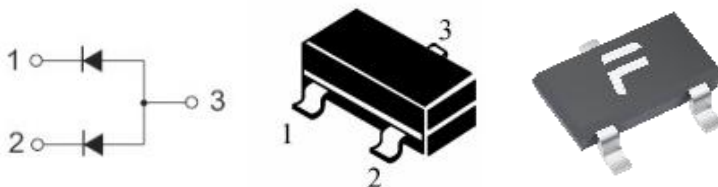


## SOT-323 Switching Diode 开关二极管

### Internal Configuration 内部结构



### Features 特点

| Characteristic 特性参数                                               | Symbol 符号                   | Max 最大值                    | Unit 单位                   |
|-------------------------------------------------------------------|-----------------------------|----------------------------|---------------------------|
| Power dissipation 耗散功率                                            | $P_D(T_a=25^\circ\text{C})$ | 200                        | mW                        |
| Forward Current 正向电流                                              | $I_F$                       | 150                        | mA                        |
| Non-Repetitive Peak Forward Current<br>不重复峰值正向电流                  | $I_{FM}$                    | 300                        | mA                        |
| Non-Repetitive Peak Forward Surge Current<br>@t=8.3ms 不重复峰值正向浪涌电流 | $I_{FSM}$                   | 2000                       | mA                        |
| Reverse Voltage 反向电压                                              | $V_R$                       | 75                         | V                         |
| Thermal Resistance J-A 结到环境热阻                                     | $R_{\theta JA}$             | 625                        | $^\circ\text{C}/\text{W}$ |
| Junction and Storage Temperature<br>结温和储藏温度                       | $T_J, T_{stg}$              | -55to+150 $^\circ\text{C}$ |                           |

### Device Marking 产品打标

BAW56W=KJC

### 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<br>特性参数                                                                                              | Symbol<br>符号 | Min<br>最小值 | Max<br>最大值                     | Unit<br>单位          |
|---------------------------------------------------------------------------------------------------------------------|--------------|------------|--------------------------------|---------------------|
| Reverse Breakdown Voltage<br>反向击穿电压( $I_R=100\mu\text{A}$ )                                                         | $V_{(BR)}$   | 75         | —                              | V                   |
| Reverse Leakage Current( $V_R=25\text{V}$ )<br>反向漏电流( $V_R=75\text{V}$ )                                            | $I_R$        | —          | 25<br>2.5                      | nA<br>$\mu\text{A}$ |
| Forward Voltage( $I_F=1\text{mA}$ )<br>正向电压( $I_F=10\text{mA}$ )<br>( $I_F=50\text{mA}$ )<br>( $I_F=150\text{mA}$ ) | $V_F$        | —          | 0.715<br>0.855<br>1.00<br>1.25 | V                   |
| Diode Capacitance 二极管电容( $V_R=0\text{V}$ , $f=1\text{MHz}$ )                                                        | $C_D$        | —          | 2                              | pF                  |
| Reverse Recovery Time 反向恢复时间                                                                                        | $T_{rr}$     | —          | 4                              | nS                  |

■ Typical Characteristic Curve 典型特性曲线

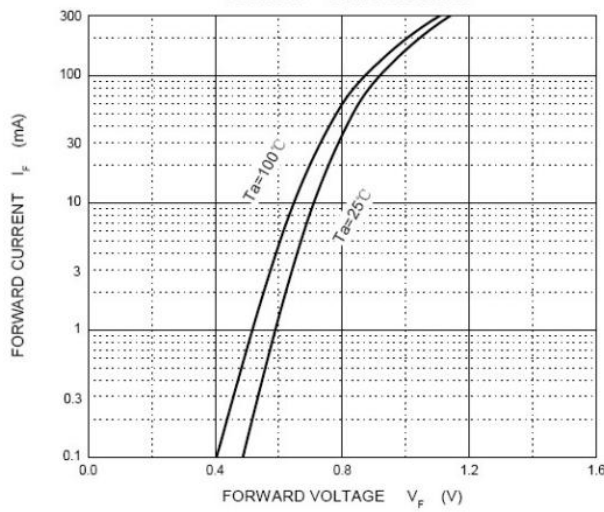


Figure 1: Forward Characteristics

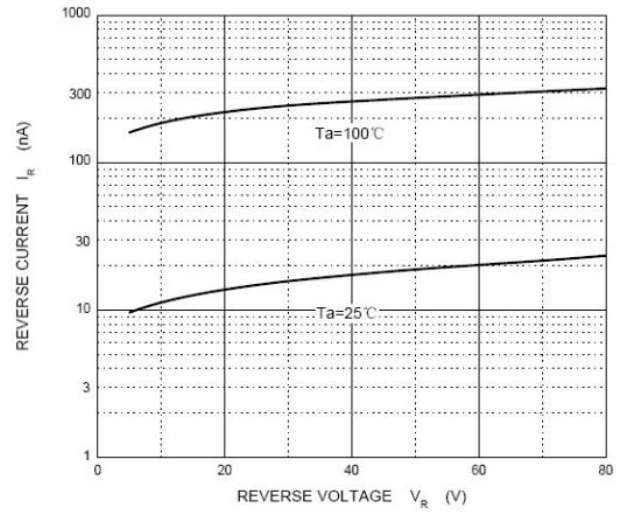


Figure 2: Leakage Current

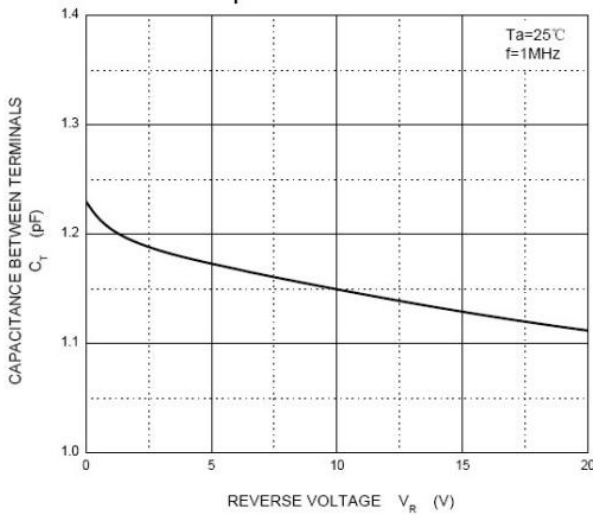


Figure 3: Capacitance Characteristics

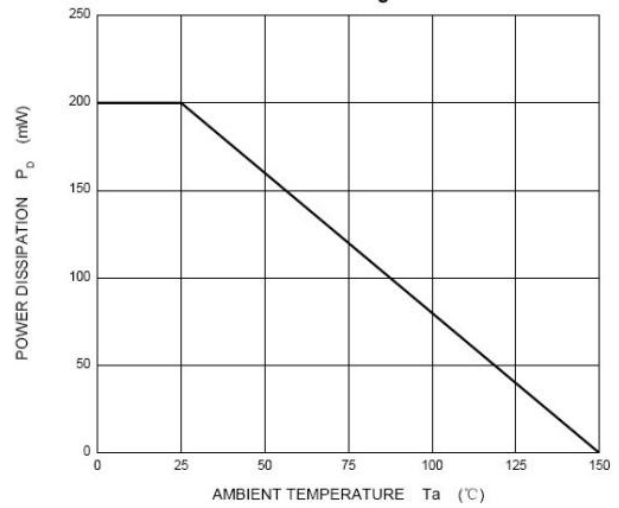
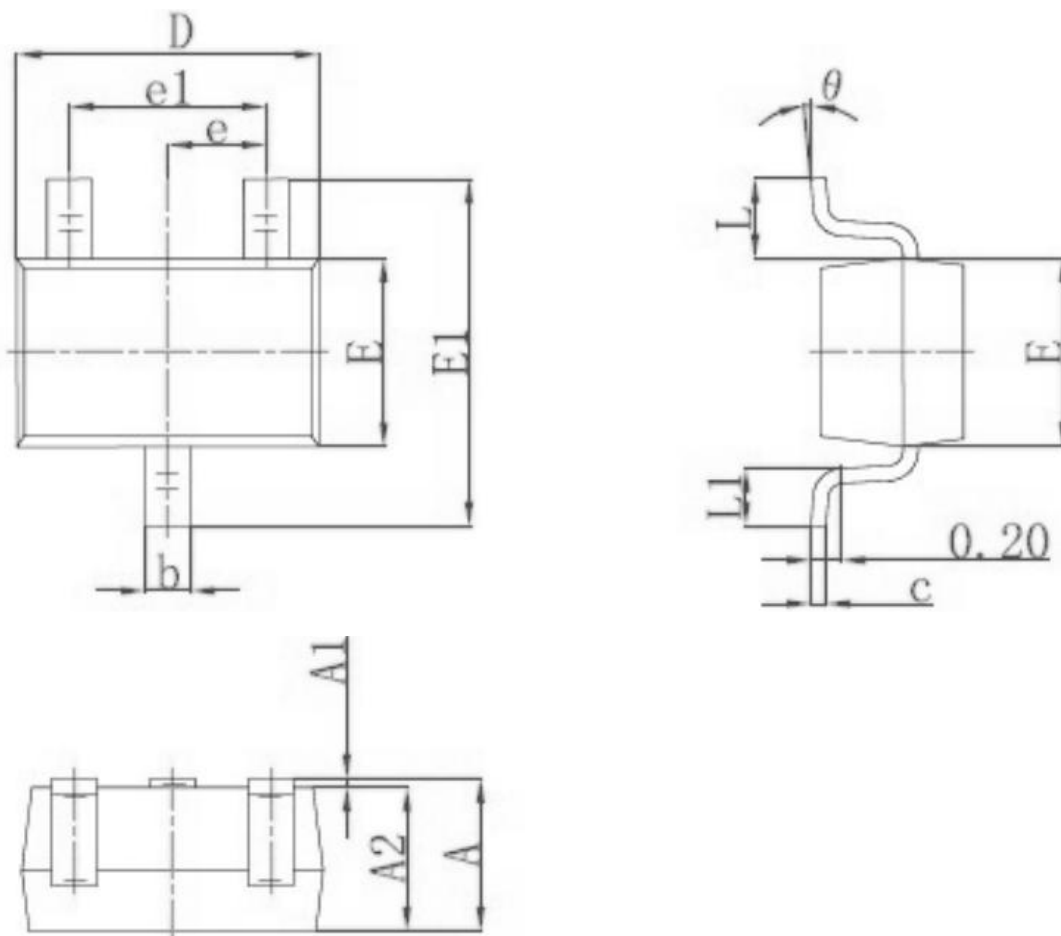


Figure 4: Power Derating Curve

■Dimension 外形封装尺寸



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.900                     | 1.100 | 0.035                | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.000 | 0.035                | 0.039 |
| b      | 0.200                     | 0.400 | 0.008                | 0.016 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 2.000                     | 2.200 | 0.079                | 0.087 |
| E      | 1.150                     | 1.350 | 0.045                | 0.053 |
| E1     | 2.150                     | 2.450 | 0.085                | 0.096 |
| e      | 0.650 TYP                 |       | 0.026 TYP            |       |
| e1     | 1.200                     | 1.400 | 0.047                | 0.055 |
| L      | 0.525 REF                 |       | 0.021 REF            |       |
| L1     | 0.260                     | 0.460 | 0.010                | 0.018 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |