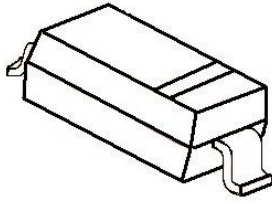


## SOD-323 贴片塑封开关二极管 250mW SOD-323 Fast Switching Diode

SOD-323



MARKING:A8

### 特征 Features

- 开关速度小于50ns; Fast Switching Device( $T_{rr} < 50\text{ns}$ )
- 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

- 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
- 安装位置: 任意 Mounting Position: Any
- Device meets MSL 1 requirements

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

### Maximum Ratings & Thermal Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise specified)

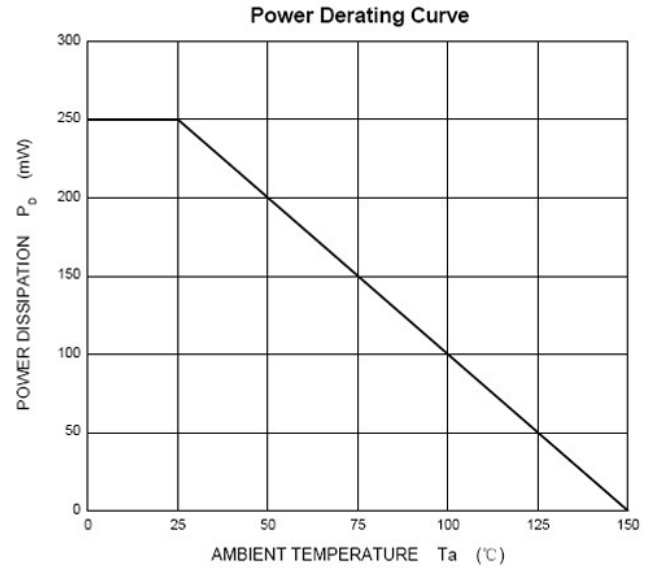
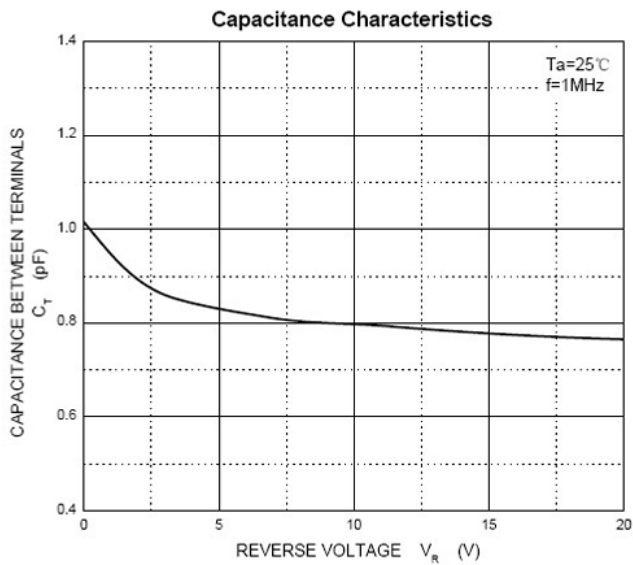
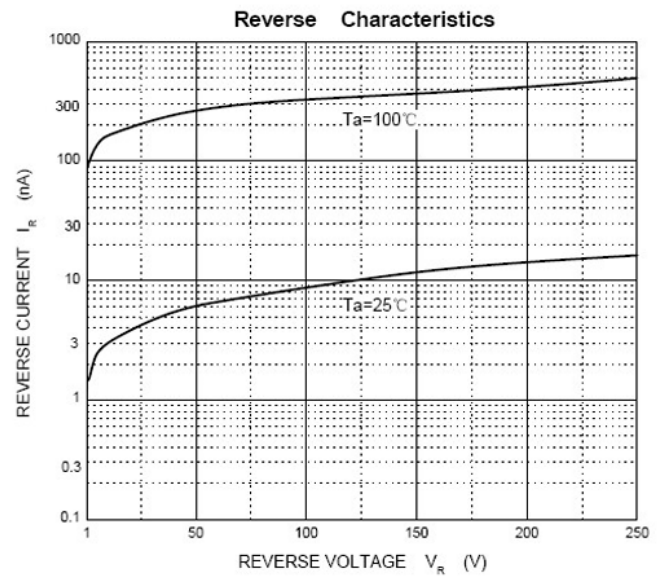
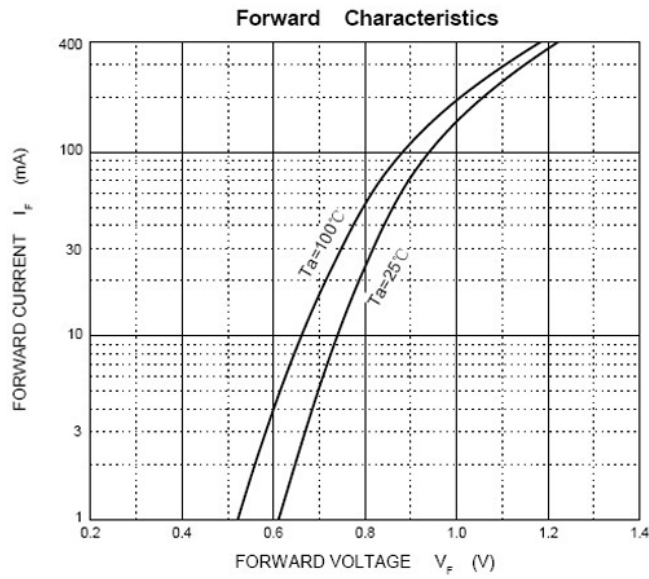
| 参数 Parameters                                                                           | 符号 Symbol       | 数值 Value | 单位 Unit            |
|-----------------------------------------------------------------------------------------|-----------------|----------|--------------------|
| 反向电压 Reverse Voltage                                                                    | $V_R$           | 100      | V                  |
| 反向峰值电压 Peak Repetitive Reverse Voltage                                                  | $V_{RRM}$       | 120      | V                  |
| 功率消耗 Power Dissipation                                                                  | $P_d$           | 250      | mW                 |
| 工作结温 Operating junction temperature                                                     | $T_j$           | 150      | $^\circ\text{C}$   |
| 存储温度 Storage temperature range                                                          | $T_s$           | -55-+150 | $^\circ\text{C}$   |
| 热阻抗 Thermal Resistance from Junction to Ambient                                         | $R_{\theta JA}$ | 500      | $^\circ\text{C/W}$ |
| 平均整流电流 Average Rectified Current                                                        | $I_O$           | 200      | mA                 |
| 正向(不重复)电流 Non-repetitive Peak Forward Current                                           | $I_{FM}$        | 400      | mA                 |
| 正向(不重复)浪涌电流 Peak Forward Surge Current<br>@ $t_p=1\mu\text{s}$ ; $T_A=25^\circ\text{C}$ | $I_{FSM}$       | 2.0      | A                  |

