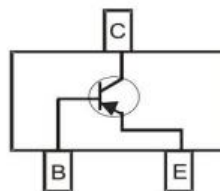


## SOT-23 Bipolar Transistor 双极型三极管

### ■ Features 特点

PNP Low equivalent on-resistance 低等效电阻



### ■ Absolute Maximum Ratings 最大额定值

| Characteristic 特性参数                         | Symbol 符号                     | Rat 额定值                      | Unit 单位                     |
|---------------------------------------------|-------------------------------|------------------------------|-----------------------------|
| Collector-Base Voltage 集电极基极电压              | $V_{CBO}$                     | -50                          | V                           |
| Collector-Emitter Voltage 集电极发射极电压          | $V_{CEO}$                     | -50                          | V                           |
| Emitter-Base Voltage 发射极基极电压                | $V_{EBO}$                     | -5                           | V                           |
| Collector Current 集电极电流                     | $I_C$                         | -2000                        | mA                          |
| Power dissipation 耗散功率                      | $P_C(T_a=25^{\circ}\text{C})$ | 250                          | mW                          |
| Thermal Resistance Junction-Ambient 热阻      | $R_{\theta JA}$               | 500                          | $^{\circ}\text{C}/\text{W}$ |
| 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

FMMT720=720

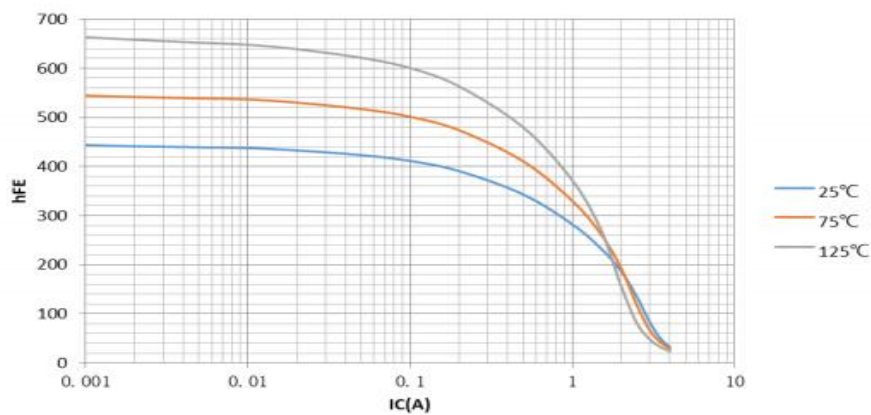
**■Electrical Characteristics 电特性**

(TA=25℃ unless otherwise noted 如无特殊说明, 温度为 25℃)

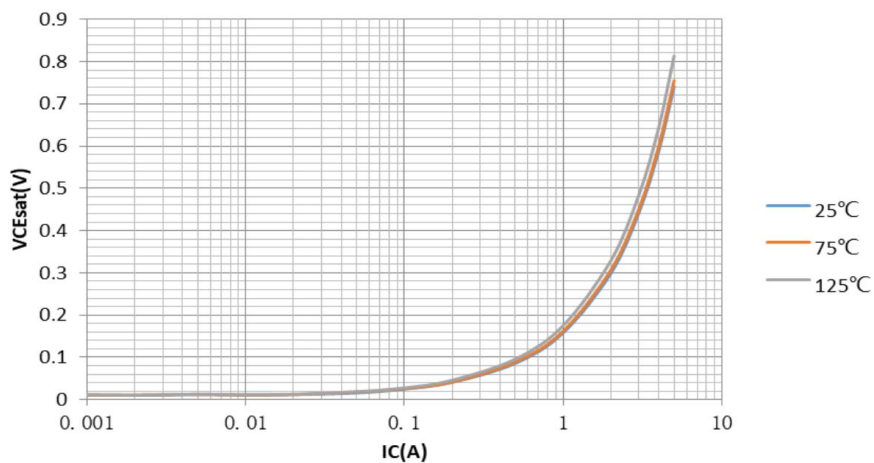
| Characteristic<br>特性参数                                                                           | Symbol<br>符号  | Min<br>最小值 | Type<br>典型值 | Max<br>最大值 | Unit<br>单位 |
|--------------------------------------------------------------------------------------------------|---------------|------------|-------------|------------|------------|
| Collector-Base Breakdown Voltage<br>集电极基极击穿电压( $I_C = -100\mu A$ , $I_E = 0$ )                   | $BV_{CBO}$    | -50        | —           | —          | V          |
| Collector-Emitter Breakdown Voltage<br>集电极发射极击穿电压( $I_C = -10mA$ , $I_B = 0$ )                   | $BV_{CEO}$    | -50        | —           | —          | V          |
| Emitter-Base Breakdown Voltage<br>发射极基极击穿电压( $I_E = -100\mu A$ , $I_C = 0$ )                     | $BV_{EBO}$    | -5         | —           | —          | V          |
| Collector-Base Leakage Current<br>集电极基极漏电流( $V_{CB} = -30V$ , $I_E = 0$ )                        | $I_{CBO}$     | —          | —           | -1         | $\mu A$    |
| Collector-Emitter Leakage Current<br>集电极发射极漏电流( $V_{CE} = -30V$ , $V_{BE} = 0.5V$ )              | $I_{CEX}$     | —          | —           | -1         | $\mu A$    |
| Emitter-Base Leakage Current<br>发射极基极漏电流( $V_{EB} = -5V$ , $I_C = 0$ )                           | $I_{EBO}$     | —          | —           | -1         | $\mu A$    |
| DC Current Gain( $V_{CE} = -2V$ , $I_C = -200mA$ )<br>直流电流增益( $V_{CE} = -2V$ , $I_C = -2000mA$ ) | $H_{FE}$      | 300<br>100 | —           | 450        |            |
| Collector-Emitter Saturation Voltage<br>集电极发射极饱和压降<br>( $I_C = -1500mA$ , $I_B = -100mA$ )       | $V_{CE(sat)}$ | —          | —           | -0.3       | V          |
| Base-Emitter Saturation Voltage<br>基极发射极饱和压降<br>( $I_C = -1500mA$ , $I_B = -100mA$ )             | $V_{BE(sat)}$ | —          | —           | -1.2       | V          |
| Transition Frequency<br>特征频率( $V_{CE} = -10V$ , $I_C = -50mA$ )                                  | $f_T$         | 150        | —           | —          | MHz        |

■ Typical Characteristic Curve 典型特性曲线

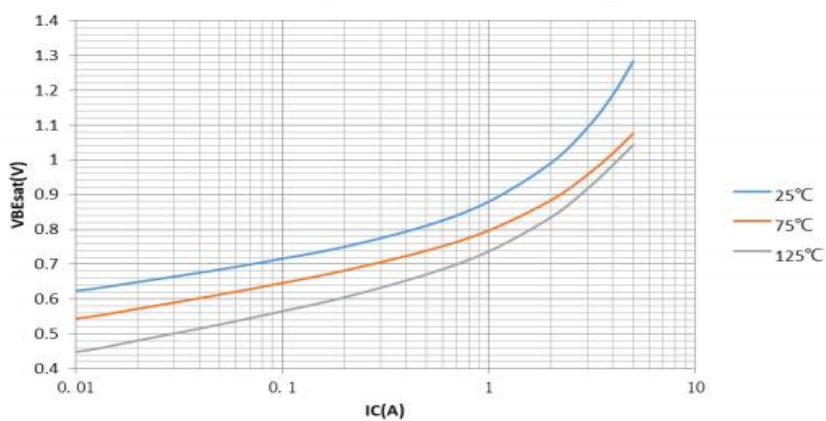
$h_{FE} \sim I_C$



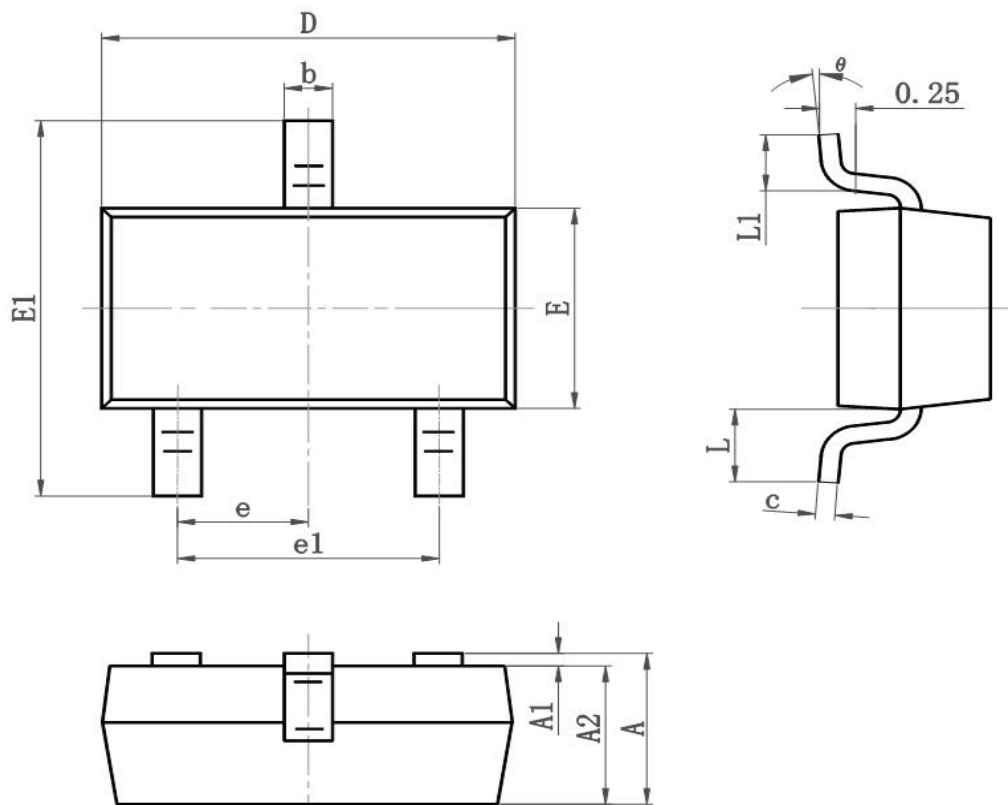
$V_{CE(sat)} \sim I_C$



$V_{BE(sat)} \sim I_C$



■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°                        | 8°    | 0°                   | 8°    |