

描述 / Descriptions

TO-92 塑封封装 PNP 半导体三极管。
 Silicon PNP transistor in a TO-92 Plastic Package.

特征 / Features

低电流, 低电压。
 Low current, Low voltage.

用途 / Applications

用于一般放大。
 General purpose amplifier.

引脚排列 / Pinning


PIN1 : Collector

PIN 2 : Base

PIN 3 : Emitter

内部等效电路 / Equivalent Circuit

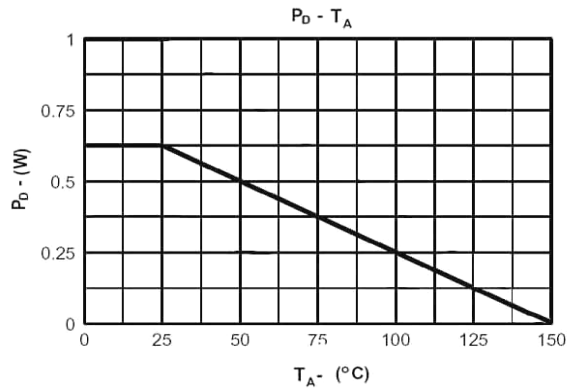
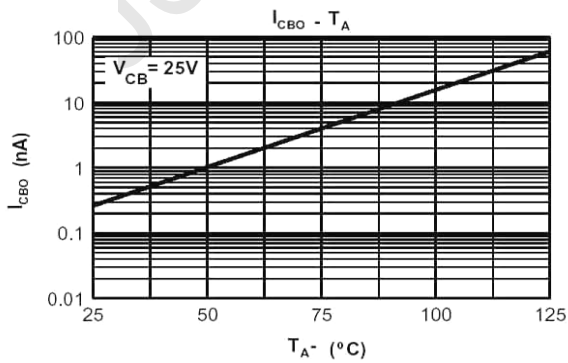
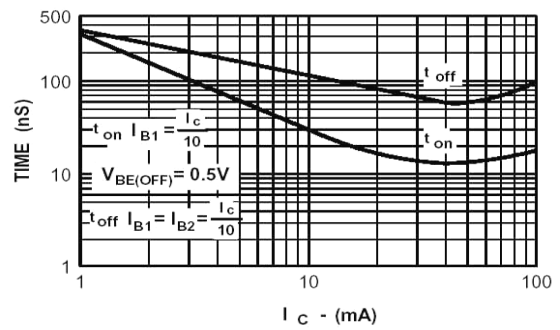
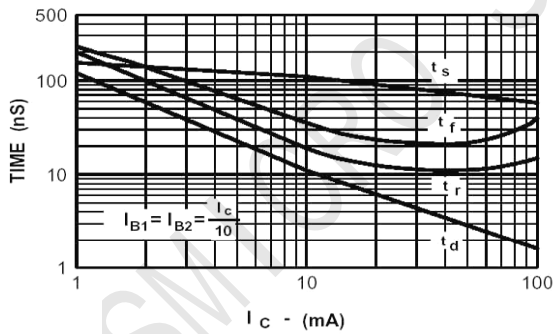
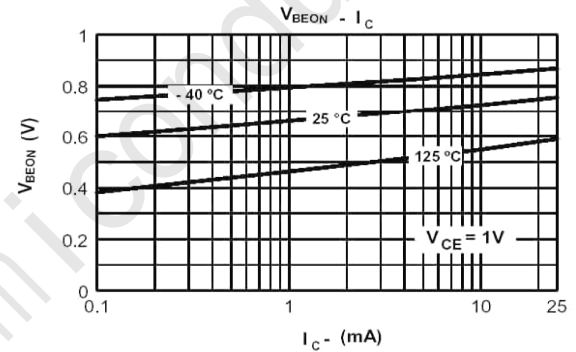
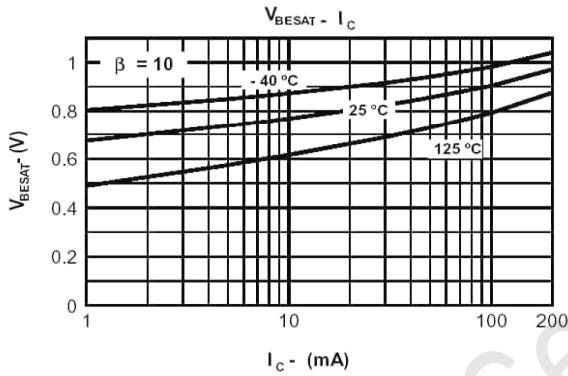
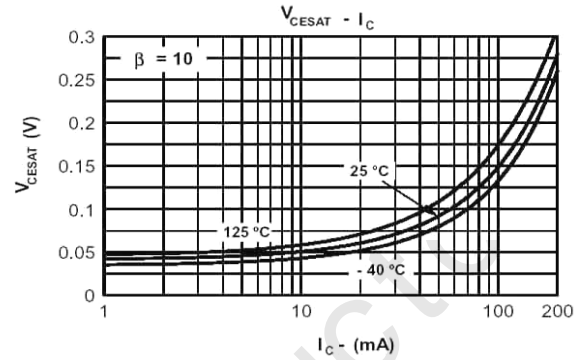
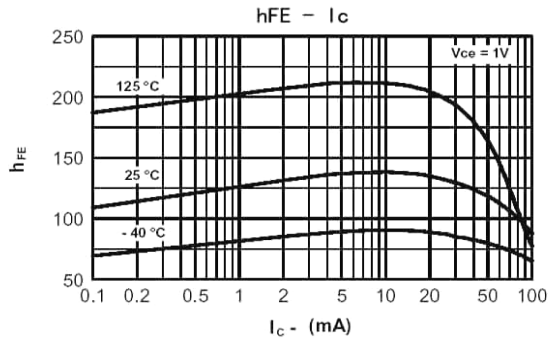
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 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} | -40 | V |
| Emitter to Base Voltage | V_{EBO} | -5.0 | V |
| Collector Current - Continuous | I_C | -200 | mA |
| Collector Power Dissipation | P_C | 625 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55~150 | °C |

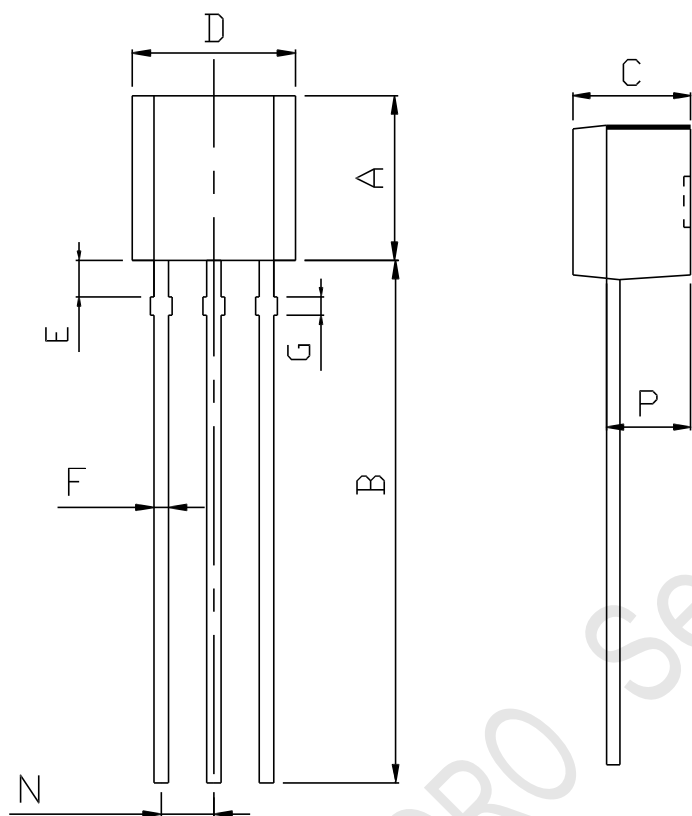
电性能参数 / Electrical Characteristics(Ta=25°C)

| 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 |
|---|---------------|--|------------|------------|------------|------------|
| Collector to Base Breakdown Voltage | V_{CBO} | $I_C=-10\mu A$ $I_E=0$ | -40 | | | V |
| Collector to Emitter Breakdown Voltage | V_{CEO} | $I_C=-1.0mA$ $I_B=0$ | -40 | | | V |
| Emitter to Base Breakdown Voltage | V_{EBO} | $I_E=-10\mu A$ $I_C=0$ | -5.0 | | | V |
| Collector Cut-Off Current | I_{CBO} | $V_{CB}=-40V$ $I_E=0$ | | | -0.1 | μA |
| Emitter Cut-Off Current | I_{EBO} | $V_{EB}=-5.0V$ $I_C=0$ | | | -0.1 | μA |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}=-1.0V$ $I_C=-10mA$ | 100 | | 300 | |
| | $h_{FE(2)}$ | $V_{CE}=-1.0V$ $I_C=-100mA$ | 30 | | | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-50mA$ $I_B=-5.0mA$ | | | -0.4 | V |
| Base to Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=-50mA$ $I_B=-5.0mA$ | | | -0.95 | V |
| Current Gain Bandwidth Product | f_T | $I_C=-10mA$ $V_{CE}=-20V$ $f=100MHz$ | 250 | | | MHz |
| Output Capacitance | C_{ob} | $V_{CB}=-5.0V$ $I_E=0$ $f=100KHz$ | | | 4.5 | pF |
| Turn On Time | T_{on} | $V_{CC}=-3.0V$ $I_C=-10mA$ $V_{BE}=-0.5V$ $I_{B1}=-1.0mA$ | | | 0.07 | μs |
| Turn Off Time | T_{off} | $V_{CC}=-3.0V$ $I_C=-10mA$ $I_{B1}=-I_{B2}=-1.0mA$ | | | 0.3 | μs |

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



| DIM | MILLIMETERS |
|-----|------------------|
| A | 4.55 ± 0.20 |
| B | 14.50 ± 0.30 |
| C | 3.54 ± 0.20 |
| D | 4.56 ± 0.20 |
| E | 1.30 ± 0.20 |
| F | 0.46 ± 0.20 |
| G | 0.50 ± 0.10 |
| H | 0.32 ± 0.10 |
| N | 1.30 ± 0.20 |
| P | 2.52 ± 0.20 |

(Units: mm)

