



晶体管
TRANSISTOR
C9013B

主要参数 MAIN CHARACTERISTICS

| | |
|------------------|-------|
| I _c | 500mA |
| V _{CEO} | 20V |
| V _{CB0} | 40V |
| P _c | 625mW |

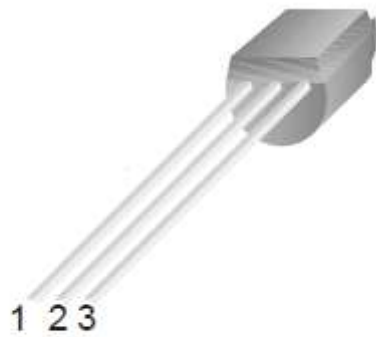
产品特性 FEATURES

| | |
|------------|------------------------|
| 硅外延 | Epitaxial silicon |
| 高开关速度 | High switching speed |
| 与 C9012 互补 | Complementary to C9012 |
| 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-92

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} | 40 | V |
| 集电极—发射极直流电压 Collector- Emitter Voltage (I _B =0) | V _{CEO} | 20 | V |
| 发射极—基极直流电压 Emitter-Base Voltage (I _C =0) | V _{EBO} | 5 | V |
| 最大集电极直流电流 Collector Current (DC) | I _c | 500 | 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 |

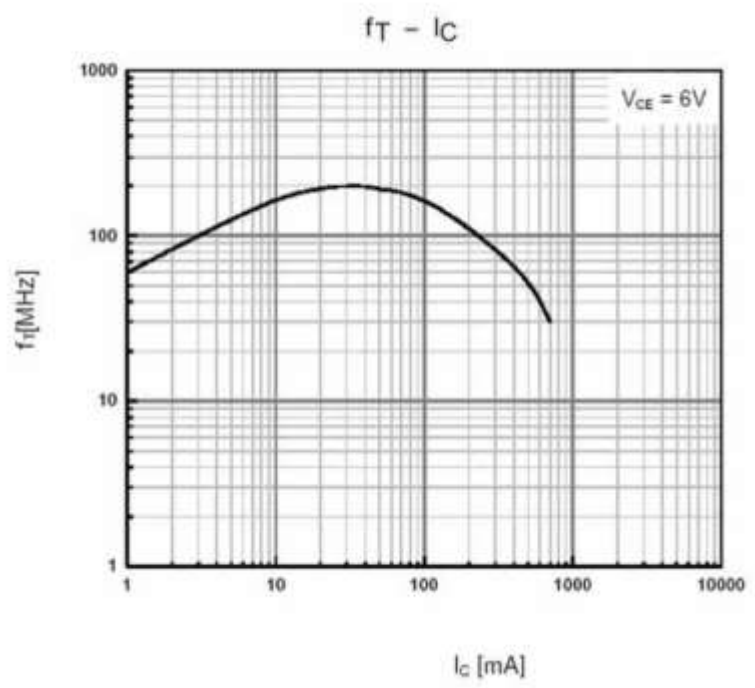
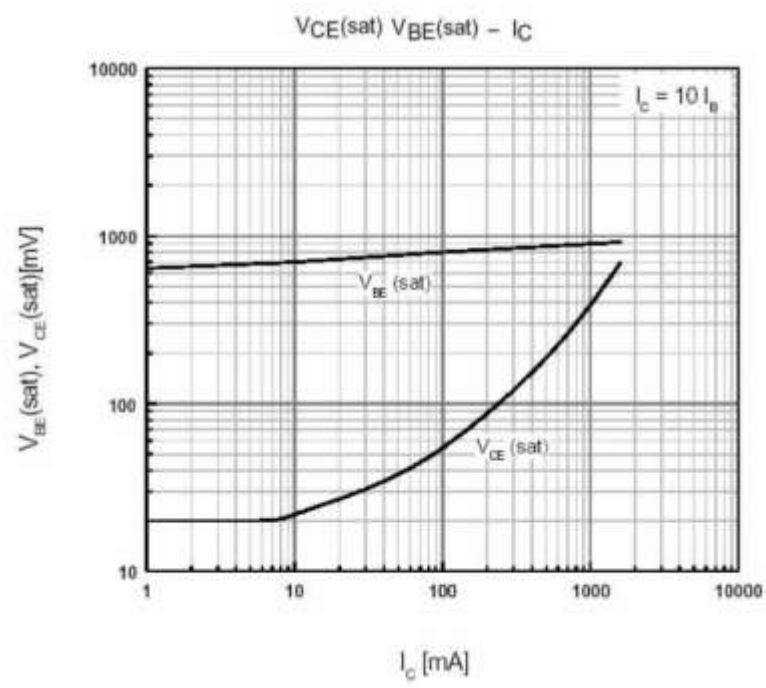
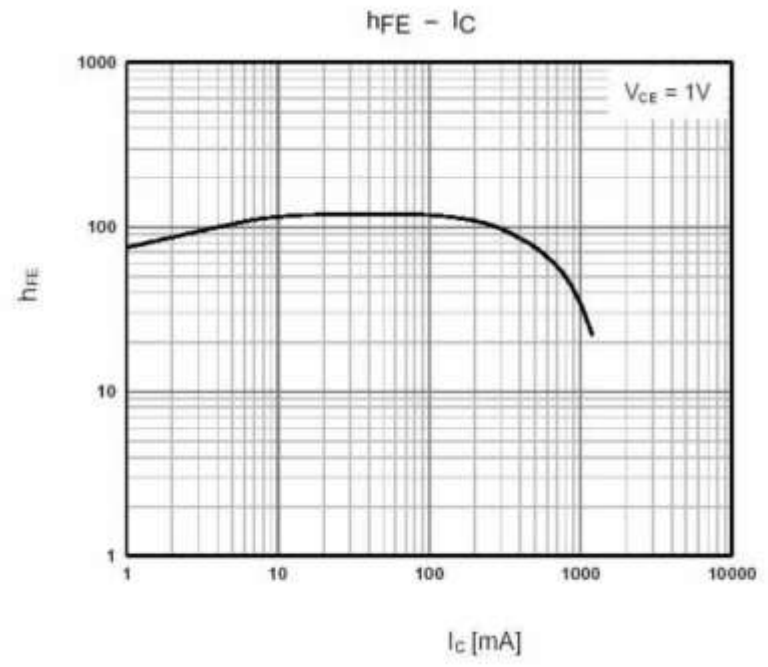
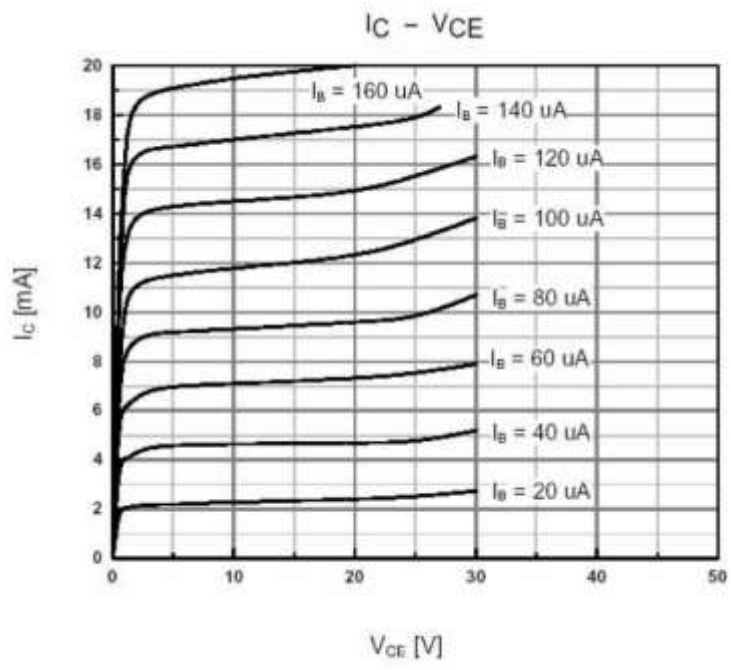
电特性 ELECTRICAL CHARACTERISTICS

