



SLS SEMICONDUCTOR (SHENZHEN) CO.,LTD.

SOT-23 封装半导体晶体管/SOT-23 Plastic-Encapsulate Transistors

## MMBT5401 ( PNP )

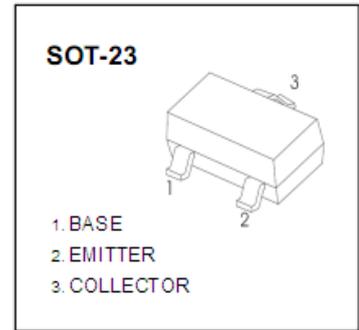
印章/Marking : 2L

特点/Features :

击穿电压高 ;

用途/Applications :

用于普通高压放大 , 与 MMBT5551 互补。



极限参数/Absolute maximum ratings(Ta=25°C)

| 参数/Parameter                         | 符号/ Symbol | 数值/Value | 单位/Unit |
|--------------------------------------|------------|----------|---------|
| 集电极-基极电压/Collector-Base Voltage      | $V_{CB0}$  | -160     | V       |
| 集电极-发射极电压/Collector-Emitter Voltage  | $V_{CE0}$  | -150     | V       |
| 发射极-基极电压/Emitter-Base Voltage        | $V_{EB0}$  | -5       | V       |
| 集电极连续电流/Collector Current Continuous | $I_C$      | -0.6     | A       |
| 集电极耗散功率/Collector Power Dissipation  | $P_C$      | 0.3      | W       |
| 结温/Junction Temperature              | $T_j$      | 150      | °C      |
| 储存温度/Storage Temperature             | $T_{stg}$  | -55~150  | °C      |

电性能参数/Electrical characteristics (Ta=25°C)

| 参数          | 符号            | 测试条件                                   | 最小值  | 最大值  | 单位      |
|-------------|---------------|--|------|------|---------|
| 集电极-基极击穿电压  | $V_{BR(CB0)}$ | $I_C = -100 \mu A, I_E = 0$            | -160 |      | V       |
| 集电极-发射极击穿电压 | $V_{BR(CE0)}$ | $I_C = -1mA, I_B = 0$                  | -150 |      | V       |
| 发射极-基极击穿电压  | $V_{BR(EB0)}$ | $I_E = -10 \mu A, I_C = 0$             | -5   |      | V       |
| 集电极截止电流     | $I_{CB0}$     | $V_{CB} = -120V, I_E = 0$              |      | -0.1 | $\mu A$ |
| 发射极截止电流     | $I_{EB0}$     | $V_{EB} = -4V, I_C = 0$                |      | -0.1 | $\mu A$ |
| 直流电流增益      | $h_{FE(1)}$   | $V_{CE} = -5V, I_C = -1mA$             | 80   |      |         |
| 直流电流增益      | $h_{FE(2)}$   | $V_{CE} = -5V, I_C = -10mA$            | 100  | 300  |         |
| 直流电流增益      | $h_{FE(3)}$   | $V_{CE} = -5V, I_C = -50mA$            | 50   |      |         |
| 集电极-发射极饱和压降 | $V_{CE(sat)}$ | $I_C = -50mA, I_B = -5mA$              |      | -0.5 | V       |
| 基极-发射极饱和压降  | $V_{BE(sat)}$ | $I_C = -50mA, I_B = -5mA$              |      | -1   | V       |
| 特征频率        | $f_T$         | $V_{CE} = -5V, I_C = -10mA, f = 30MHz$ | 100  |      | MHz     |



