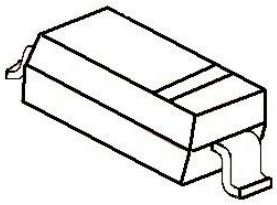
**SOD-123** 贴片塑封开关二极管

**500mW SOD-123 Fast Switching Diode**

**SOD-123**



**MARKING:T6**

特征 **Features**

- 开关速度小于 4.0nS; Fast Switching Device (Trr <4.0nS)
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 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-123 封 装 SOD-123 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(TA = 25℃ 除非另有规定)
## Maximum Ratings & Thermal Characteristics ($T_A$=25°C unless otherwise specified)

| 参数 Parameters | 符号 Symbol | 数值 Value | 单位 Unit |
|---|---|---|---|
| 反向电压Reverse Voltage | $V_R$ | 75 | V |
| 反向峰值电压 Peak Reverse Voltage | $V_{RRM}$ | 100 | V |
| 功率消耗 Power Dissipation | Pd | 500 | mW |
| 工作结温 Operating junction temperature | $T_j$ | 150 | ℃ |
| 存储温度 Storage temperature range | $T_{STG}$ | -55-+150 | ℃ |
| 反向工作电压Working Inverse Voltage | $W_{IV}$ | 75 | V |
| 平均整流电流 Average Rectified Forward Current | IO | 150 | mA |
| 正向(不重复)电流Non-repetitive Peak Forward Current | $I_{FM}$ | 300 | mA |
| 正向(不重复)浪涌电流 Peak Forward Surge Current @tp=1us; $T_A$=25℃ | $I_{FSM}$ | 2.0 | A |

Valid provided that electrodes are kept at ambient temperature.

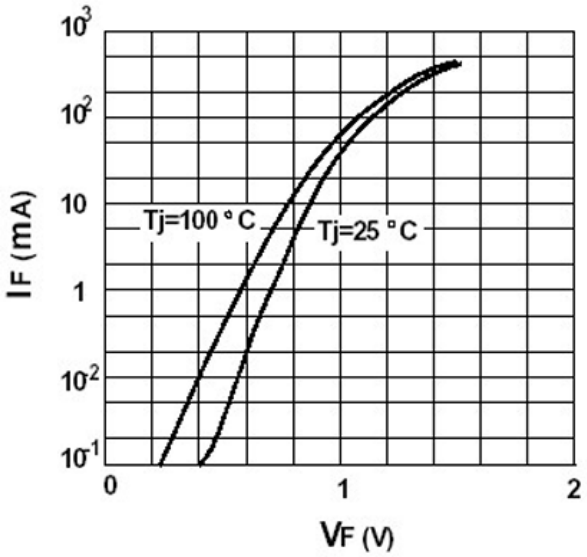
## 电特性 Electrical Characteristics($T_A$=25°C unless otherwise specified)

| 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 | $I_R$=5uA | 75 | --- | V |
| | | $I_R$=100uA | 100 | --- | |
| $I_R$ | 反向漏电电流 Reverse Leakage Current | $V_R$=20V | --- | 25 | nA |
| | | $V_R$=75V | --- | 1 | uA |
| $V_F$ | 正向电压 Forward Voltage | $I_F$=1.0mA | --- | 0.715 | V |
| | | $I_F$=10mA | | 0.855 | |
| | | $I_F$=50mA | | 1.0 | |
| | | $I_F$=150mA | --- | 1.25 | |

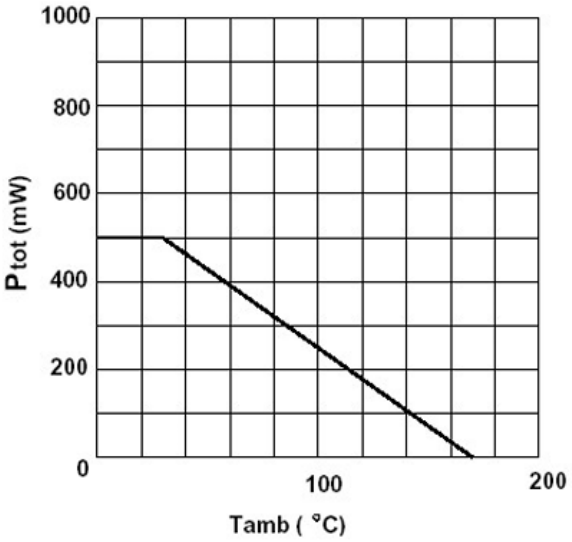
| | | | | | |
|---|---|---|---|---|---|
| **Trr** | 反向恢复时间<br>Reverse Recovery Time | $I_F$=10mA,$I_R$=60mA,RL=100Ω<br>$I_{RR}$=1mA | --- | 4 | nS |
| **$C_T$** | 结电容<br>Capacitance | $V_R$=0V, f=1MHZ | --- | 2 | pF |

## Typical Performance Characteristics ($T_A$=25°C unless otherwise Specified)

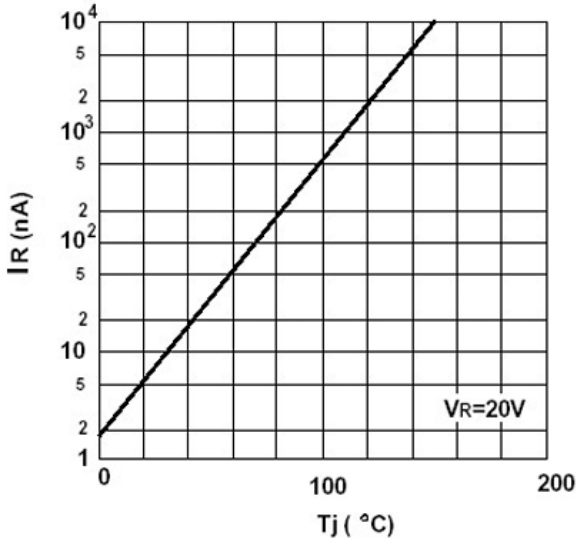
Forward characteristics



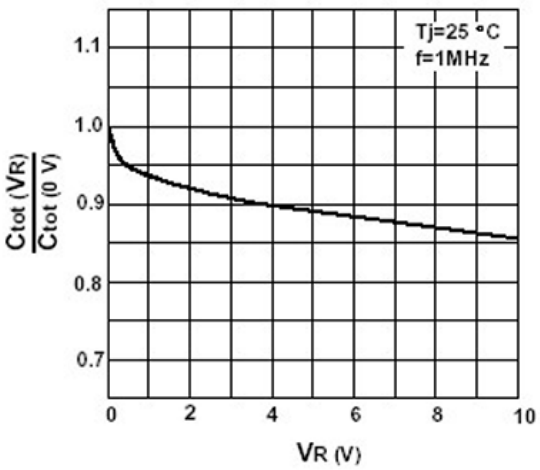

Admissible power dissipation versus ambient temperature



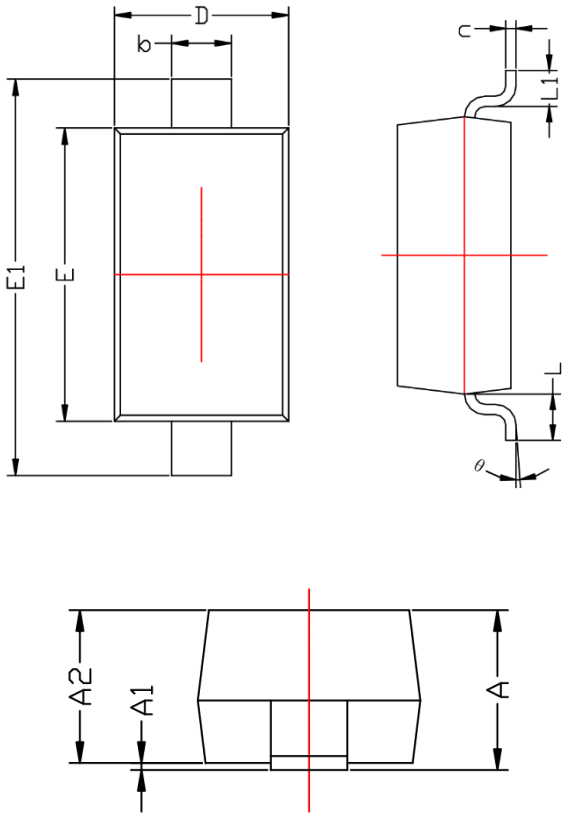

Leakage current versus junction temperature




Reverse capacitance VS. reverse boltage

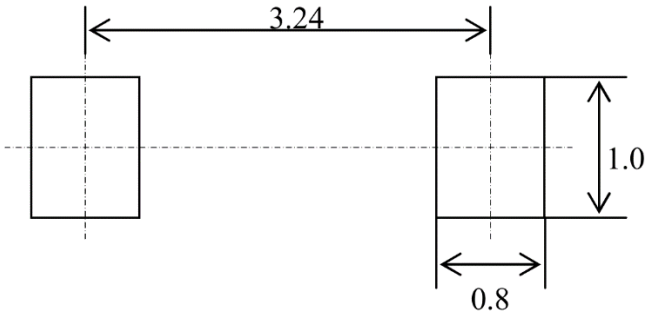


## SOD-123 Package Outline Drawing




| SYMBOL | DIMENSIONS | |
|---|---|---|
| | MIN. | MAX. |
| A | 1.050 | 1.250 |
| A1 | 0.000 | 0.100 |
| A2 | 1.050 | 1.150 |
| b | 0.450 | 0.650 |
| c | 0.080 | 0.150 |
| D | 1.500 | 1.700 |
| E | 2.600 | 2.800 |
| E1 | 3.550 | 3.850 |
| L | 0.500REF | |
| L1 | 0.250 | 0.450 |
| θ | 0° | 8° |