| 项目 Parameter | 测试条件 Tests conditions | 最小值 (min) | 典型值 (typ) | 最大值 (max) | 单位 Unit |
|---------------|------------------------|-----------|-----------|-----------|---------|
| $V(BR)_{CBO}$ | $I_C=0.1mA, I_E=0$ | 40 | - | - | V |
| $V(BR)_{CEO}$ | $I_C=1mA, I_B=0$ | 20 | - | - | V |
| $V(BR)_{EBO}$ | $I_E=0.1mA, I_C=0$ | 5 | - | - | V |
| I_{CBO} | $V_{CB}=25V, I_E=0$ | - | - | 0.1 | μA |
| I_{EBO} | $V_{EB}=3V, I_C=0$ | - | - | 0.1 | μA |
| $H_{fe}(1)$ | $V_{CE}=1V, I_C=50mA$ | 64 | - | 276 | - |
| $H_{fe}(2)$ | $V_{CE}=1V, I_C=500mA$ | 40 | - | - | - |
| $V_{CE(sat)}$ | $I_C=500mA, I_B=50mA$ | - | - | 0.6 | V |
| $V_{BE(sat)}$ | $I_C=500mA, I_B=50mA$ | - | - | 1.2 | V |

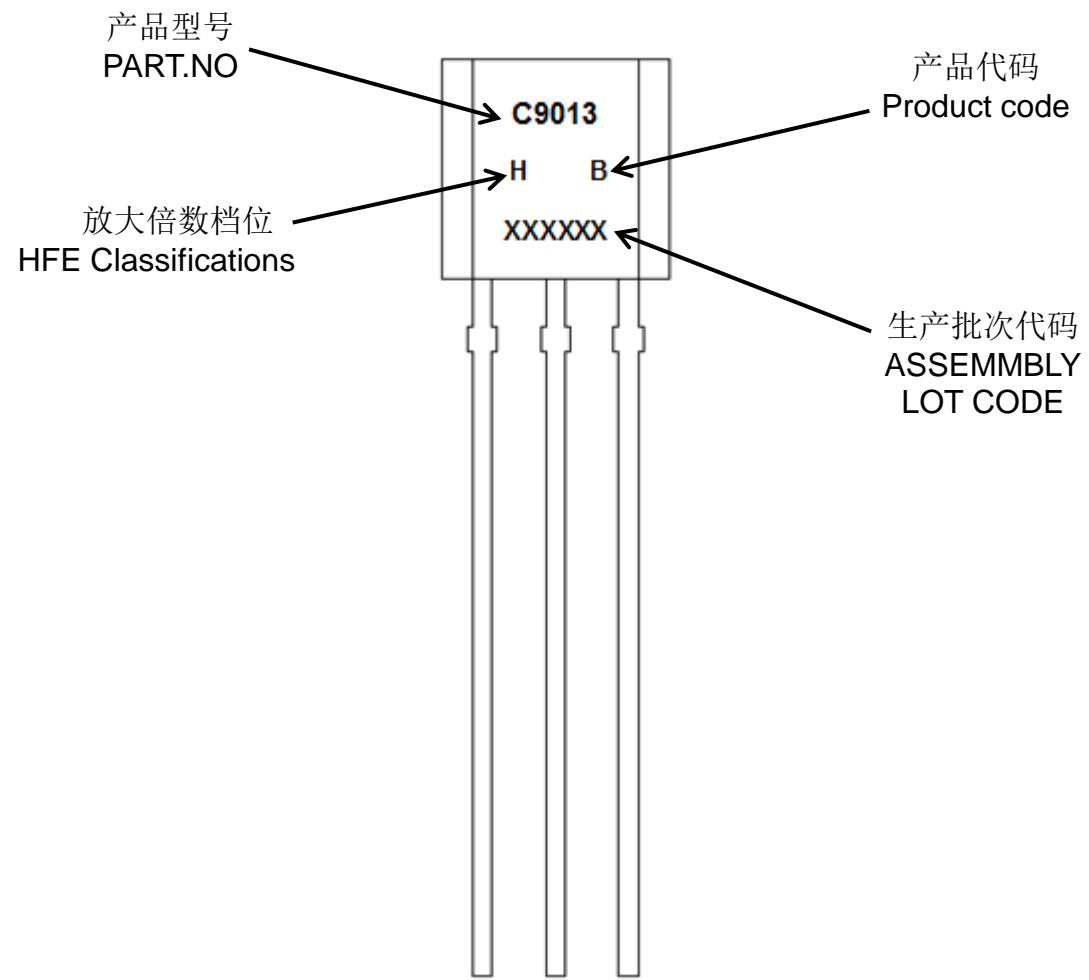
放大倍数hFE Classifications

| hFE Classifications | D | E | F | G | H | I |
|---------------------|-------|--------|--------|---------|---------|---------|
| hFE Range | 64-91 | 78-112 | 96-135 | 112-166 | 120-202 | 188-276 |

典型特性曲线 Electrical Characteristics

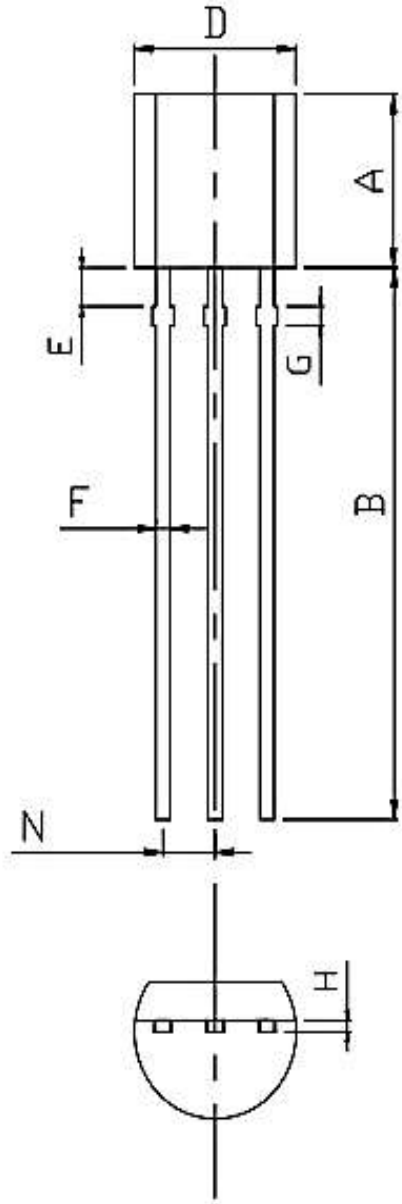


印记 Marking:



外形尺寸: Package Dimension

T0-92



| 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 |

Unit : (mm)