



型号：BAT54&BAT54A&BAT54C&BAT54S

SCHOTTKY DIODES

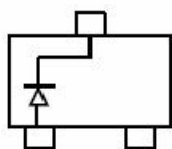
主要特性/Features

速度快，导通电压低 Fast speed, low on voltage

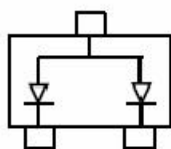
应用/Application

高速开关电路 High speed switch circuit

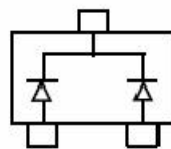
电路和印章/ Circuit&Marking



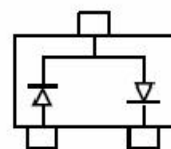
BAT54 MARKING: KL1



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4



极限参数/Absolute Maximum Ratings(TA=25°C unless otherwise noted)

| 参数/Parameter | 符号/ Symbol | 数值/Value | 单位/Unit |
|---|---------------|-----------|---------|
| 反向峰值电压/Peak Repetitive Peak Reverse Voltage | V_{RRM} | 30 | V |
| 反向工作电压/Working Peak Reverse Voltage | V_{RWM} | | |
| 直流阻断电压/DC Blocking Voltage | V_R | | |
| 正向电流/Forward Continuous Current | I_F | 200 | mA |
| 功率/ Power Dissipation | P_D | 0.225 | W |
| 储存温度/Storage Temperature | Tstg | -55 ~ 150 | °C |

电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted)

| 参数/Parameter | 符号 | 测试条件 | 最小值 | 最大值 | 单位 |
|-----------------------------------|-------------|---|-----|------|---------|
| 反向击穿电压/Reverse Breakdown Voltage | $V_{R(BR)}$ | $I_R=100\mu A$ | 30 | | V |
| 正向电压/Forward Voltage | V_{F1} | $I_F=0.1mA$ | | 0.24 | V |
| | V_{F2} | $I_F=1mA$ | | 0.32 | V |
| | V_{F3} | $I_F=10mA$ | | 0.4 | V |
| | V_{F4} | $I_F=30mA$ | | 0.5 | V |
| | V_{F5} | $I_F=100mA$ | | 1 | V |
| 反向漏电流/Reverse Current | I_R | $V_R=25V$ | | 2 | μA |
| 端电容/Capacitance Between Terminals | C_T | $V_R=1V, f=1MHz$ | | 10 | pF |
| 反向恢复时间/Reverse Recovery Time | t_{rr} | $I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_{Rr},$ $R_L=100\Omega$ | | 5 | nS |