Valid provided that electrodes are kept at ambient temperature.

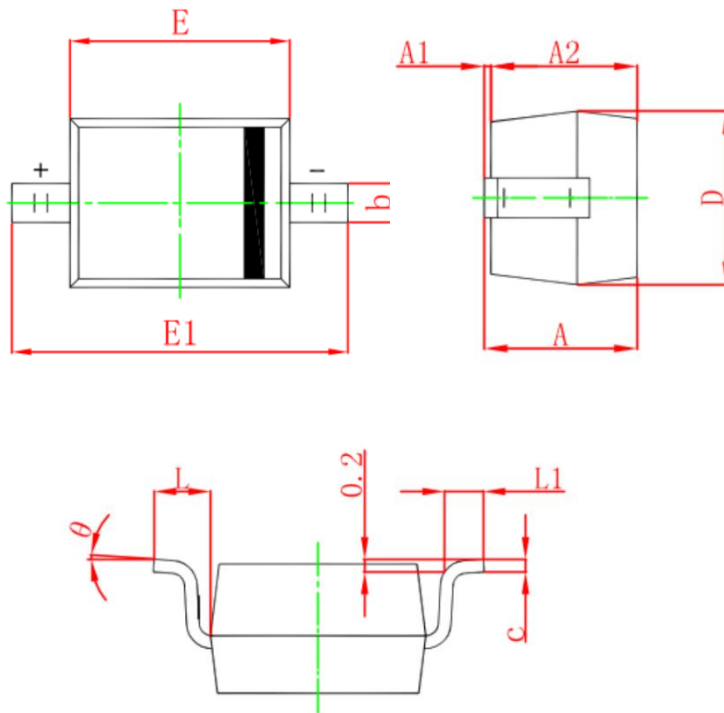
### 电特性 Electrical Characteristics( $T_A=25^\circ\text{C}$ unless otherwise specified)

| 符号 Symbols | 参数 Parameter                  | 测试条件 Test Condition                                            | 界限 Limits |      | 单位 Unit       |
|------------|-------------------------------|----------------------------------------------------------------|-----------|------|---------------|
|            |                               |                                                                | Min       | Max  |               |
| $V_{BR}$   | 反向击穿电压 Reverse Voltage        | $I_R=100\mu\text{A}$                                           | 120       | ---  | V             |
| $I_R$      | 反向漏电流 Reverse Leakage Current | $V_R=100\text{V}$                                              | ---       | 0.1  | $\mu\text{A}$ |
| $V_F$      | 正向电压 Forward Voltage          | $I_F=100\text{mA}$                                             | ---       | 1.0  | V             |
|            |                               | $I_F=200\text{mA}$                                             | ---       | 1.25 |               |
| $T_{rr}$   | 反向恢复时间 Reverse Recovery Time  | $I_F=I_R=30\text{mA}$ , $R_L=100\Omega$<br>$I_{RR}=3\text{mA}$ | ---       | 50   | nS            |
| $C_T$      | 结电容 Capacitance               | $V_R=0\text{V}$ , $f=1\text{MHz}$                              | ---       | 5    | pF            |

**Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)**

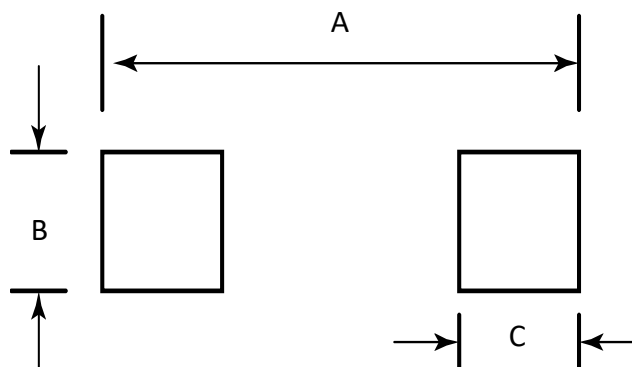


**SOD-323 Package Outline Drawing**



| 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°       |

**Suggested Land Pattern**



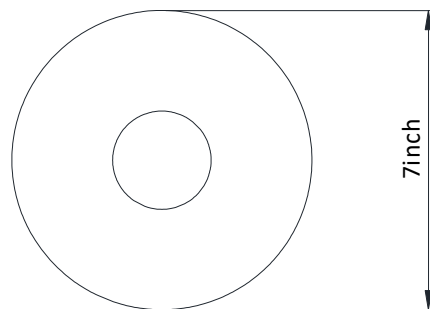
| SYM | DIMENSIONS  |        |
|-----|-------------|--------|
|     | MILLIMETERS | INCHES |
| A   | 3.15        | 0.120  |
| B   | 0.80        | 0.031  |
| C   | 0.80        | 0.031  |

## Ordering Information

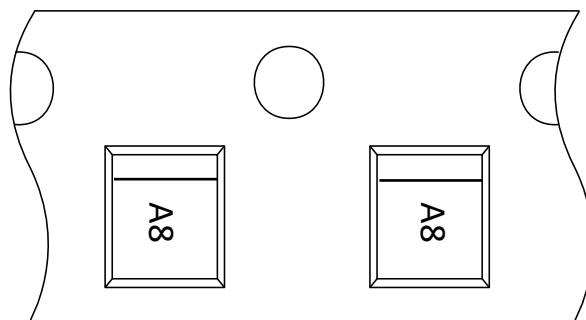
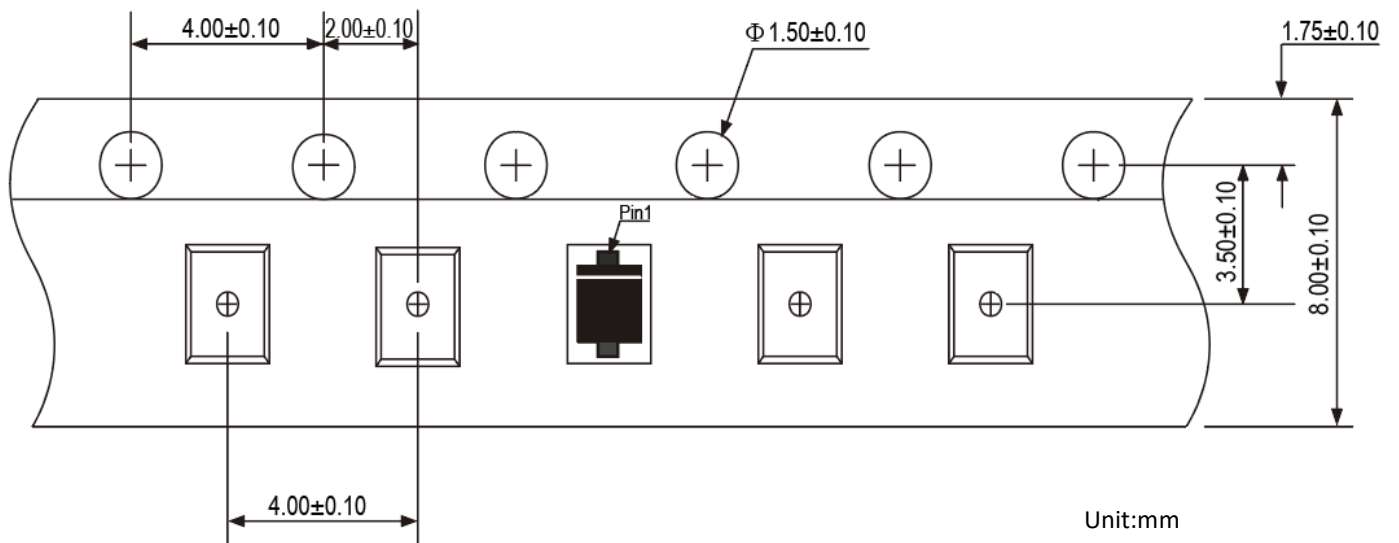
| Part Number | Shipping         | Reel Size |
|-------------|------------------|-----------|
| BAV19WS     | 3000/Tape & Reel | 7 inch    |

## TAPE AND REEL INFORMATION

**Reel Dimensions**



**Tape Dimensions**



User Direction of Feed

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