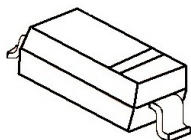


## SOD-123

## SOD-123 贴片塑封肖特基二极管



## SOD-123 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

- 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
- 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)

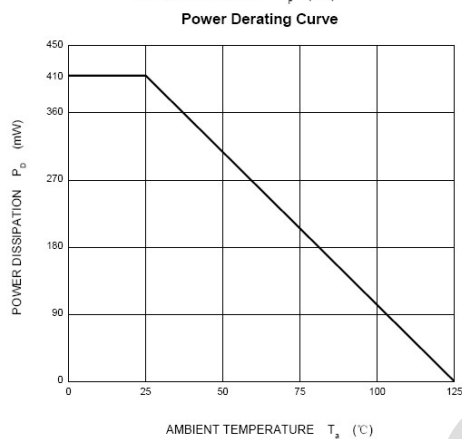
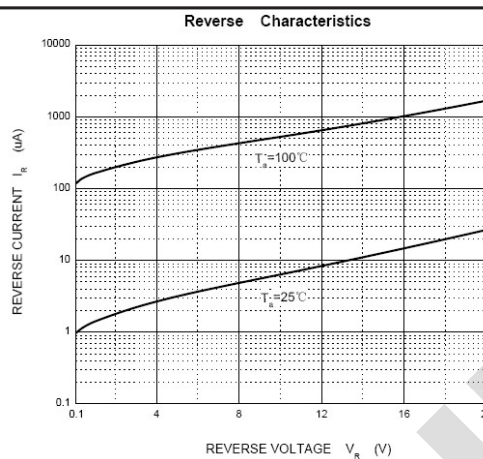
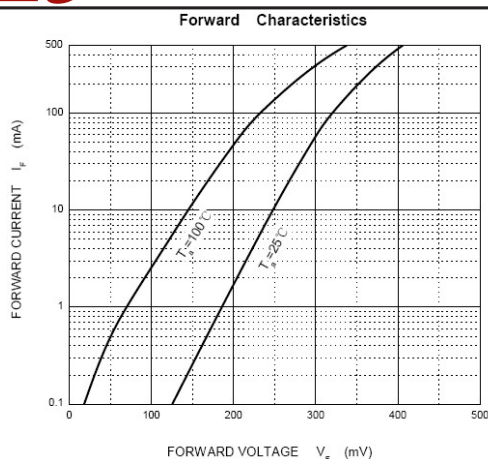
Maximum Ratings &amp; Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

| 参数<br>Parameters                                                                 | 符号<br>Symbol | MBR<br>0520 | MBR<br>0530 | MBR<br>0540 | MBR<br>0560 | MBR<br>0580 | 单位<br>Unit |
|----------------------------------------------------------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|------------|
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage                           | VRRM         | 20          | 30          | 40          | 60          | 80          | V          |
| 最大均方根电压<br>Maximum RMS voltage                                                   | VRMS         | 14          | 21          | 28          | 42          | 56          | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage                                          | VDC          | 20          | 30          | 40          | 60          | 80          | V          |
| 最大正向平均整流电流<br>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<br>Peak forward surge current 8.3 ms single half sine-wave | IFSM         | 5.5         |             |             |             |             | A          |
| 典型热阻<br>Typical thermal resistance                                               | RθJA         | 244         |             |             |             |             | ℃/W        |
| 功率消耗<br>Power Dissipation                                                        | PD           | 410         |             |             |             |             | mW         |
| 结温<br>Junction temperature                                                       | Tj           | 125         |             |             |             |             | ℃          |
| 存储温度<br>Storage temperature range                                                | TSTG         | -50-+150    |             |             |             |             | ℃          |

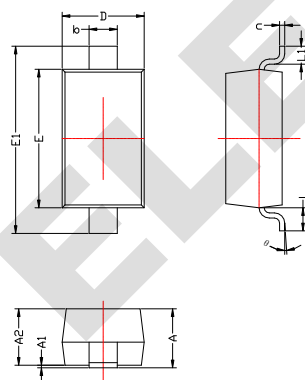
电特性 (TA = 25℃ 除非另有规定)

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

| 参数<br>Parameters                  | 符号<br>Symbol | 测试条件<br>Test conditions | MBR<br>0520 | MBR<br>0530 | MBR<br>0540 | MBR<br>0560 | MBR<br>0580 | 单位<br>Unit |
|-----------------------------------|--------------|-------------------------|-------------|-------------|-------------|-------------|-------------|------------|
| 最大正向电压<br>Maximum forward voltage | VF           | IF = 0.5A               | 0.45        | 0.55        | 0.55        | 0.70        | 0.80        | V          |
| 最大反向电流<br>Maximum reverse current | IR           | VR=20V                  | 80          | ---         | ---         | ---         | ---         | uA         |
|                                   |              | VR=30V                  | ---         | 80          | ---         | ---         | ---         |            |
|                                   |              | VR=40V                  | ---         | ---         | 80          | ---         | ---         |            |
|                                   |              | VR=60V                  | ---         | ---         | ---         | 80          | ---         |            |
|                                   |              | VR=80V                  | ---         | ---         | ---         | ---         | 80          |            |
| Capacitance between terminals     | CT           | VR = 4V, f = 1MHz       | 30          | 30          | 30          | 30          | 30          | pF         |

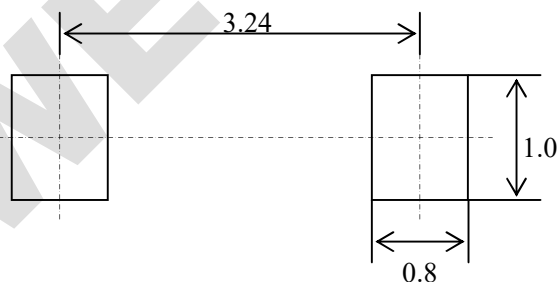


## SOD-123 PACKAGE OUTLINE Plastic surface mounted package



| 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°    |

焊盘设计参考 Precautions: PCB Design (Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs)



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:  $\pm 0.05$
- 3, 所有单位: mm