典型特性曲线图/Typical Characteristics

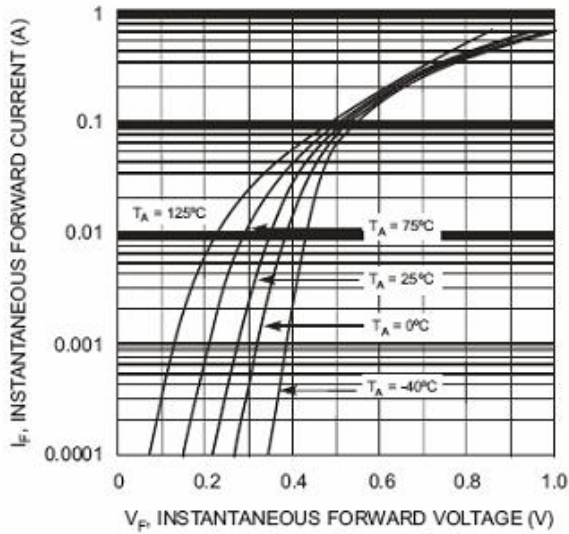


Fig. 1 Forward Characteristics

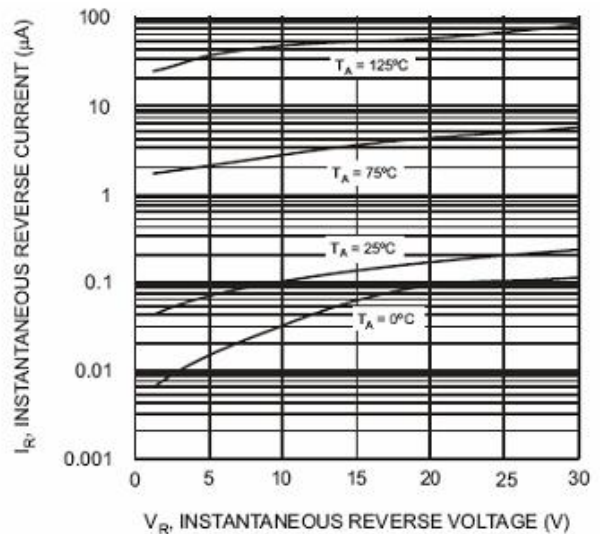


Fig. 2 Typical Reverse Characteristics

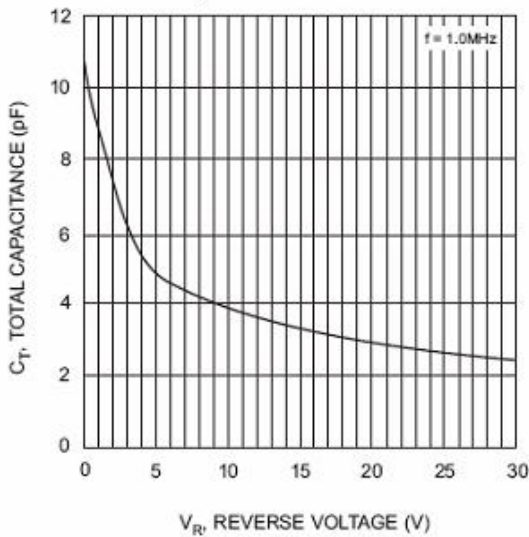


Fig. 3 Typical Capacitance vs. Reverse Voltage

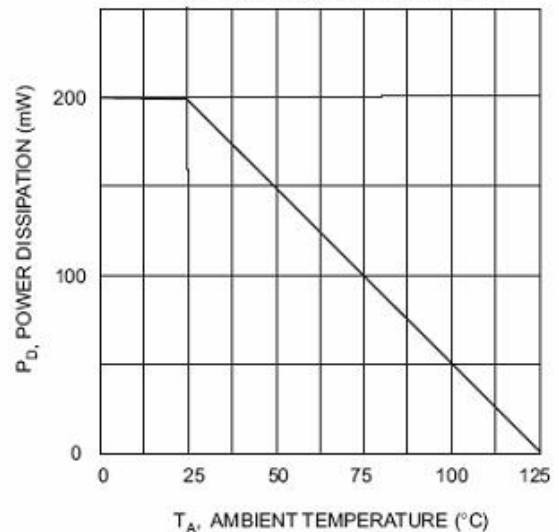
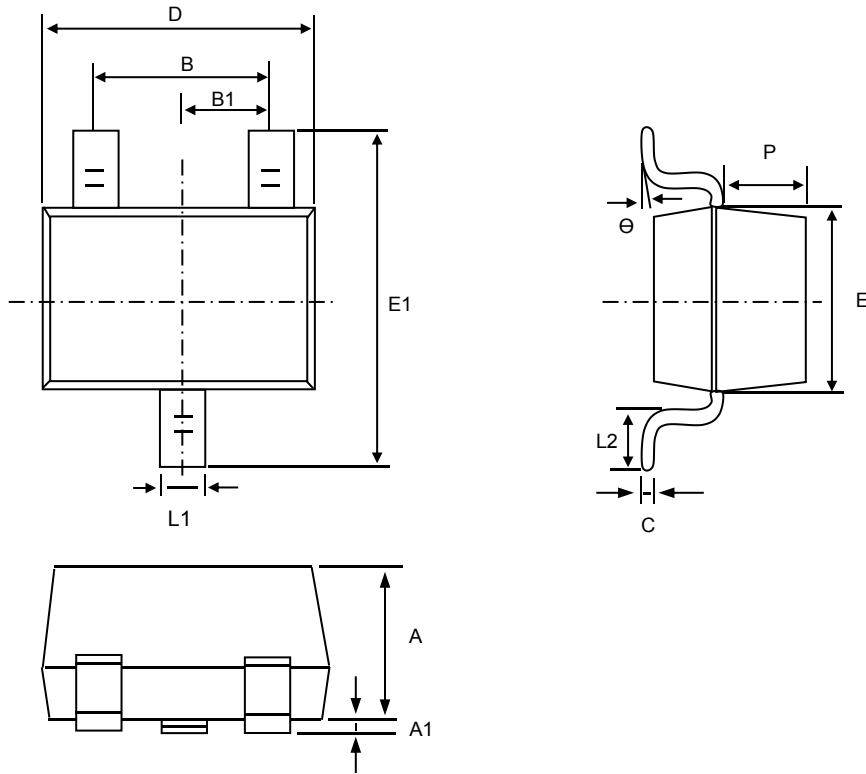


Fig. 4 Power Derating Curve



成品外观尺寸/SOT-23 Package Information



| Symbol | Dim in mm | | |
|--------|-----------|-------|-------|
| | Min | Nor | Max |
| A | 0.900 | 1.000 | 1.100 |
| A1 | 0.000 | 0.050 | 0.100 |
| L1 | 0.350 | 0.400 | 0.500 |
| C | 0.100 | 0.110 | 0.120 |
| D | 2.800 | 2.900 | 3.000 |
| E | 1.250 | 1.300 | 1.350 |
| E1 | 2.250 | 2.400 | 2.550 |
| B | 1.800 | 1.900 | 2.000 |
| B1 | 0.950TPY. | | |
| L2 | 0.200 | 0.350 | 0.450 |
| P | 0.550 | 0.575 | 0.600 |