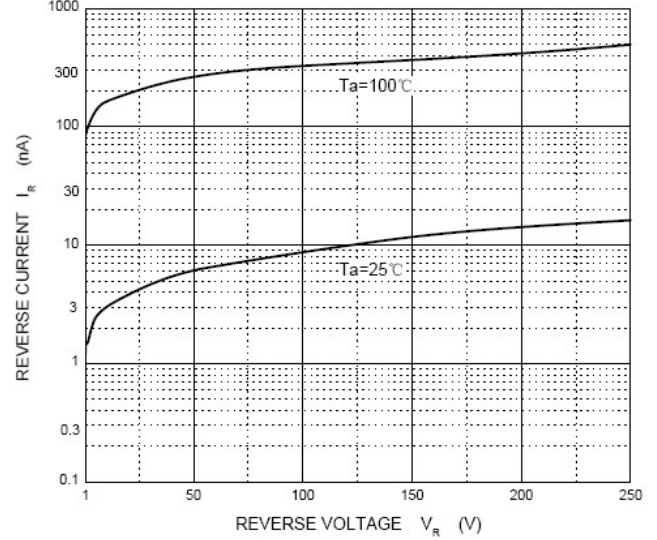
| 符号<br>Symbols | 参数<br>Parameter                  | 测试条件<br>Test Condition                                | 界限 Limits         |      | 单位<br>Unit |
|---------------|----------------------------------|-------------------------------------------------------|-------------------|------|------------|
|               |                                  |                                                       | Min               | Max  |            |
| VRB           | 反向击穿电压<br>Reverse Voltage        | IB=100uA BAV19WS<br>BAV20WS<br>BAV21WS                | 120<br>200<br>250 | ---  | V          |
| IR            | 反向漏电流<br>Reverse Leakage Current | VR=100V BAV19WS<br>VR=150V BAV20WS<br>VR=200V BAV21WS | ---               | 0.1  | uA         |
| VF            | 正向电压<br>Forward Voltage          | IF=100mA                                              | ---               | 1.00 | V          |
|               |                                  | IF=200mA                                              | ---               | 1.25 |            |
| TRR           | 反向恢复时间<br>Reverse Recovery Time  | IF= 30mA, IR=30mA                                     | ---               | 50   | nS         |
|               |                                  | RL=100Ω<br>IRR=3mA                                    |                   |      |            |
| C             | 结电容<br>Capacitance               | VR=0V, f=1MHZ                                         | ---               | 5    | pF         |
|               |                                  |                                                       |                   |      |            |

**Typical Characteristics**

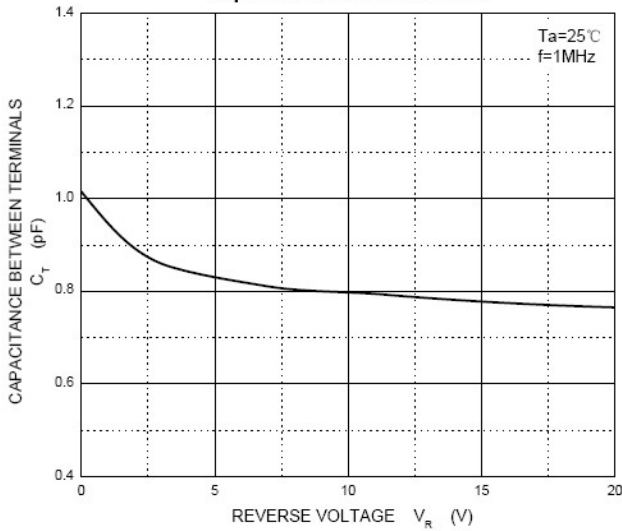
**Forward Characteristics**



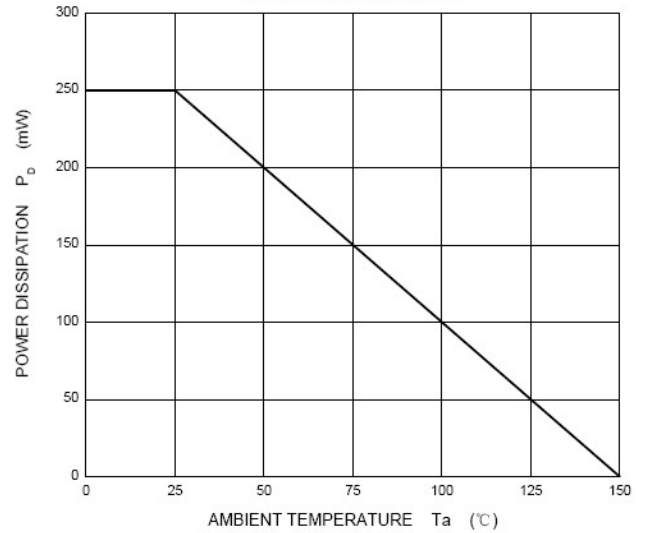
**Reverse Characteristics**



**Capacitance Characteristics**



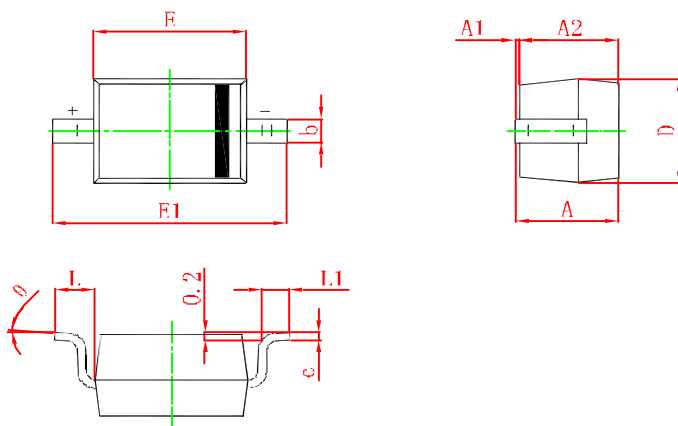
**Power Derating Curve**



**SOD-323 PACKAGE OUTLINE**

Plastic surface mounted package

**SOD-323**



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