



## SOD-323 Schottky Barrier Diode 肖特基势垒二极管



### Internal Configuration & Device Marking 内部结构与产品打标

|         |                                                                                                                                                                       |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type 型号 | BAT46WS-6AF                                                                                                                                                           |
| Pin 管脚  |   |
| Mark 打标 | S9                                                                                                                                                                    |

### Absolute Maximum Ratings 最大额定值

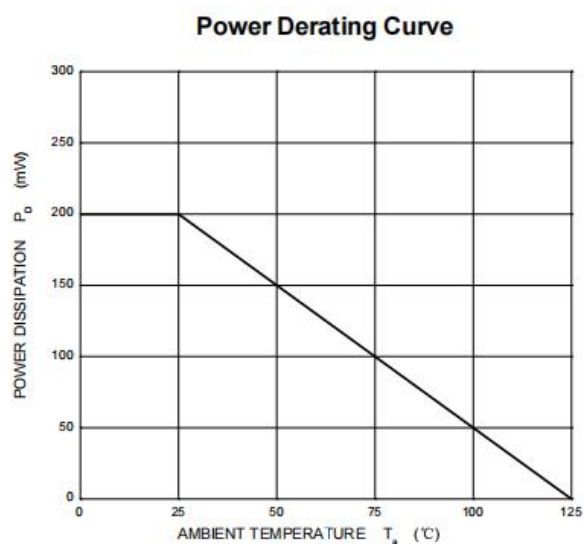
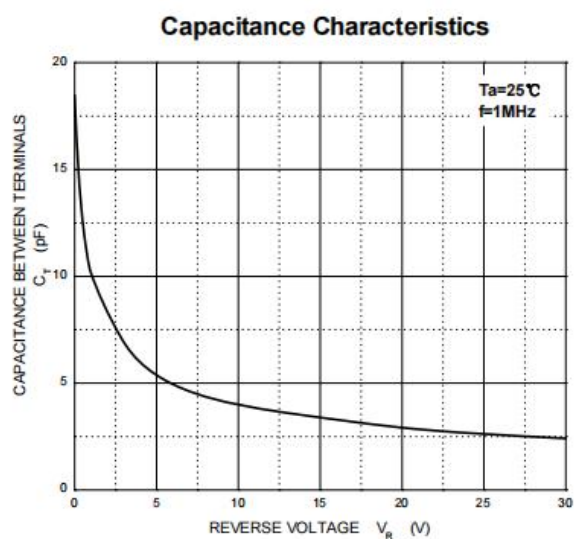
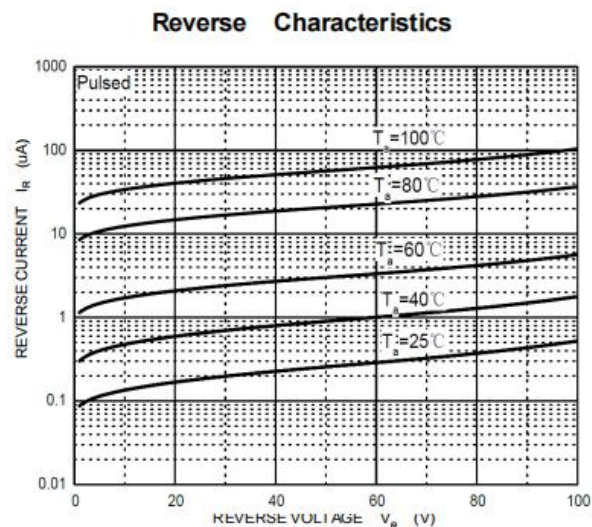
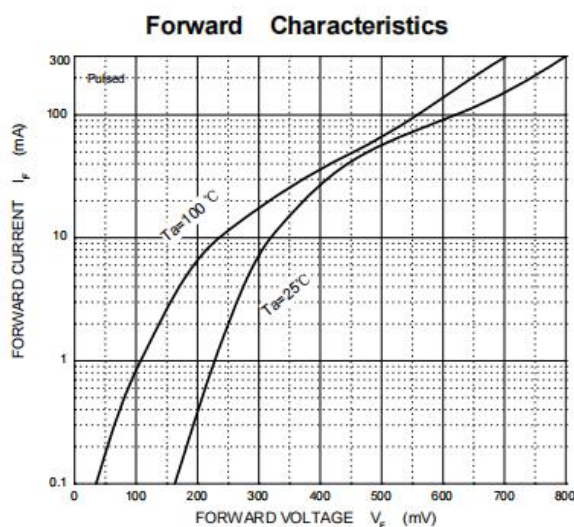
| Characteristic 特性参数                      | Symbol 符号              | Rat 额定值               | Unit 单位       |
|------------------------------------------|------------------------|-----------------------|---------------|
| Peak Reverse Voltage 反向峰值电压              | $V_{RRM}$              | 100                   | V             |
| Reverse Work Voltage 反向工作电压              | $V_{RWM}$              |                       |               |
| Forward Work Current 正向工作电流              | $I_F(I_O)$             | 150                   | mA            |
| Repetitive Peak Forward Current 重复正向峰值电流 | $I_{FRM}$              | 350                   | mA            |
| Surge Peak Forward Current 正向峰值浪涌电流      | $I_{FSM}$              | 750                   | mA            |
| Power dissipation 耗散功率                   | $P_D(T_a=25^{\circ}C)$ | 200                   | mW            |
| Thermal Resistance J-A 结到环境热阻            | $R_{\theta JA}$        | 500                   | $^{\circ}C/W$ |
| Junction Temperature 结温                  | $T_J$                  | -40to+125 $^{\circ}C$ |               |
| Storage Temperature 储藏温度                 | $T_{stg}$              | -55to+150 $^{\circ}C$ |               |

