

描述 / Descriptions

SOT-23 塑封封装 硅 PNP 数字三极管。Silicon PNP Digital transistor in a SOT-23 Plastic Package.

特征 / Features

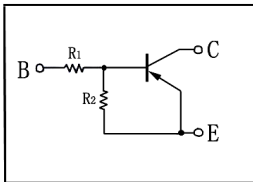
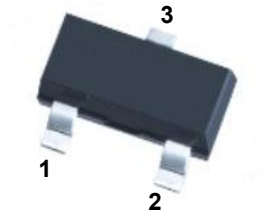
内装偏置电阻，简化线路设计，减少元件和制造流程。

With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process.

用途 / Applications

用于开关、界面电路以及驱动电路中。

Switching applications, interface circuit and driver circuit applications.

内部等效电路 / Equivalent Circuit**引脚排列 / Pinning**

PIN 1 : Base

PIN 2 : Emitter

PIN 3 : Collector

放大及印章代码 / h_{FE} Classifications & Marking

| | |
|---------|-----|
| Marking | H14 |
|---------|-----|

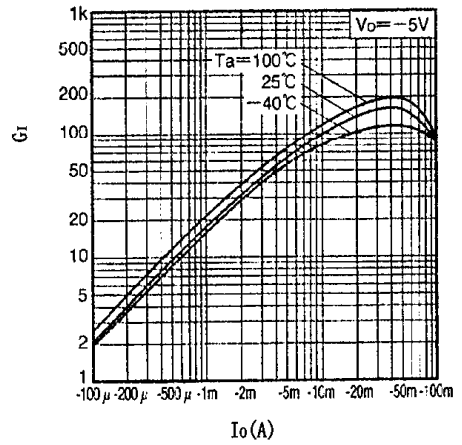
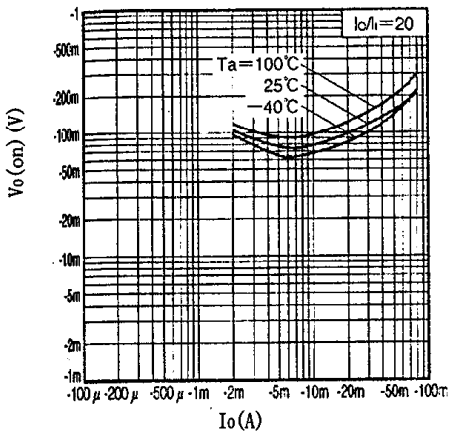
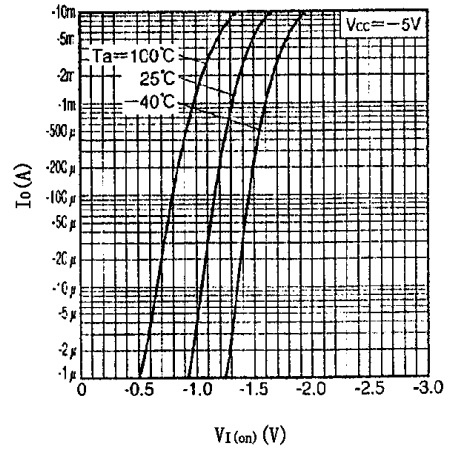
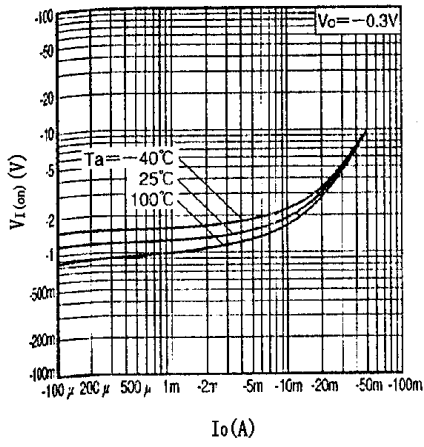
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 数值 Rating | 单位 Unit |
|---------------------------|--------------|--------------|------------|
| Output Voltage | V_{CC} | -50 | V |
| Input Voltage | V_{IN} | -40 | V |
| | | 10 | V |
| Output Current | I_C | -100 | mA |
| | I_O | -50 | mA |
| Power Dissipation | P_C | 200 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55~150 | °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 |
|------------------------|--------------|--|------------|------------|------------|------------|
| Input Voltage(OFF) | $V_{I(off)}$ | $V_{CC}=-5.0V$ $I_O=-100\mu A$ | | | -0.5 | V |
| Input Voltage(ON) | $V_{I(on)}$ | $V_O=-0.3V$ $I_O=-10mA$ | -3 | | | V |
| Output Voltage | $V_{O(on)}$ | $I_O=-10mA$ $I_I=-0.5mA$ | | | -0.3 | V |
| Input Current | I_I | $V_I=-5.0V$ | | | -0.88 | mA |
| Output Cut-off Current | $I_{O(off)}$ | $V_{CC}=-50V$ $V_I=0V$ | | | -0.5 | μA |
| DC Current Gain | G_I | $V_O=-5.0V$ $I_O=-5.0mA$ | 30 | | | |
| Transition Frequency | f_T | $V_{CE}=-10V$ $I_C=-5.0mA$ $f=100MHz$ | | 250 | | MHz |
| Resistance1 | R_1 | | 7 | 10 | 13 | K Ω |
| Resistance Ratio | R_2/R_1 | | 0.8 | 1 | 1.2 | |

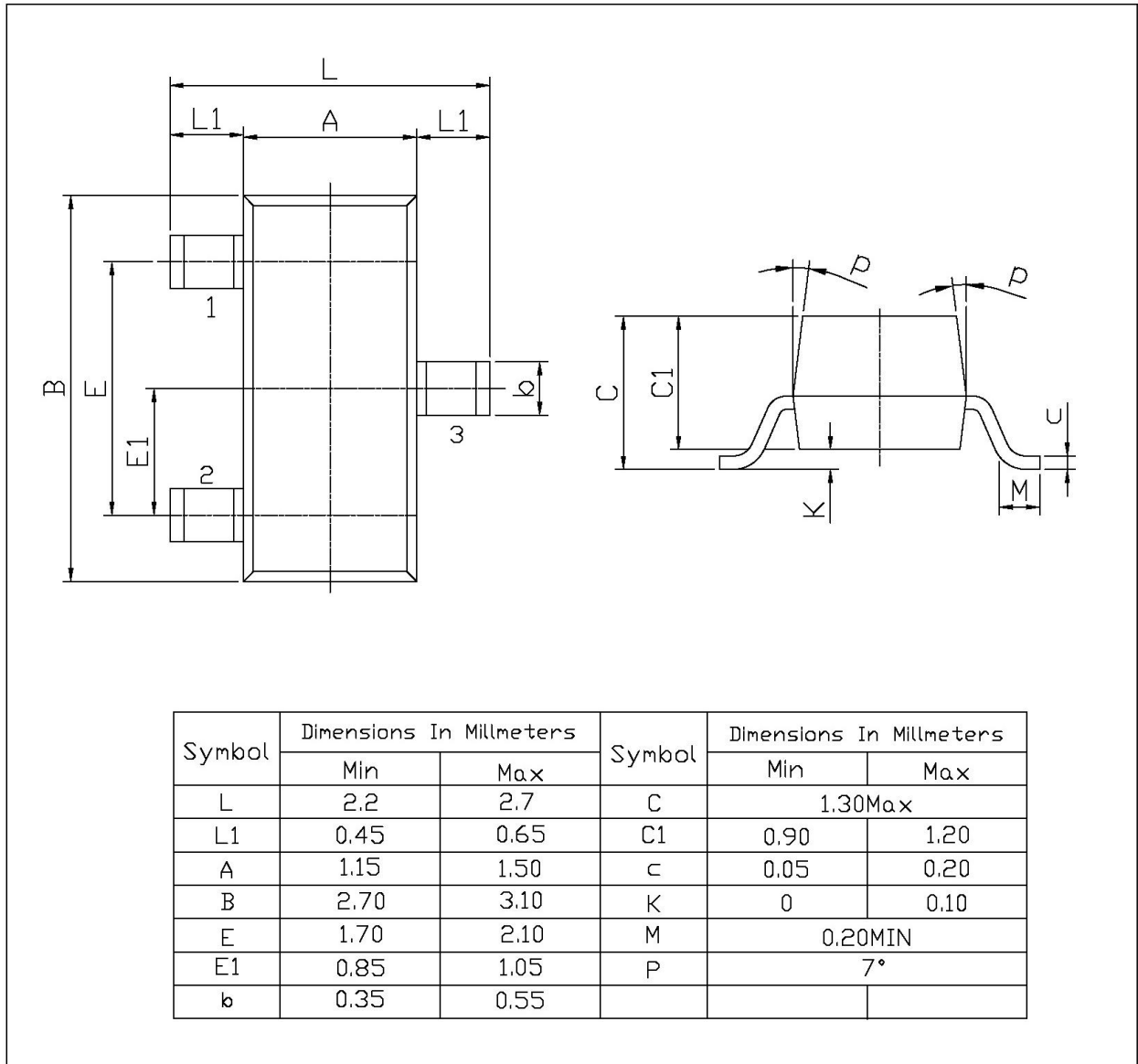
电参数曲线图 / Electrical Characteristic Curve



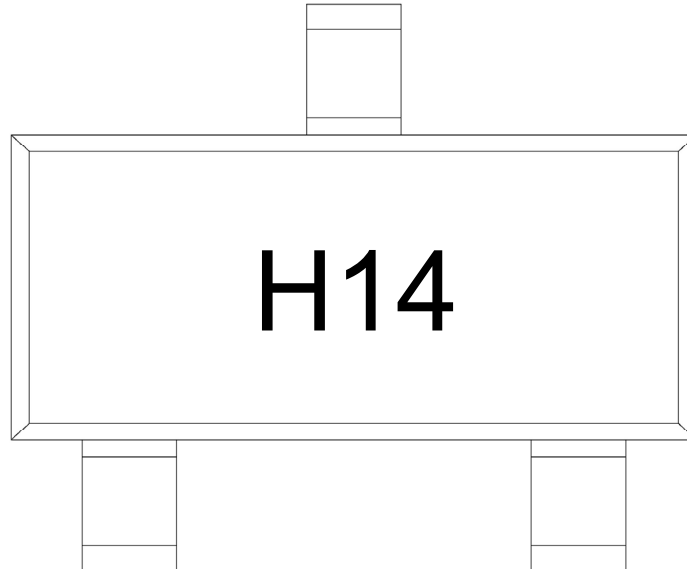
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

H： 为公司代码

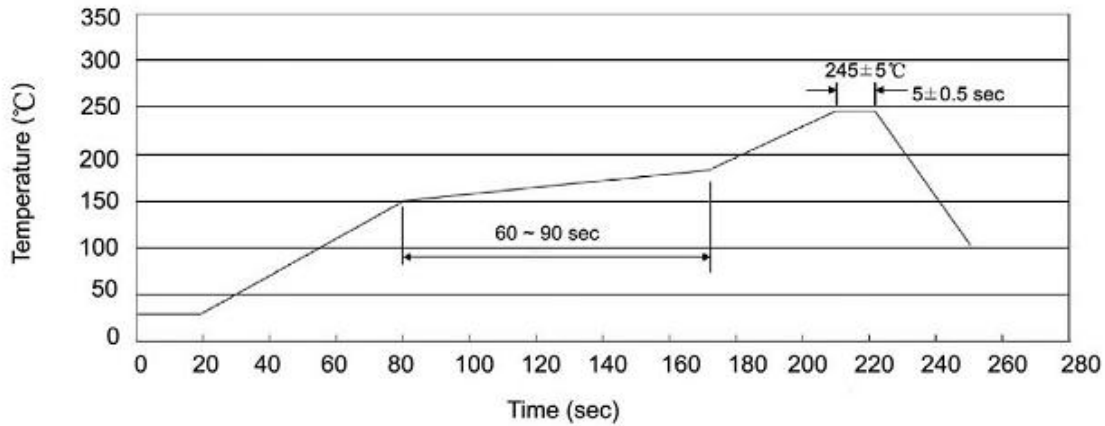
14： 为型号代码

Note:

H： Company Code

14： Product Type 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" x8 | 180×120×180 | 390×385×205 |

使用说明 / Notices