### 典型特性曲线图/Typical Characteristics

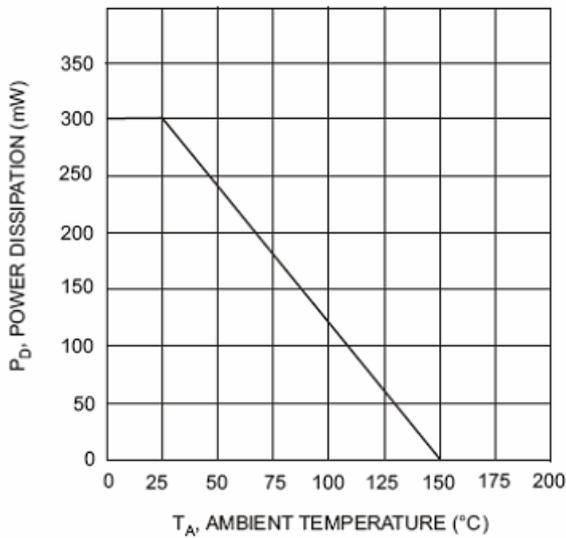


Fig. 1, Max Power Dissipation vs Ambient Temperature

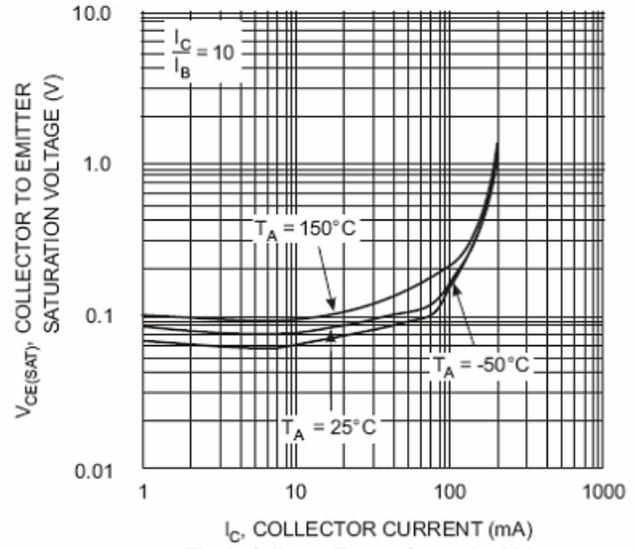


Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

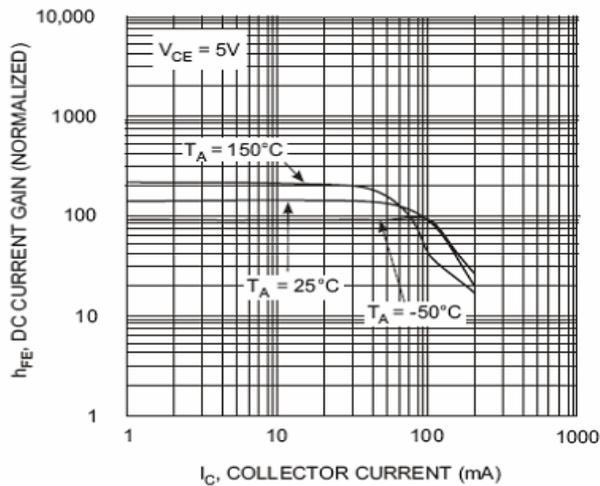


Fig. 3, DC Current Gain vs. Collector Current

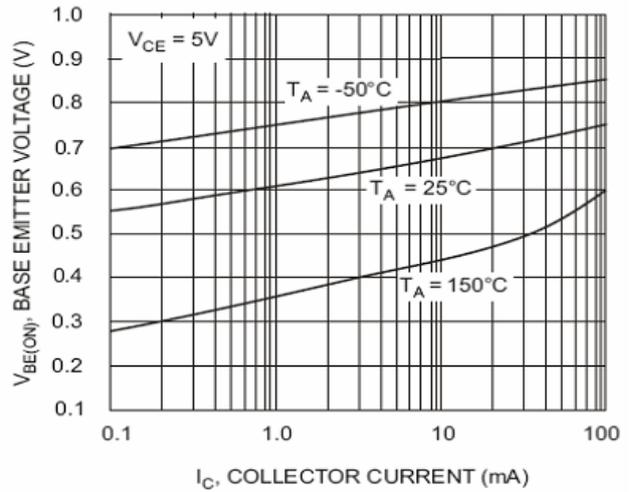


Fig. 4, Base Emitter Voltage vs. Collector Current

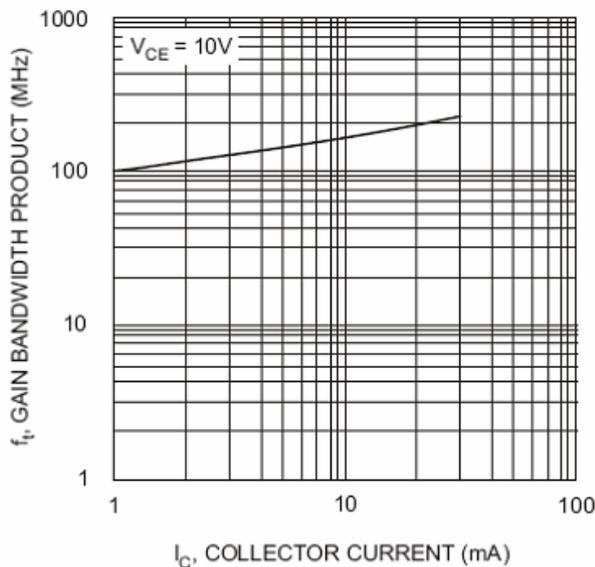


Fig. 5, Gain Bandwidth Product vs Collector Current