



晶体管  
TRANSISTOR  
C9013B

### 主要参数 MAIN CHARACTERISTICS

|                  |       |
|------------------|-------|
| I <sub>c</sub>   | 500mA |
| V <sub>CBO</sub> | 20V   |
| V <sub>CBO</sub> | 40V   |
| P <sub>c</sub>   | 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 ( $T_c=25^\circ\text{C}$ )

| 项目<br><b>Parameter</b>                           | 符号<br><b>Symbol</b> | 数值<br><b>Value</b> | 单位<br><b>Unit</b> |
|--|---------------------|--------------------|-------------------|
| 集电极—基极直流电压<br>Collector- Base Voltage (IE=0)     | V <sub>CBO</sub>    | 40                 | V                 |
| 集电极—发射极直流电压<br>Collector- Emitter Voltage (IB=0) | V <sub>CEO</sub>    | 20                 | V                 |
| 发射极—基极直流电压<br>Emitter-Base Voltage (IC=0)        | V <sub>EBO</sub>    | 5                  | V                 |
| 最大集电极直流电流<br>Collector Current (DC)              | I <sub>c</sub>      | 500                | mA                |
| 最大集电极耗散功率<br>Total Dissipation (TO-92)           | P <sub>c</sub>      | 625                | mW                |
| 最高结温<br>Junction Temperature                     | T <sub>j</sub>      | 150                | °C                |
| 贮存温度<br>Storage Temperature                      | T <sub>stg</sub>    | -55~+150           | °C                |

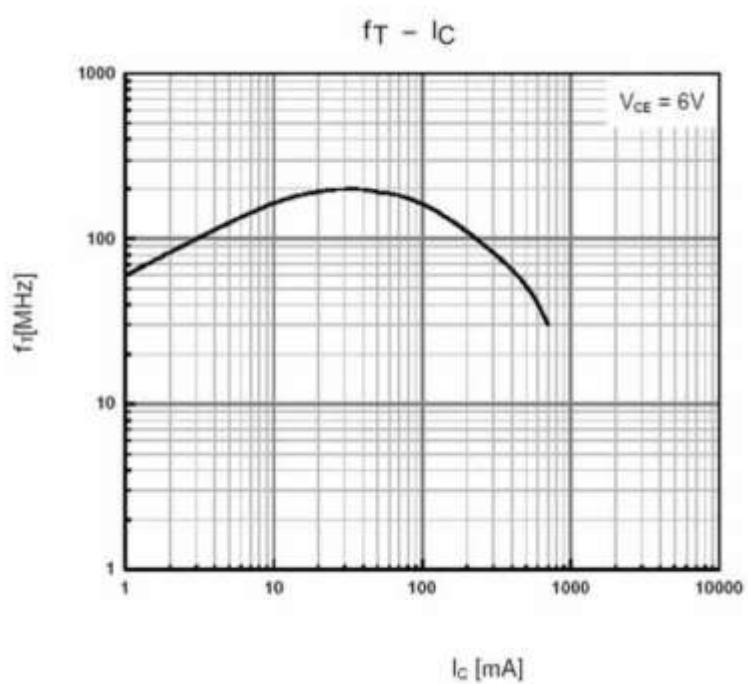
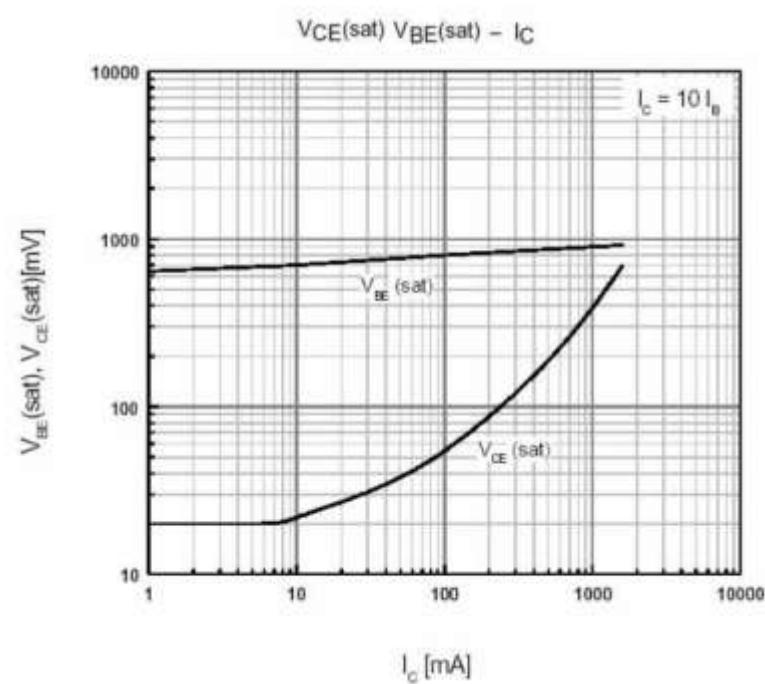
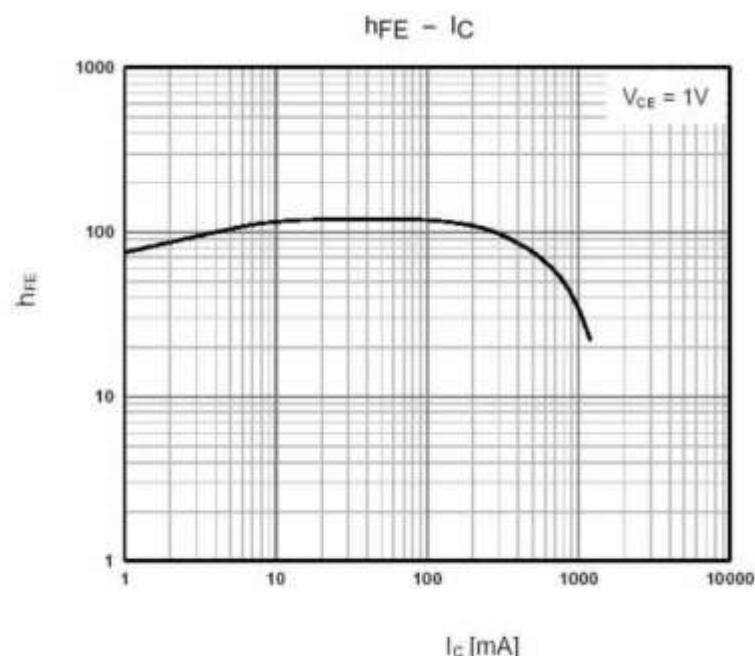
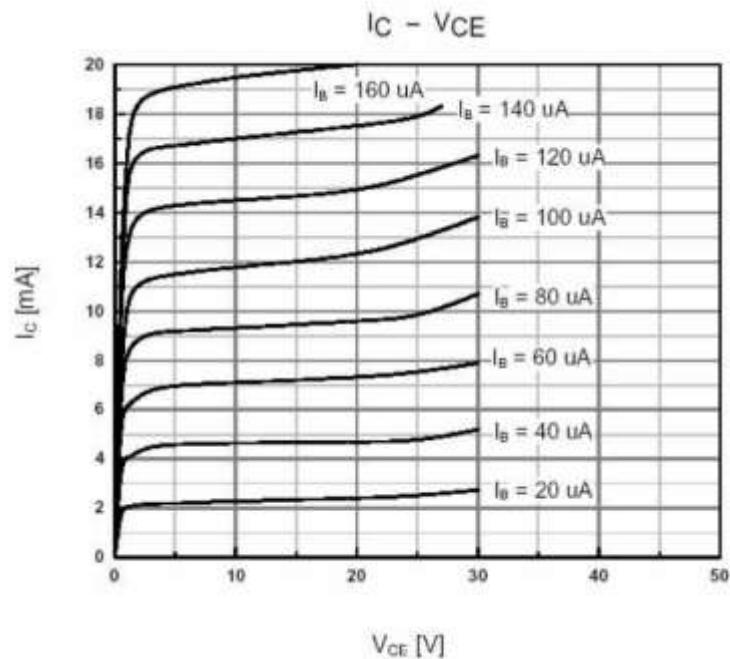
## 电特性 ELECTRICAL CHARACTERISTICS

| 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) <sub>CBO</sub> | I <sub>c</sub> =0.1mA I <sub>E</sub> =0     | 40        | -         | -         | V       |
| V(BR) <sub>CEO</sub> | I <sub>c</sub> =1mA, I <sub>B</sub> =0      | 20        | -         | -         | V       |
| V(BR) <sub>EBO</sub> | I <sub>E</sub> =0.1mA, I <sub>c</sub> =0    | 5         | -         | -         | V       |
| I <sub>CBO</sub>     | V <sub>CB</sub> =25V, I <sub>E</sub> =0     | -         | -         | 0.1       | μA      |
| I <sub>EBO</sub>     | V <sub>EB</sub> =3V, I <sub>c</sub> =0      | -         | -         | 0.1       | μA      |
| H <sub>fe</sub> (1)  | V <sub>CE</sub> =1V, I <sub>c</sub> =50mA   | 64        | -         | 276       | -       |
| H <sub>fe</sub> (2)  | V <sub>CE</sub> =1V, I <sub>c</sub> =500mA  | 40        | -         | -         | -       |
| V <sub>CE(sat)</sub> | I <sub>c</sub> =500mA, I <sub>B</sub> =50mA | -         | -         | 0.6       | V       |
| V <sub>BE(sat)</sub> | I <sub>c</sub> =500mA, I <sub>B</sub> =50mA | -         | -         | 1.2       | V       |

放大倍数hFE Classifications

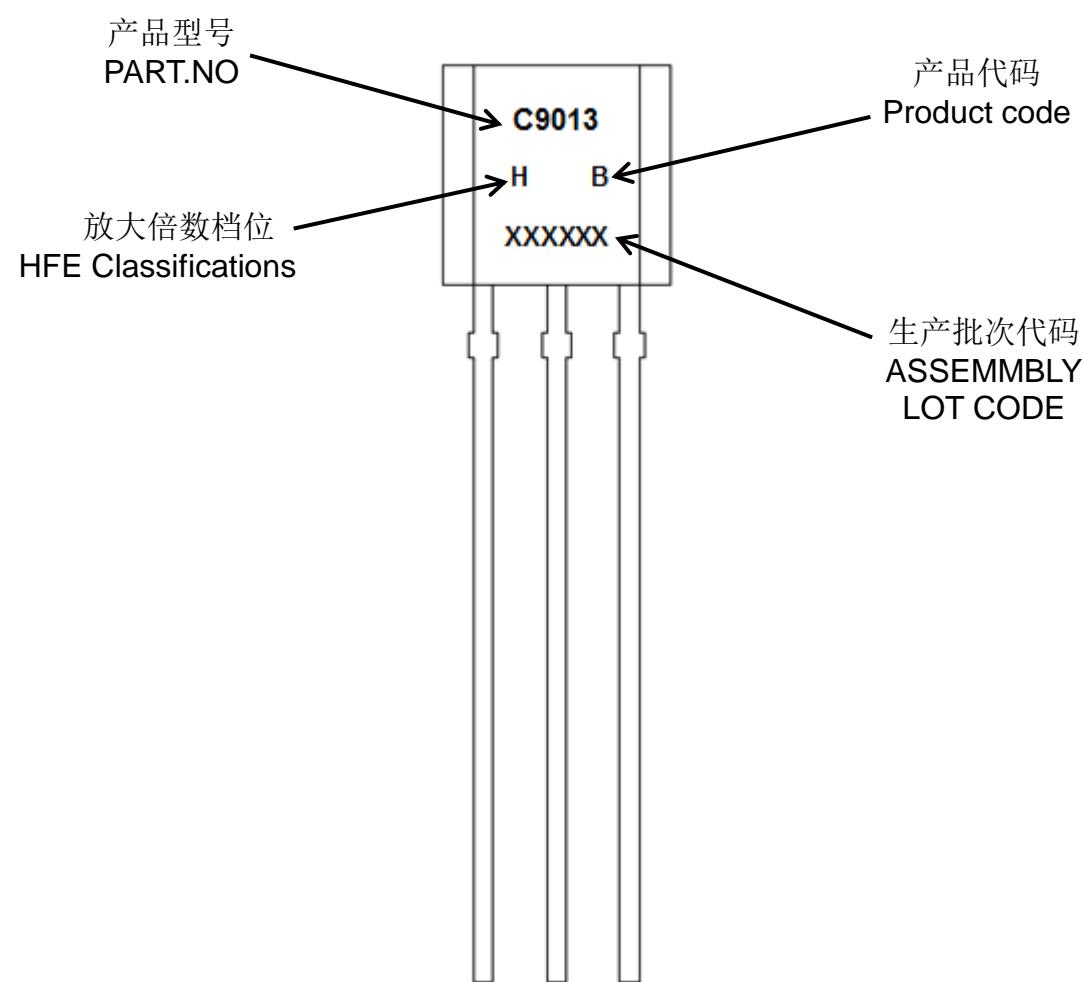
| hFE Classifications | D     | E      | F      | G       | H       | I       |
|---------------------|-------|--------|--------|---------|---------|---------|
| hFE Range           | 64-91 | 78-112 | 96-135 | 112-166 | 120-202 | 188-276 |

## 典型特性曲线 Electrical Characteristics



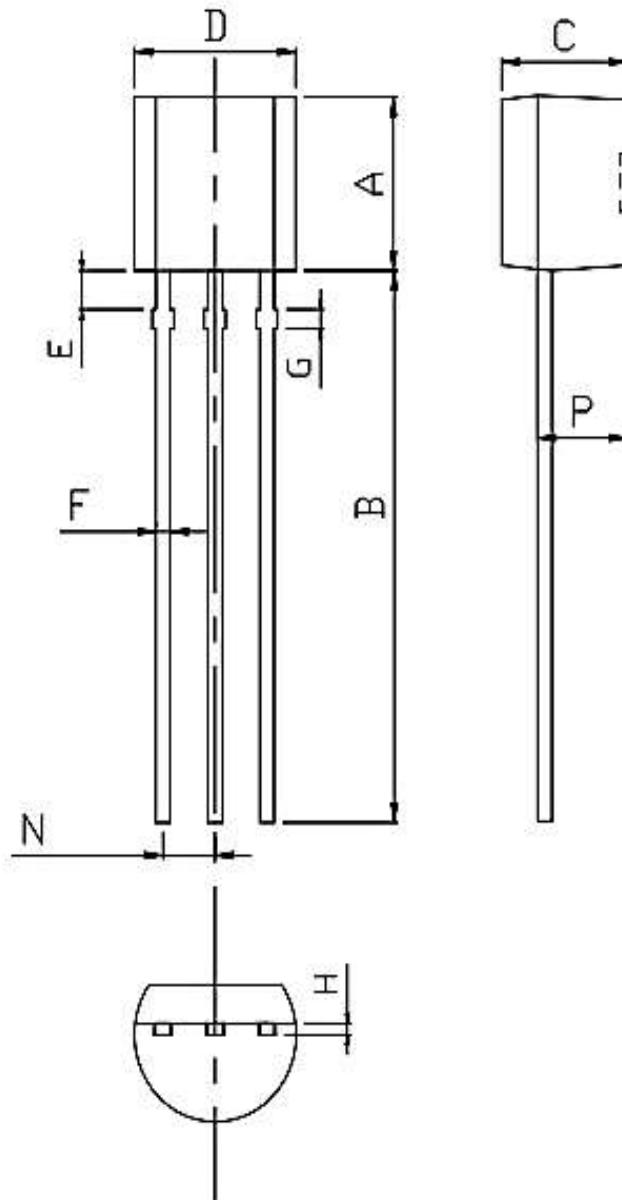
---

## 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)

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for Bipolar Transistors - BJT category:***

***Click to view products by FeiHong manufacturer:***

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T\)](#)  
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)  
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-TL-H](#)  
[2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)  
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)  
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)