## Suggested Land Pattern




中心距: 3.24
脚 宽: 0.55
焊盘宽: 1.00
脚 长: 0.50
焊盘长: 0.80

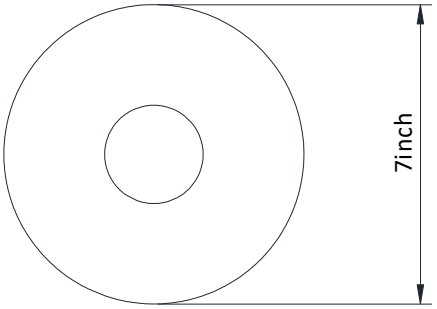
技术要求:
1, 塑封体尺寸: 2.70 X 1.60
2: 未注公差为: ±0.05
3, 所有单位: mm

## Ordering Information

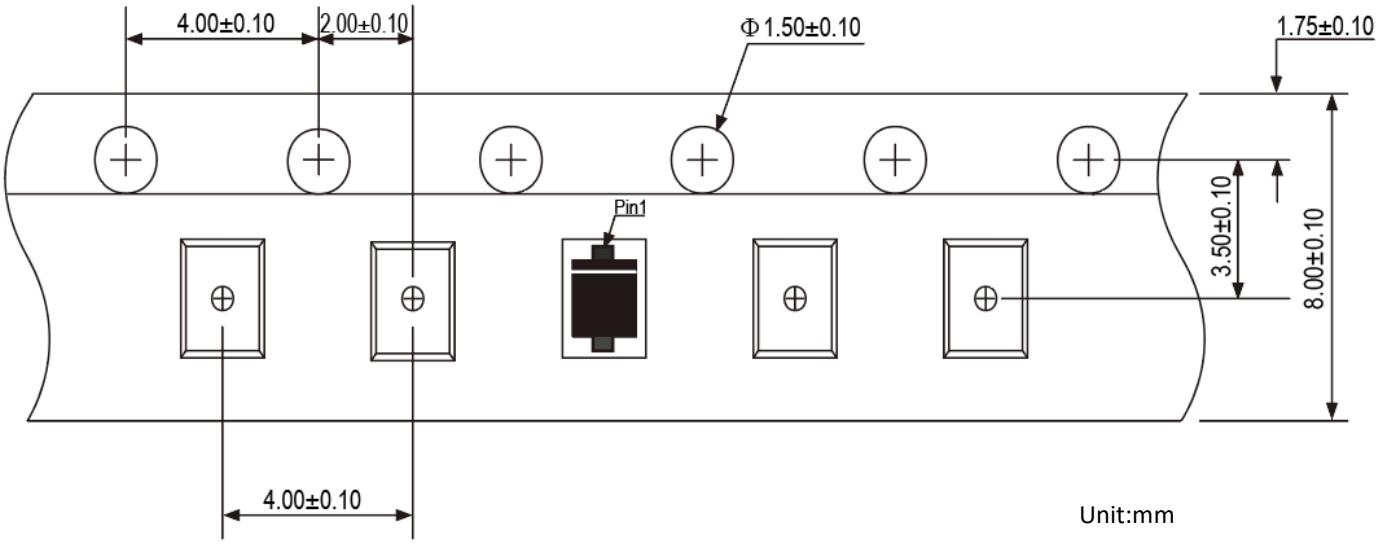
| Part Number | Shipping | Reel Size |
|---|---|---|
| BAV16W | 3000/Tape &Reel | 7 inch |

**TAPE AND REEL INFORMATION**

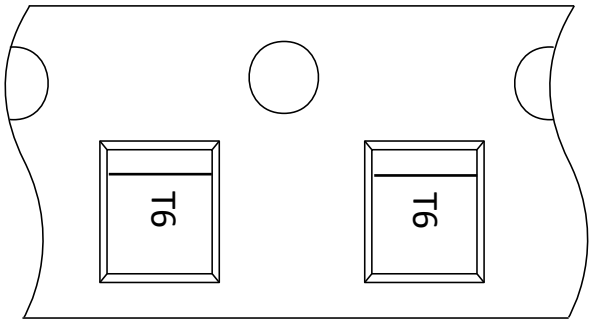
**Reel Dimensions**




**Tape Dimensions**




Unit:mm




User Direction of Feed

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