### Electrical Characteristics 电特性

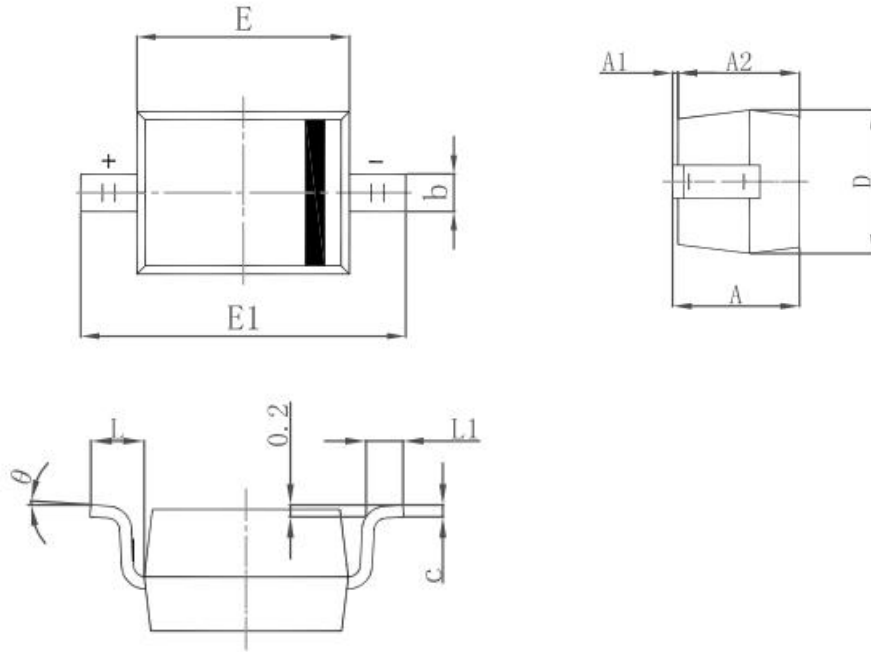
( $T_A=25^{\circ}C$  unless otherwise noted 如无特殊说明, 温度为 25 $^{\circ}C$ )

| Characteristic 特性参数                                                         | Symbol 符号  | Min 最小值 | Max 最大值           | Unit 单位 |
|-----------------------------------------------------------------------------|------------|---------|-------------------|---------|
| Reverse Breakdown Voltage 反向击穿电压( $I_R=100\mu A$ )                          | $V_{(BR)}$ | 100     | —                 | V       |
| Reverse Leakage Current( $V_R=10V$ )<br>反向漏电流( $V_R=50V$ )<br>( $V_R=75V$ ) | $I_R$      | —       | 0.5<br>1<br>2     | $\mu A$ |
| Forward Voltage( $I_F=0.1mA$ )<br>正向电压( $I_F=10mA$ )<br>( $I_F=250mA$ )     | $V_F$      |         | 0.25<br>0.45<br>1 | V       |
| Diode Capacitance( $V_R=0V$ , $f=1MHz$ )<br>二极管电容( $V_R=1V$ , $f=1MHz$ )    | $C_D$      | —       | 20<br>12          | pF      |

## ■ Typical Characteristic Curve 典型特性曲线



#### ■Dimension 外形封装尺寸



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      |                           | 1.100 |                      | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.800                     | 1.000 | 0.031                | 0.039 |
| b      | 0.250                     | 0.350 | 0.010                | 0.014 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E      | 1.600                     | 1.800 | 0.063                | 0.071 |
| E1     | 2.500                     | 2.750 | 0.098                | 0.108 |
| L      | 0.475 REF                 |       | 0.019 REF            |       |
| L1     | 0.250                     | 0.400 | 0.010                | 0.016 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |