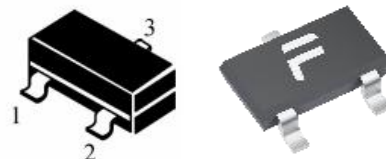
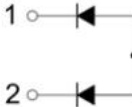
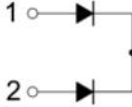
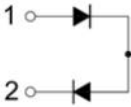


## SOT-23 Schottky Barrier Diode 肖特基势垒二极管



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

| Type 型号 | BAT54                                                                             | BAT54A                                                                            | BAT54C                                                                             | BAT54S                                                                              |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Pin 管脚  |  |  |  |  |
| Mark 打标 | KL1                                                                               | KL2                                                                               | KL3                                                                                | KL4                                                                                 |

### Absolute Maximum Ratings 最大额定值

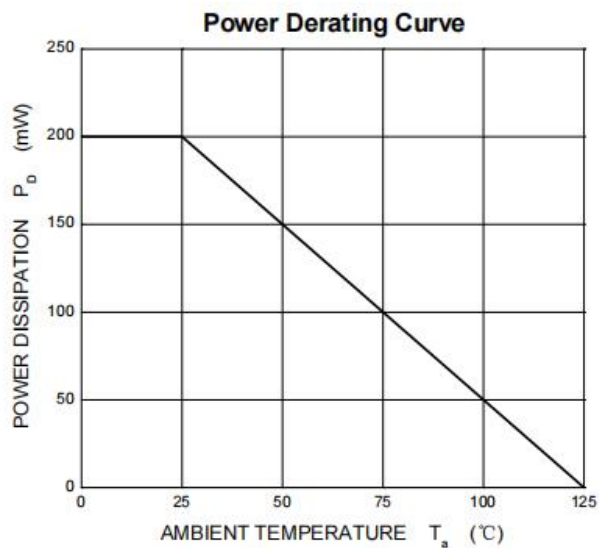
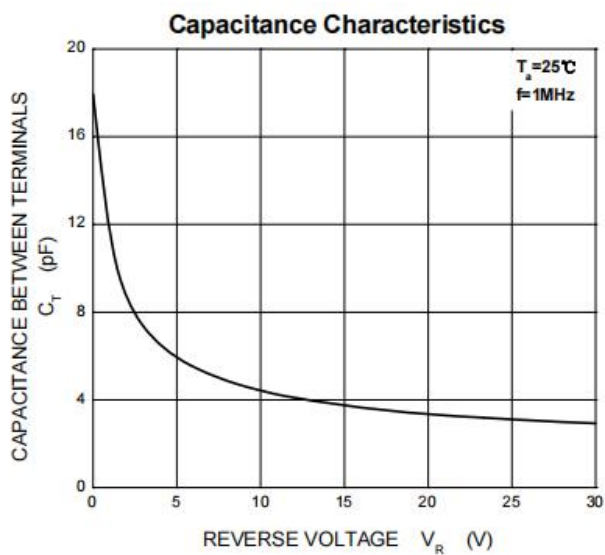
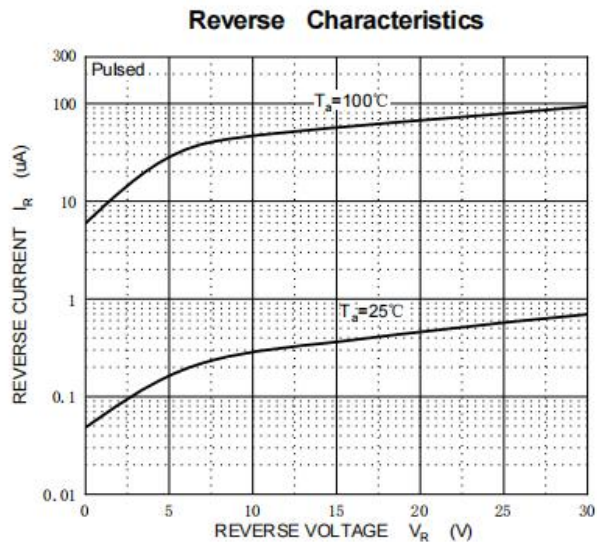
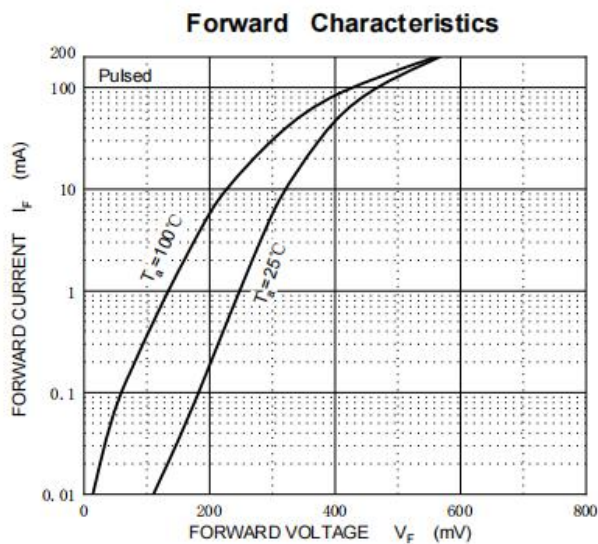
| Characteristic 特性参数                      | Symbol 符号              | Rat 额定值                                 | Unit 单位       |
|------------------------------------------|------------------------|-----------------------------------------|---------------|
| Peak Reverse Voltage 反向峰值电压              | $V_{RRM}$              | 30                                      | 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              | $I_F(I_O)$             | 200                                     | mA            |
| Peak Forward Current 正向峰值电流              | $I_{FM}$               | 600                                     | 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 and Storage Temperature 结温和储藏温度 | $T_J, T_{stg}$         | 125 $^{\circ}C$ , -55to+150 $^{\circ}C$ |               |

### Electrical Characteristics 电特性

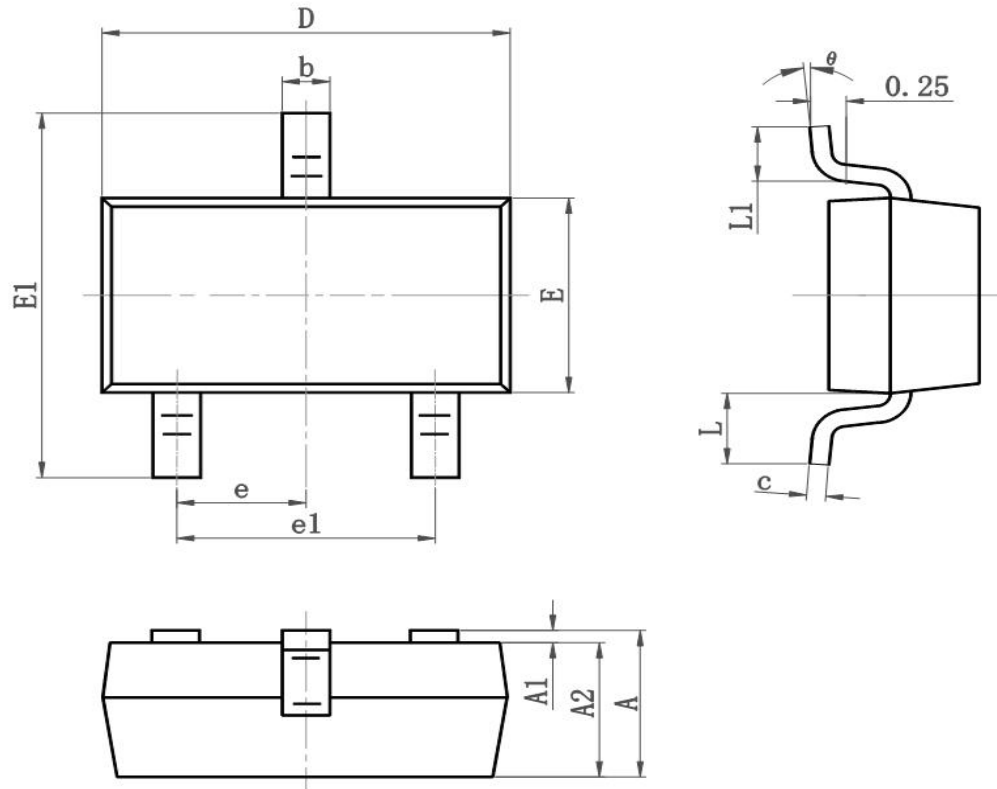
( $T_A=25^{\circ}C$  unless otherwise noted 如无特殊说明, 温度为 25 $^{\circ}C$ )

| 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( $I_R=100\mu A$ )                                                         | $V_{(BR)}$ | 30      | —                                 | V       |
| Reverse Leakage Current 反向漏电流( $V_R=25V$ )                                                                 | $I_R$      | —       | 2                                 | $\mu A$ |
| Forward Voltage( $I_F=0.1mA$ )<br>正向电压( $I_F=1mA$ )<br>( $I_F=10mA$ )<br>( $I_F=30mA$ )<br>( $I_F=100mA$ ) | $V_F$      | —       | 0.24<br>0.32<br>0.4<br>0.5<br>0.8 | V       |
| Diode Capacitance 二极管电容( $V_R=1V, f=1MHz$ )                                                                | $C_D$      | —       | 10                                | pF      |
| Reverse Recovery Time 反向恢复时间                                                                               | $T_{rr}$   | —       | 5                                 | 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 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |