



晶体管
TRANSISTOR
A1013C

主要参数 MAIN CHARACTERISTICS

| | |
|------------------|--------|
| I _c | -600mA |
| V _{CEO} | -165V |
| P _c | 625mW |

产品特性 FEATURES

| | |
|--------------|--------------------------|
| 硅外延 | Epitaxial silicon |
| 高开关速度 | High switching speed |
| 与 2SC2383 互补 | Complementary to 2SC2383 |
| RoHS 产品 | RoHS product |

用途 APPLICATIONS

| | |
|----------|------------------------------------|
| 高频开关电源 | High frequency switch power supply |
| 一般功率放大电路 | Commonly power amplifier circuit |
| 高频功率变换 | High frequency power transform |

封装形式 Package



1. Emitter 2. Base 3. Collector

TO-92LS

绝对最大额定值 ABSOLUTE RATINGS (T_c=25°C)

| 项目 Parameter | 符号 Symbol | 数值 Value | 单位 Unit |
|--|------------------|-------------|------------|
| 集电极—基极直流电压 Collector- Base Voltage (I _E =0) | V _{CB0} | -190 | V |
| 集电极—发射极直流电压 Collector- Emitter Voltage (I _B =0) | V _{CEO} | -165 | V |
| 发射极—基极直流电压 Emitter-Base Voltage (I _C =0) | V _{EB0} | -6.0 | V |
| 最大集电极直流电流 Collector Current (DC) | I _c | -600 | mA |
| 最大集电极耗散功率 Total Dissipation (TO-92) | P _c | 625 | mW |
| 最高结温 Junction Temperature | T _j | 150 | °C |
| 贮存温度 Storage Temperature | T _{stg} | -55~+150 | °C |

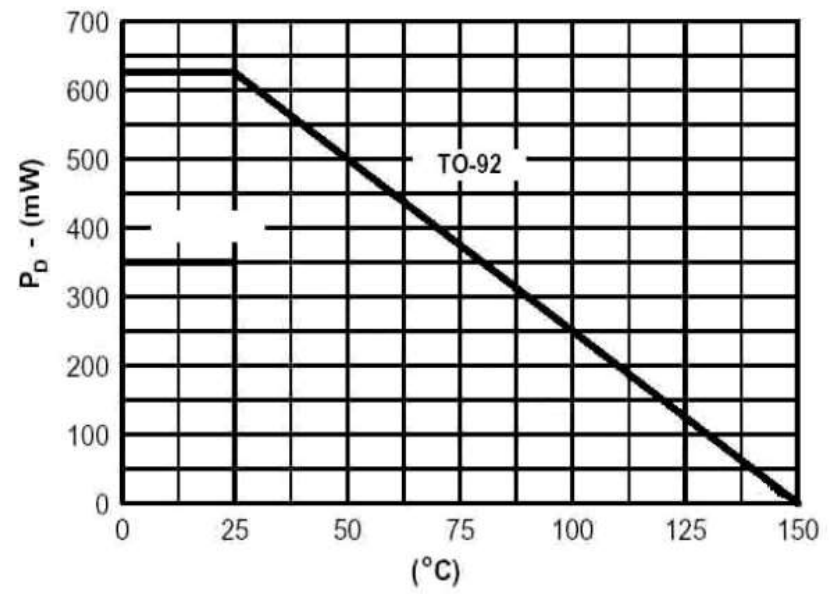
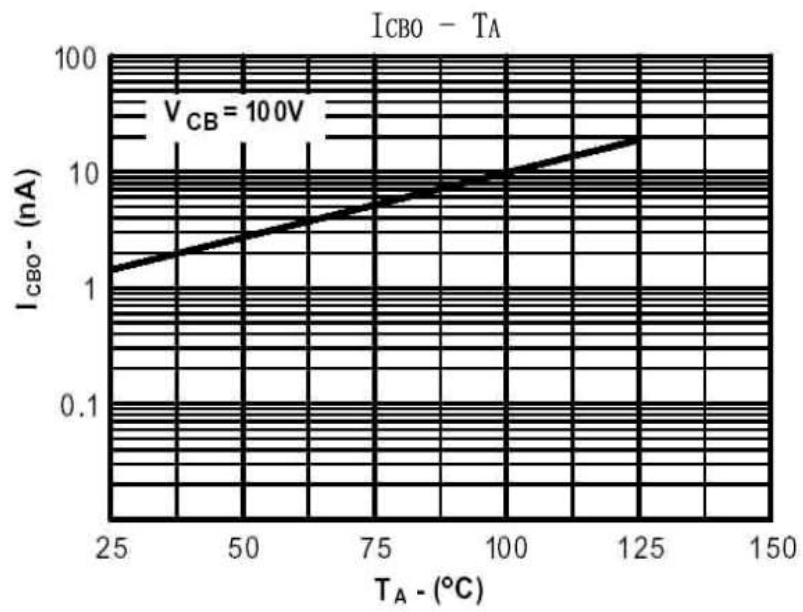
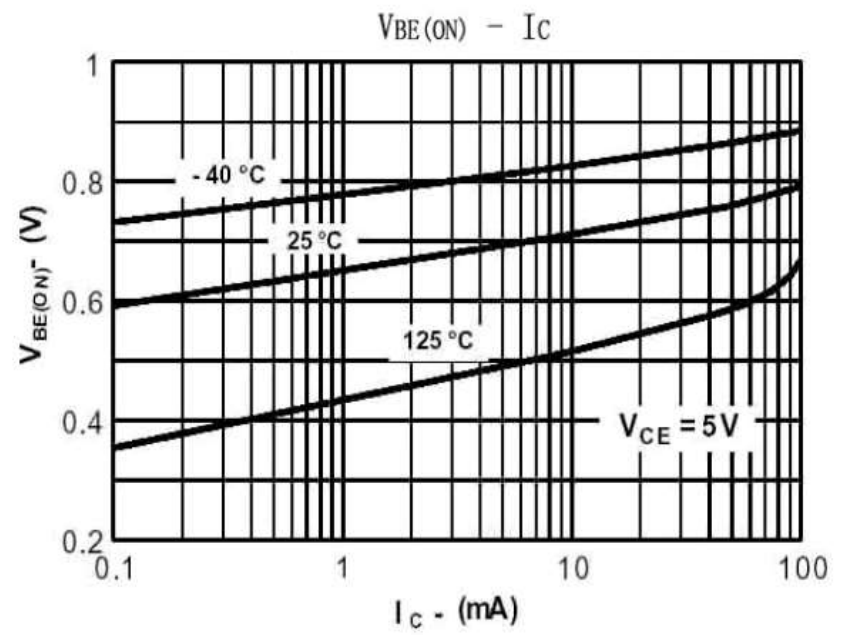
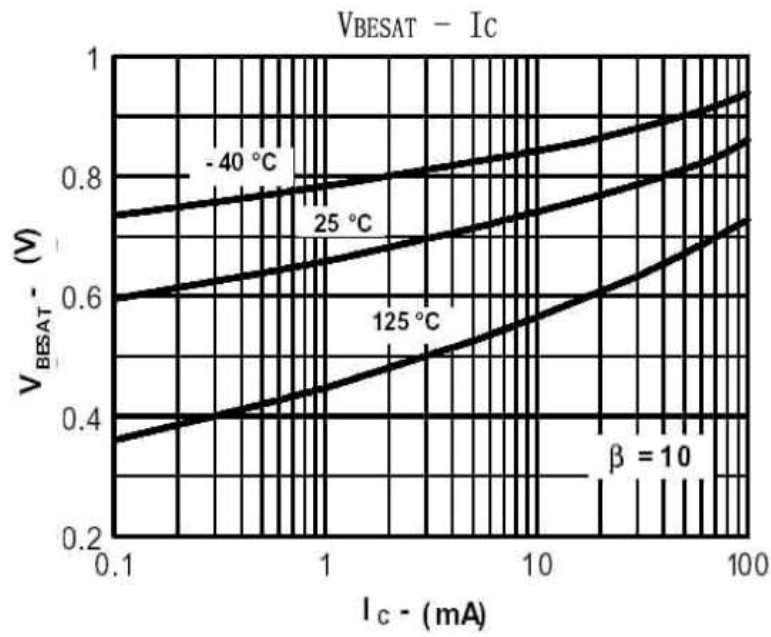
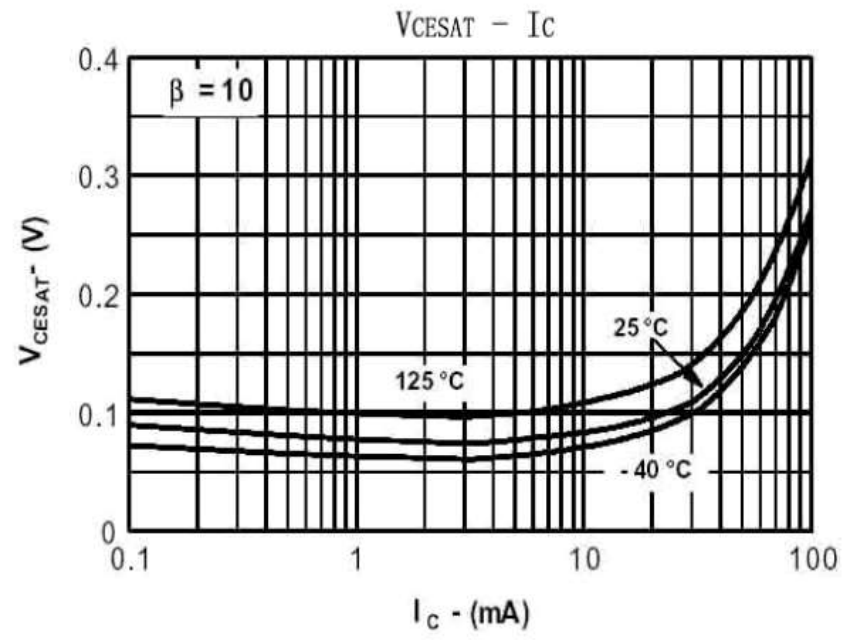
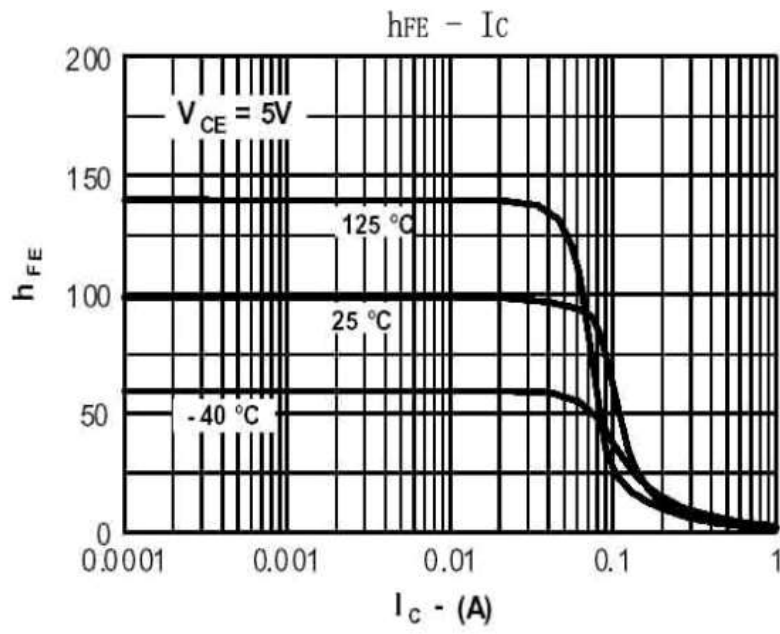
电特性 ELECTRICAL CHARACTERISTICS

| 项目 Parameter | 测试条件 Tests conditions | 最小值 (min) | 典型值 (typ) | 最大值 (max) | 单位 Unit |
|---------------|------------------------------|-----------|-----------|-----------|---------|
| $V(BR)_{CBO}$ | $I_C = -10\mu A, I_E = 0$ | -190 | - | - | V |
| $V(BR)_{CEO}$ | $I_C = -1.0mA, I_B = 0$ | -165 | - | - | V |
| $V(BR)_{EBO}$ | $I_E = -10\mu A, I_C = 0$ | -6.0 | - | - | V |
| I_{CBO} | $V_{CB} = -120V, I_E = 0$ | - | - | -50 | nA |
| I_{EBO} | $V_{BE} = -5V, I_C = 0$ | - | - | -50 | nA |
| $h_{FE} (1)$ | $V_{CE} = -5V, I_C = -10mA$ | 100 | - | 300 | - |
| $h_{FE} (2)$ | $V_{CE} = -5V, I_C = -50mA$ | 80 | - | - | - |
| $V_{CE(sat)}$ | $I_C = -10mA, I_B = -1.0mA$ | - | - | -0.2 | V |
| $V_{CE(sat)}$ | $I_C = -50mA, I_B = -5.0mA$ | - | - | -0.5 | V |
| $V_{BE(sat)}$ | $I_C = -10mA, I_B = -1.0mA$ | - | - | -1 | V |
| f_T | $V_{CE} = -10V, I_C = -10mA$ | 50 | 80 | - | MHz |

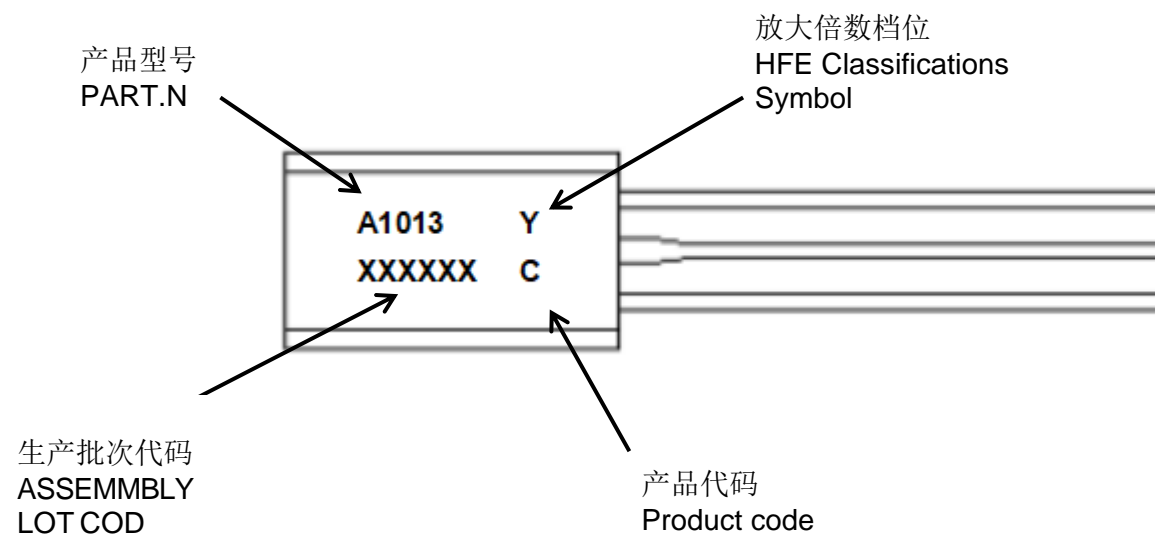
放大倍数 h_{FE} Classifications

| h_{FE} Classifications Symbol | R | O | Y |
|---------------------------------|--------|---------|---------|
| h_{FE} Range | 60-120 | 100-200 | 160-300 |

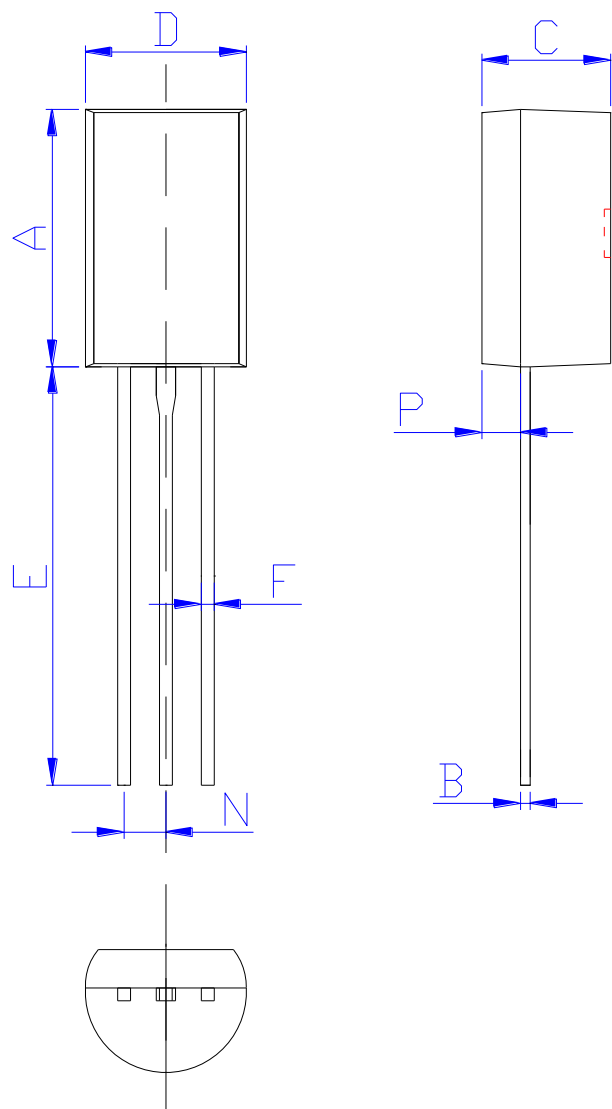
典型特性曲线 Electrical Characteristics



印记 Marking:



外形尺寸: Package Dimension



| DIM | MILLIMETERS |
|-----|------------------|
| A | 8.00 ± 0.30 |
| B | 0.40 ± 0.25 |
| C | 3.80 ± 0.30 |
| D | 4.90 ± 0.30 |
| E | 13.50 ± 0.30 |
| F | 0.50 ± 0.15 |
| N | 1.22 ± 0.25 |
| P | 1.40 ± 0.30 |

(Units: mm)