

描述 / Descriptions

SOT-23 塑封封装 PNP 半导体三极管。Silicon PNP transistor in a SOT-23 Plastic Package.

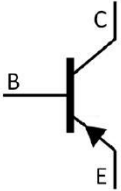
特征 / Features

与 S8050MG 互补，无卤产品。
Complementary pair with S8050MG, HF Product.

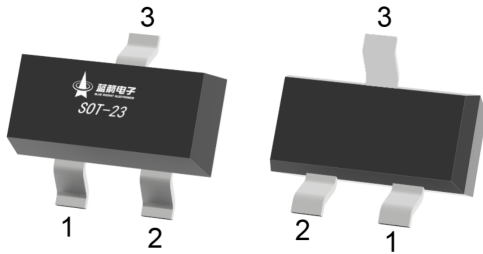
用途 / Applications

用于功率放大电路。
Power amplifier applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : Base PIN 2 : Emitter PIN 3 : Collector

放大及印章代码 / hFE Classifications & Marking

| hFE Classifications Symbol | B | C | D |
|----------------------------|----------|-----------|-----------|
| hFE Range | 85 ~ 160 | 120 ~ 200 | 160 ~ 300 |
| Marking | GY4B | GY4C | GY4D |

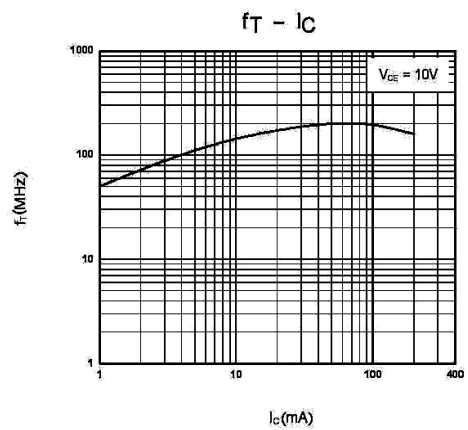
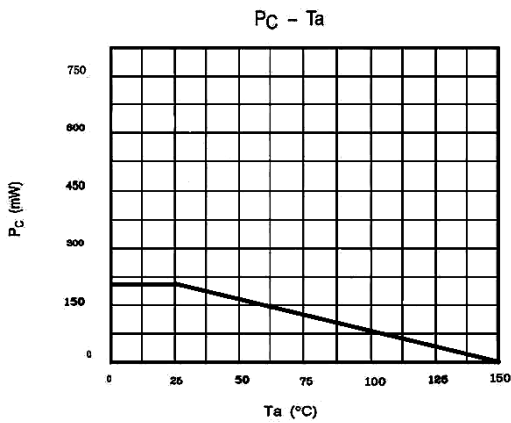
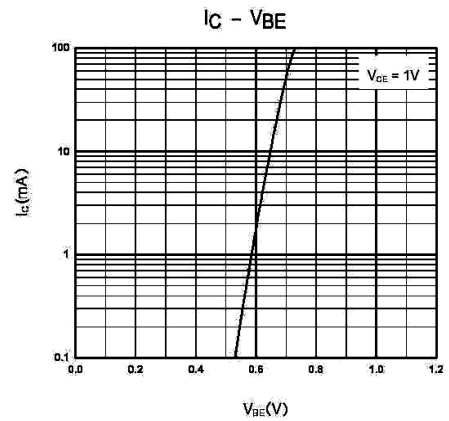
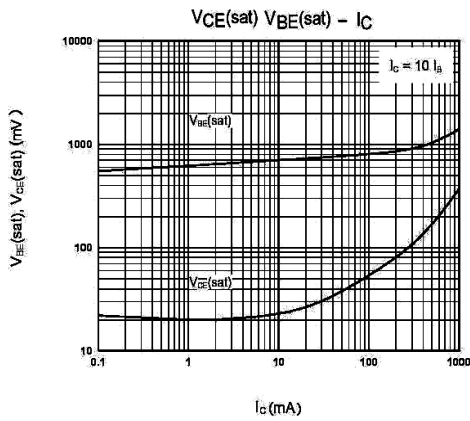
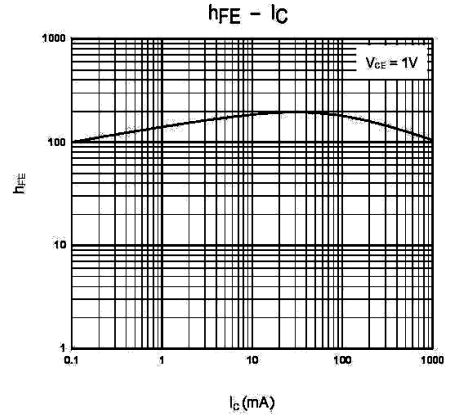
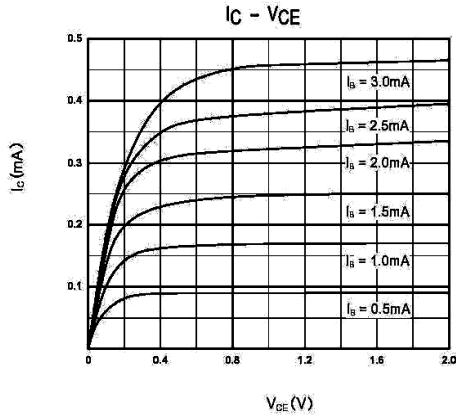
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 数值 Rating | 单位 Unit |
|------------------------------|------------------|--------------|------------|
| Collector to Base Voltage | V _{CBO} | -40 | V |
| Collector to Emitter Voltage | V _{CEO} | -25 | V |
| Emitter to Base Voltage | V _{EBO} | -6.0 | V |
| Collector Current | I _C | -800 | mA |
| Base Current | I _B | -200 | mA |
| Collector Power Dissipation | P _C | 200 | mW |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature Range | T _{stg} | -65~150 | °C |

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

| 参数 Parameter | 符号 Symbol | 测试条件 Test Conditions | 最小值 Min | 典型值 Typ | 最大值 Max | 单位 Unit |
|--|----------------------|---|------------|------------|------------|------------|
| Collector to Base Breakdown Voltage | V _{CBO} | I _C =-0.1mA I _E =0 | -40 | | | V |
| Collector to Emitter Breakdown Voltage | V _{CEO} | I _C =-2.0mA I _B =0 | -25 | | | V |
| Emitter to Base Breakdown Voltage | V _{EBO} | I _E =-0.1mA I _C =0 | -6.0 | | | V |
| Collector Cut-Off Current | I _{CBO} | V _{CB} =-35V I _E =0 | | | -0.1 | μA |
| Emitter Cut-off Current | I _{EBO} | V _{EB} =-6.0V I _C =0 | | | -0.1 | μA |
| DC Current Gain | h _{FE(1)} | V _{CE} =-1.0V I _C =-100mA | 85 | | 300 | |
| | h _{FE(2)} | V _{CE} =-1.0V I _C =-500mA | 40 | | | |
| | h _{FE(3)} | V _{CE} =-1.0V I _C =-5.0mA | 45 | | | |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | I _C =-500mA I _B =-50mA | | -0.28 | -0.6 | V |
| Base-Emitter Saturation Voltage | V _{BE(sat)} | I _C =-500mA I _B =-50mA | | -0.98 | -1.2 | V |
| Base-Emitter Voltage | V _{BE} | V _{CE} =-1.0V I _C =-10mA | | -0.66 | -1.0 | V |
| Transition Frequency | f _T | V _{CE} =-10V I _C =-50mA | 100 | 200 | | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} =-10V I _E =0 f=1.0MHz | | 15 | | pF |

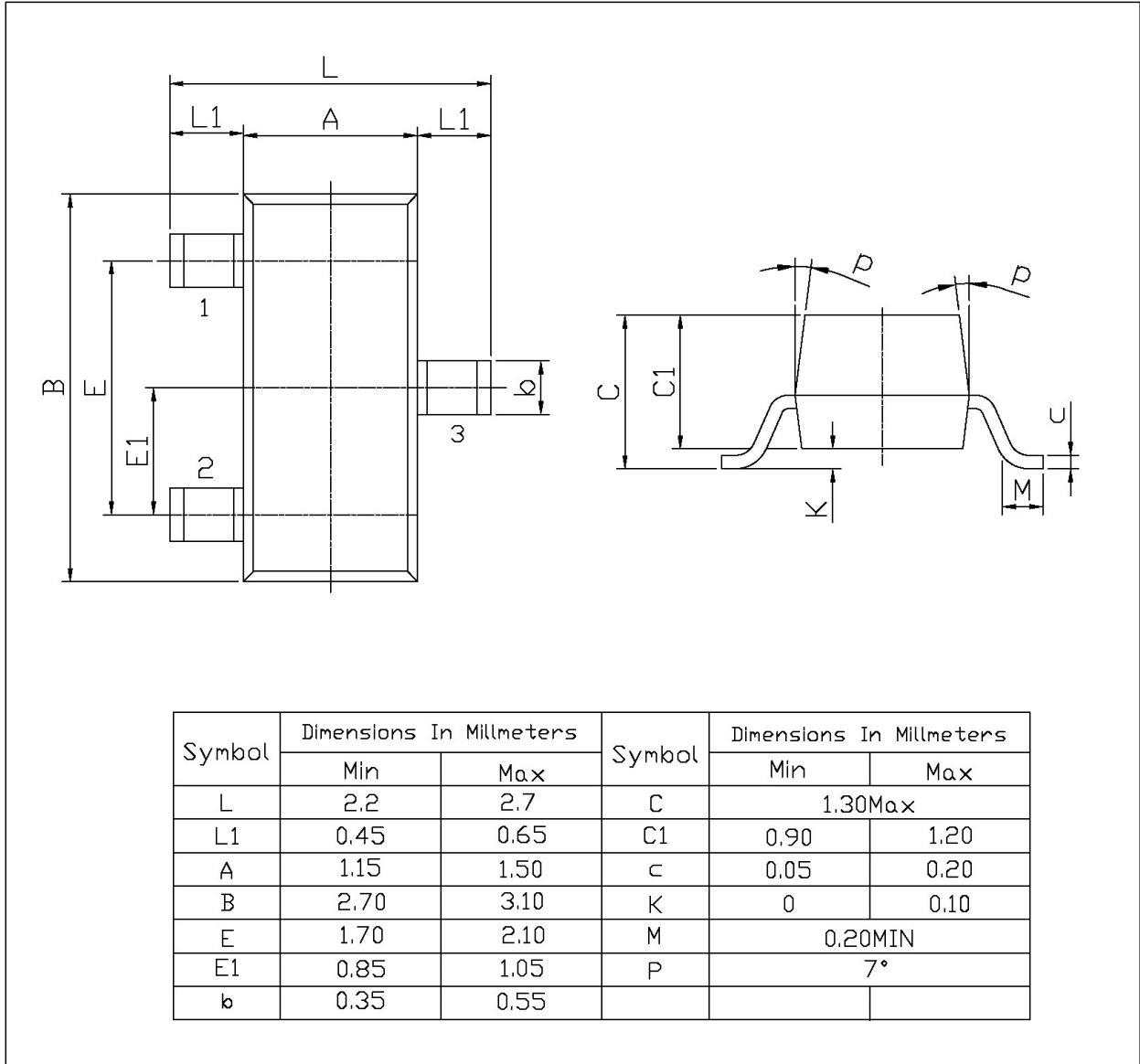
电参数曲线图 / Electrical Characteristic Curve



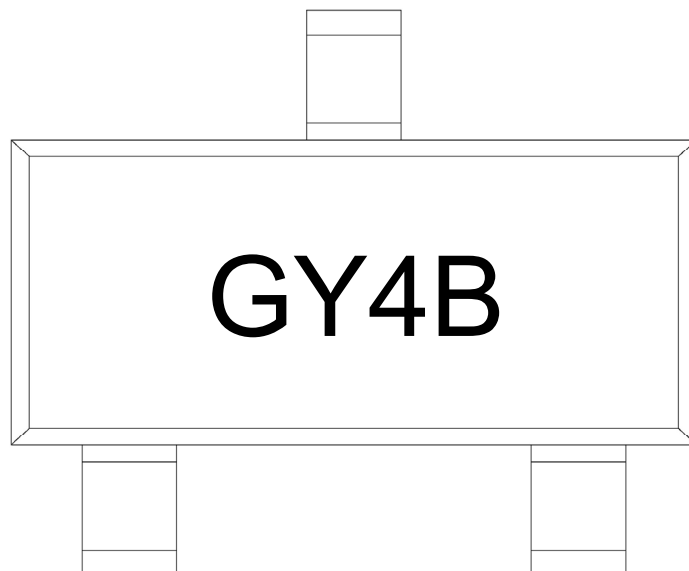
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

G： 为无卤产品代码

Y4： 为型号代码

B： 为 h_{FE} 档次代码

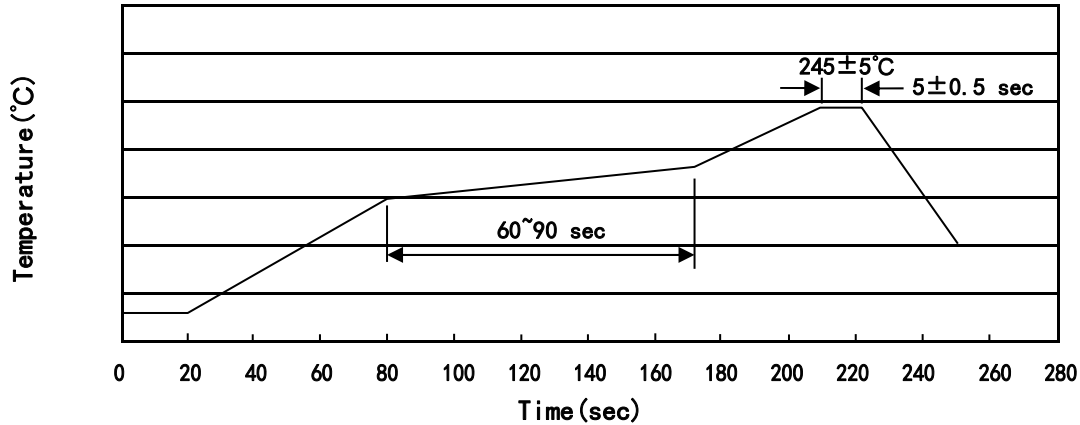
Note:

G： Halogen Free Product Code

Y4： Product Type Code

B： h_{FE} Classifications Symbol Code

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150 ~ 180°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | Units/Reel 只/卷盘 | Reels/Inner Box 卷盘/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Reel | Inner Box 盒 | Outer Box 箱 |
| SOT-23 | 3,000 | 10 | 30,000 | 6 | 180,000 | 7" ×8 | 180×120×180 | 390×385×205 |

使用说明 / Notices