

## SOD-123 Schottky Barrier Rectifier Diode 肖特基势垒整流二极管

### ■Features 特点

Low forward voltage drop 低正向压降  
High current capability 高电流能力  
Surface mount device 表面贴装器件  
Case 封装:SOD-123



### ■Maximum Rating 最大额定值

( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

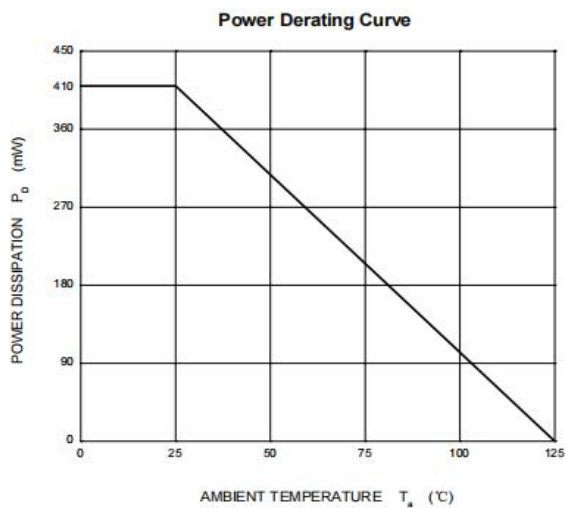
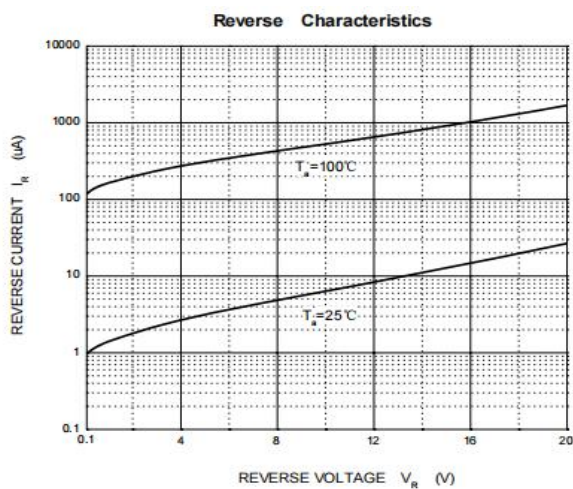
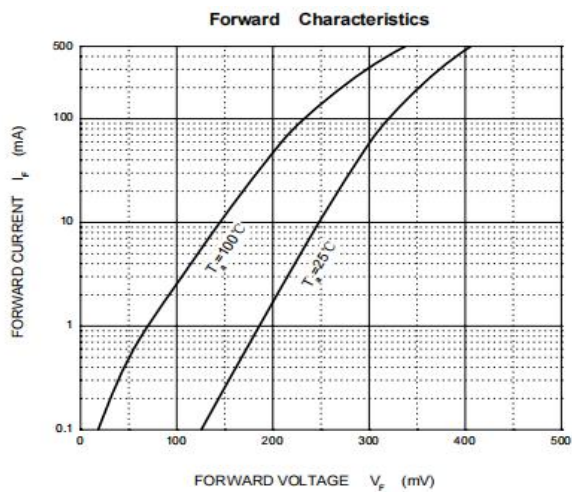
| Characteristic 特性参数                  | Symbol 符号       | MBR0520<br>-6AF                    | MBR0530<br>-6AF | MBR0540<br>-6AF | MBR0560<br>-6AF | MBR0580<br>-6AF | Unit 单位                     |
|--------------------------------------|-----------------|------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------------------|
| Device Marking 产品印字                  |                 | R2                                 | R3              | R4              | R6              | R8              | V                           |
| Peak Reverse Voltage 反向峰值电压          | $V_{RRM}$       | 20                                 | 30              | 40              | 60              | 80              | V                           |
| DC Reverse Voltage 直流反向电压            | $V_R$           | 20                                 | 30              | 40              | 60              | 80              | V                           |
| RMS Reverse Voltage 反向电压均方根值         | $V_{R(RMS)}$    | 14                                 | 21              | 28              | 42              | 56              | V                           |
| Forward Rectified Current 正向整流电流     | $I_F$           | 0.5                                |                 |                 |                 |                 | A                           |
| Peak Surge Current 峰值浪涌电流            | $I_{FSM}$       | 5.5                                |                 |                 |                 |                 | A                           |
| Power Dissipation 耗散功率               | $P_D$           | 410                                |                 |                 |                 |                 | mW                          |
| Thermal Resistance J-A 结到环境热阻        | $R_{\theta JA}$ | 245                                |                 |                 |                 |                 | $^{\circ}\text{C}/\text{W}$ |
| Junction/Storage Temperature 结温/储藏温度 | $T_J, T_{stg}$  | $-50\text{to}+125^{\circ}\text{C}$ |                 |                 |                 |                 | $^{\circ}\text{C}$          |

### ■Electrical Characteristics 电特性

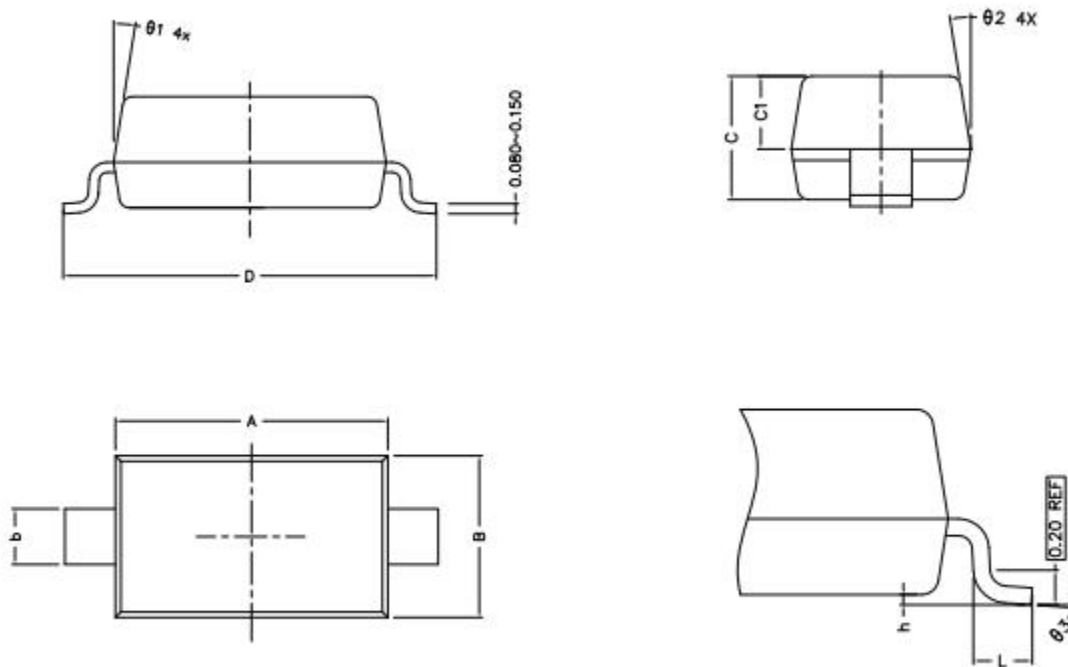
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

| Characteristic 特性参数     | Symbol 符号 | MBR0520<br>-6AF | MBR0530<br>-6AF | MBR0540<br>-6AF | MBR0560<br>-6AF | MBR0580<br>-6AF | Unit 单位       | Condition 条件                   |
|-------------------------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|--------------------------------|
| Reverse Voltage 反向电压    | $V_R$     | 20              | 30              | 40              | 60              | 80              | V             | $I_R=1\text{mA}$               |
| Forward Voltage 正向电压    | $V_F$     | 0.45            | 0.55            | 0.55            | 0.7             | 0.8             | V             | $I_F=0.5\text{A}$              |
| Reverse Current 反向电流    | $I_R$     | 80              |                 |                 |                 |                 | $\mu\text{A}$ | $V_R=V_{RRM}$                  |
| Diode Capacitance 二极管电容 | $C_T$     | 30              |                 |                 |                 |                 | pF            | $V_R=4\text{V}, f=1\text{MHz}$ |

■ Typical Characteristic Curve 典型特性曲线



■ **Dimension 外形封装尺寸 SOD-123**



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 2.600                     | 2.800 | 0.102                | 0.110 |
| B      | 1.500                     | 1.700 | 0.059                | 0.067 |
| C      | 1.050                     | 1.150 | 0.041                | 0.045 |
| C1     | 0.600                     | 0.700 | 0.024                | 0.028 |
| D      | 3.550                     | 3.850 | 0.140                | 0.152 |
| L      | 0.250                     | 0.450 | 0.010                | 0.018 |
| b      | 0.450                     | 0.650 | 0.018                | 0.026 |
| h      | 0.020                     | 0.120 | 0.001                | 0.005 |
| θ 3    | 0°                        | 7°    | 0°                   | 7°    |