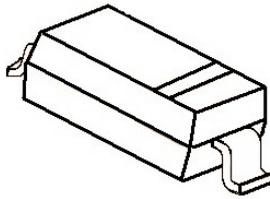


## SOD-123



Marking: S9

## 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°C 除非另有规定)

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

| 参数<br>Parameters   | 符号<br>Symbol | 界限<br>Limit | 单位<br>Unit |
|--|--------------|-------------|------------|
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage                           | VRRM         | 100         | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current                          | IFM          | 350         | mA         |
| 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         | 750         | mA         |
| 典型热阻<br>Typical thermal resistance   | RθJA         | 200         | °C/W       |
| 功率消耗<br>Power Dissipation  | PD           | 500         | mW         |
| 结温<br>Junction temperature   | Tj           | 125         | °C         |
| 存储温度<br>Storage temperature range  | TSTG         | -55-+150    | °C         |

电特性 (TA = 25°C 除非另有规定)

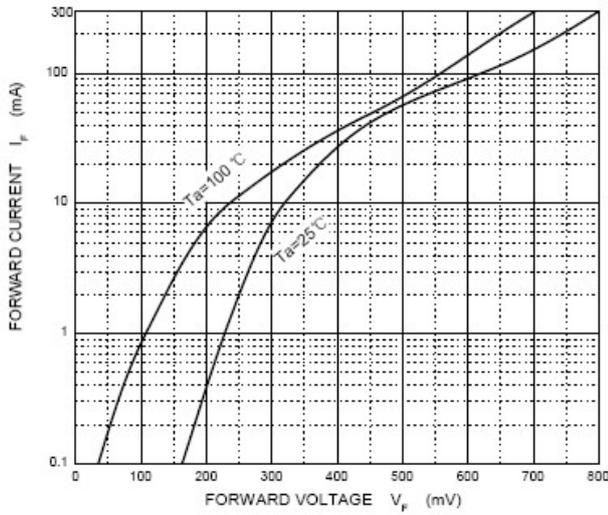
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

| 参数<br>Parameters                            | 符号<br>Symbol | 测试条件<br>Test conditions | Min | Typ | Max  | 单位<br>Unit |
|---|--------------|-------------------------|-----|-----|------|------------|
| 最大正向电压<br>Maximum forward voltage           | VF1          | IF = 0.1mA              |     |     | 250  | mV         |
|   | VF2          | IF = 10mA               |     |     | 450  |            |
|   | VF3          | IF = 250mA              |     |     | 1000 |            |
| 最大反向电压<br>Maximum reverse breakdown voltage | VR           | IR=100uA                | 100 |     |      | V          |
| 最大反向电流<br>Maximum reverse current           | IR           | VR1=1.5V                |     |     | 0.3  | uA         |
|   |              | VR2=10V                 |     |     | 0.5  |            |
|   |              | VR3=50V                 |     |     | 1.0  |            |
|   |              | VR4=75V                 |     |     | 2.0  |            |
| 典型结电容<br>Type junction capacitance          | CT           | VR = 0V, f = 1MHz       |     | 20  |      | pF         |
|   |              | VR = 1.0V, f = 1MHz     |     | 12  |      |            |

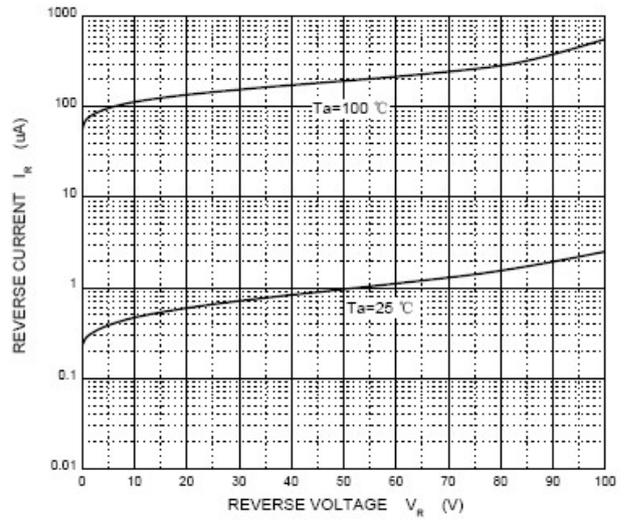
# BAT46W

## Typical Characteristics

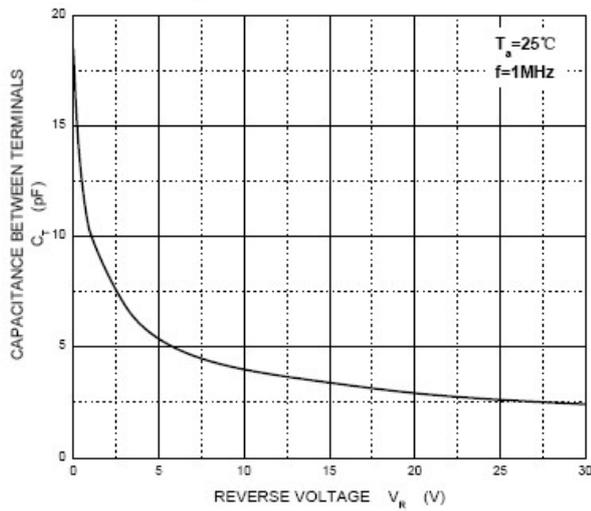
Forward Characteristics



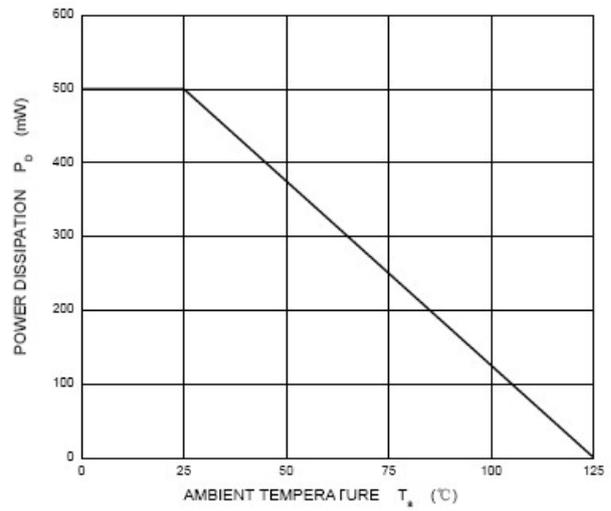
Reverse Characteristics



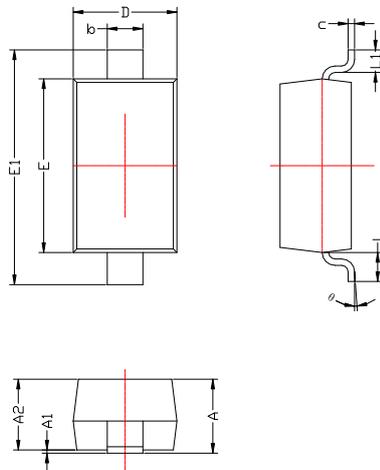
Capacitance Characteristics



Power Derating Curve



### 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°    |