



SOD-123

B5817W/B5818W/B5819W

SOD-123 贴片塑封肖特基二极管

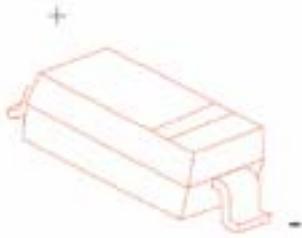
SOD-123 Plastic-Encapsulate Schottky Barrier Diode

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 Flat Lead 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



Marking: B5817W: SJ  
 B5818W: SK  
 B5819W: SL

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<br>Parameters                                                                 | 符号<br>Symbol | B5817W   | B5818W | B5819W | 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     | V          |
| 最大均方根电压<br>Maximum RMS voltage                                                   | VRMS         | 14       | 21     | 28     | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage                                          | VDC          | 20       | 30     | 40     | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current                          | IFM          | 1.0      |        |        | 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         | 9        |        |        | A          |
| 典型热阻<br>Typical thermal resistance                                               | RθJA         | 250      |        |        | /W         |
| 功率消耗<br>Power Dissipation                                                        | PD           | 500      |        |        | mW         |
| 存储温度<br>Storage temperature range                                                | TSTG         | -50-+150 |        |        |            |

电特性 (TA = 25 除非另有规定)

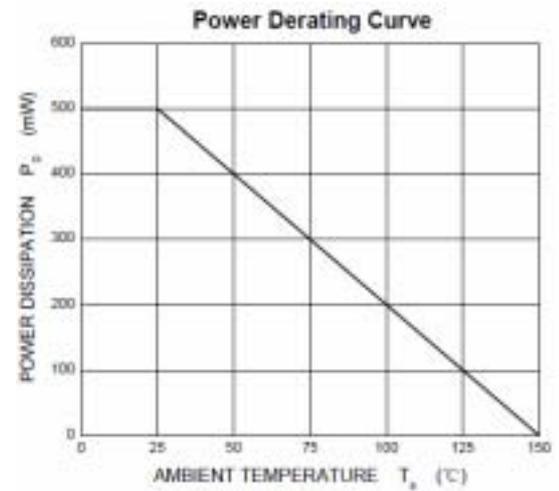
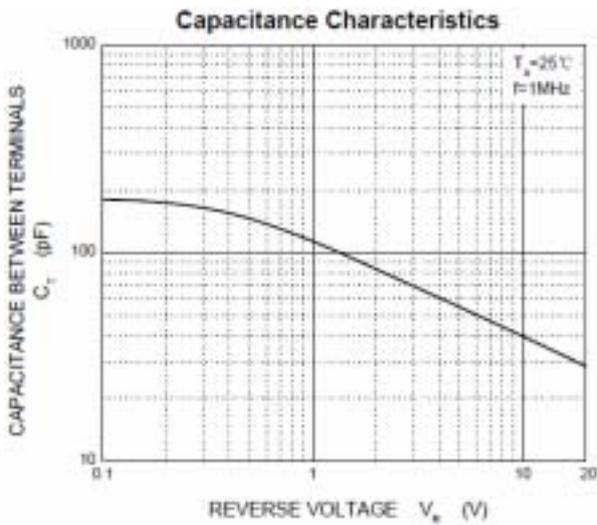
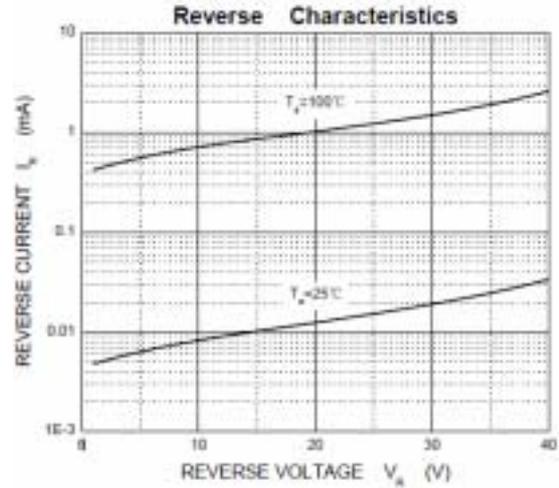
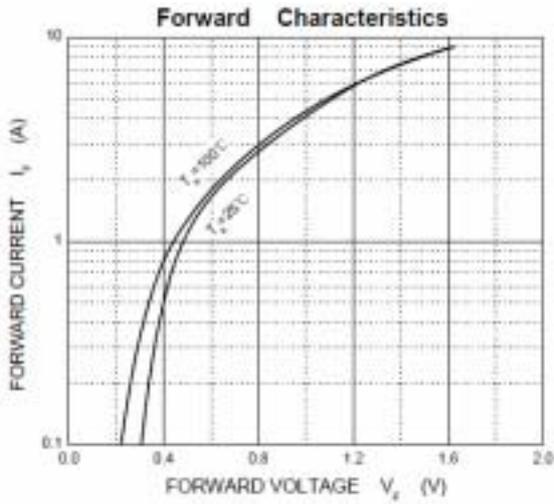
Electrical Characteristics (Ratings at 25 ambient temperature unless otherwise specified).

| 参数<br>Parameters                            | 符号<br>Symbol | 测试条件<br>Test conditions                         | B5817W         | B5818W         | B5819W         | 单位<br>Unit |
|---------------------------------------------|--------------|-------------------------------------------------|----------------|----------------|----------------|------------|
| 最大正向电压<br>Maximum forward voltage           | VF           | IF = 1.0A<br>IF = 3.0A                          | 0.450<br>0.750 | 0.550<br>0.875 | 0.600<br>0.900 | V          |
| 最大反向电压<br>Maximum reverse breakdown voltage | VR           | IR=1mA                                          | 20             | 30             | 40             | V          |
| 最大反向电流<br>Maximum reverse current           | IR           | VR=20V B5817W<br>VR=30V B5818W<br>VR=40V B5819W | 1.0            |                |                | mA         |
| 典型结电容<br>Type junction capacitance          | Cj           | VR = 4.0V, f = 1MHz                             | 120            |                |                | pF         |

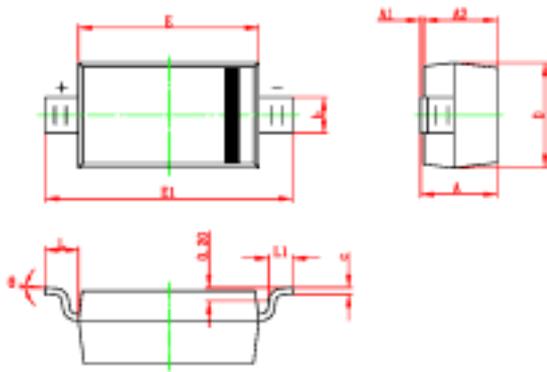


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## 特性曲线 Characteristic Curves



## SOD-123 PACKAGE OUTLINE Plastic surface mounted package



| Symbol   | Dimensions in Millimeters |       | Dimensions in Inches |       |
|----------|---------------------------|-------|----------------------|-------|
|          | Min                       | Max   | Min                  | Max   |
| A        | 1.050                     | 1.250 | 0.041                | 0.049 |
| A1       | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2       | 1.050                     | 1.150 | 0.041                | 0.045 |
| b        | 0.450                     | 0.650 | 0.018                | 0.026 |
| c        | 0.080                     | 0.150 | 0.003                | 0.006 |
| D        | 1.500                     | 1.700 | 0.059                | 0.067 |
| E        | 2.600                     | 2.800 | 0.102                | 0.110 |
| E1       | 3.550                     | 3.850 | 0.140                | 0.152 |
| L        | 0.500 REF                 |       | 0.020 REF            |       |
| L1       | 0.250                     | 0.450 | 0.010                | 0.018 |
| $\theta$ | 0°                        |       | 8°                   |       |

## 焊盘设计参考 Precautions: PCB Design

Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs

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

中心距: 3.24

脚宽: 0.55

焊盘宽: 1.00

脚长: 0.50

焊盘长: 0.80

