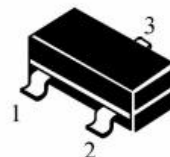
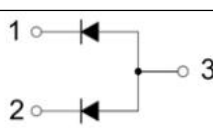
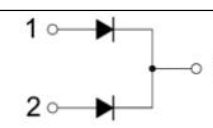
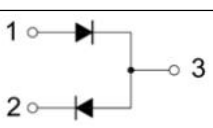


SOT-23 Switching Diode 开关二极管



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

| Type 型号 | BAV23A  | BAV23C   | BAV23S  |
|---------|---|--|---|
| Pin 管脚  |  |  |  |
| Mark 打标 | KT7   | KT6  | KL31  |

Absolute Maximum Ratings 最大额定值

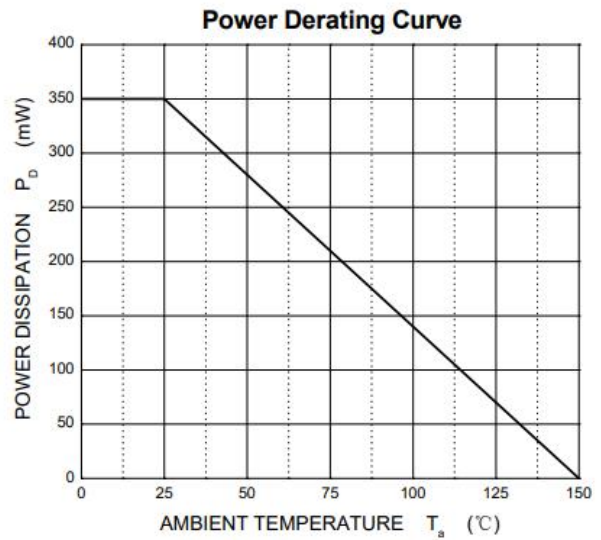
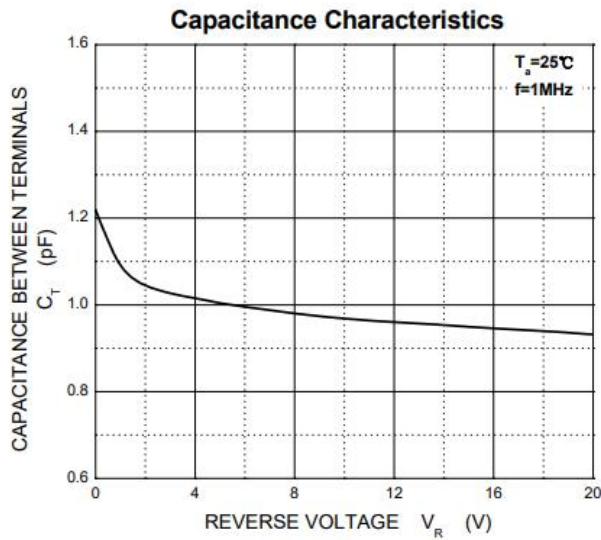
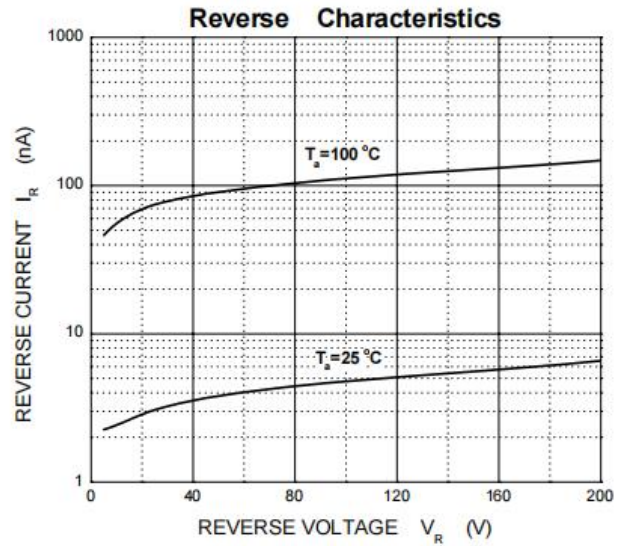
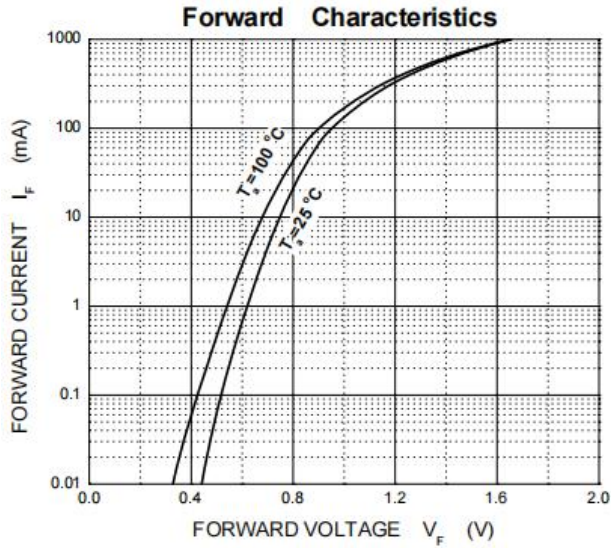
| Characteristic 特性参数                      | Symbol 符号             | Rat 额定值              | Unit 单位      |
|--|-----------------------|----------------------|--------------|
| Peak Reverse Voltage 反向峰值电压              | $V_{RRM}$             | 250                  | V            |
| Reverse Work Voltage 反向工作电压              | $V_{RWM}$             |                      |              |
| DC Reverse Voltage 直流反向电压                | $V_R$                 |                      |              |
| Forward Work Current 正向工作电流              | $I_F(I_O)$            | 225                  | mA           |
| Peak Forward Current 正向峰值电流              | $I_{FM}$              | 625                  | mA           |
| Power dissipation 耗散功率                   | $P_D(T_a=25^\circ C)$ | 350                  | mW           |
| Thermal Resistance J-A 结到环境热阻            | $R_{\theta JA}$       | 358                  | $^\circ C/W$ |
| Junction and Storage Temperature 结温和储藏温度 | $T_J, T_{stg}$        | -55to+150 $^\circ C$ |              |

Electrical Characteristics 电特性

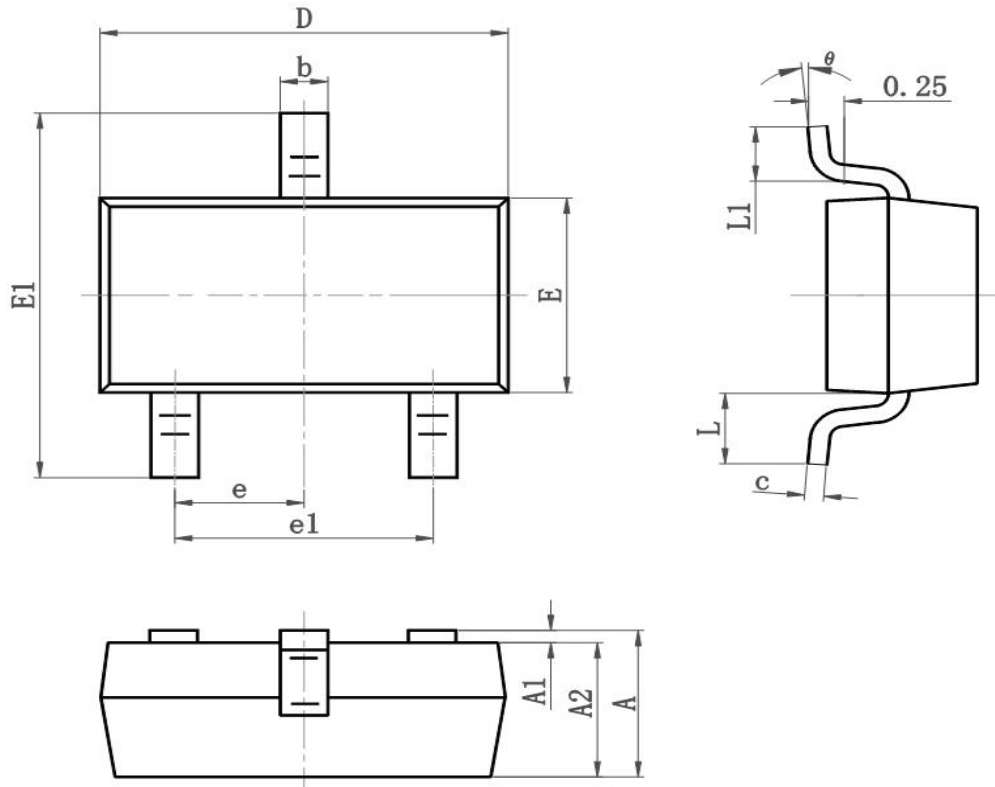
( $T_A=25^\circ C$  unless otherwise noted 如无特殊说明, 温度为  $25^\circ C$ )

| 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<br>( $I_R=100\mu A$ ) | $V_{(BR)}$ | 250     | —         | V       |
| Reverse Leakage Current 反向漏电流<br>( $V_R=200V$ )        | $I_R$      | —       | 100       | nA      |
| Forward Voltage( $I_F=100mA$ )<br>正向电压( $I_F=200mA$ )  | $V_F$      | —       | 1<br>1.25 | V       |
| Diode Capacitance 二极管电容<br>( $V_R=0V, f=1MHz$ )        | $C_D$      | —       | 5         | pF      |
| Reverse Recovery Time 反向恢复时间                           | $T_{rr}$   | —       | 50        | nS      |

■ 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        | 0.900                     | 1.150     | 0.035                | 0.045     |
| A1       | 0.000                     | 0.100     | 0.000                | 0.004     |
| A2       | 0.900                     | 1.050     | 0.035                | 0.041     |
| b        | 0.300                     | 0.500     | 0.012                | 0.020     |
| c        | 0.080                     | 0.150     | 0.003                | 0.006     |
| D        | 2.800                     | 3.000     | 0.110                | 0.118     |
| E        | 1.200                     | 1.400     | 0.050                | 0.055     |
| E1       | 2.250                     | 2.550     | 0.089                | 0.100     |
| e        | 0.900                     | 1.00      | 0.035                | 0.039     |
| e1       | 1.800                     | 2.000     | 0.071                | 0.079     |
| L        | 0.500                     | 0.600     | 0.020                | 0.024     |
| L1       | 0.300                     | 0.500     | 0.012                | 0.020     |
| $\theta$ | $0^\circ$                 | $8^\circ$ | $0^\circ$            | $8^\circ$ |