



晶体管 TRANSISTOR J13007-1A

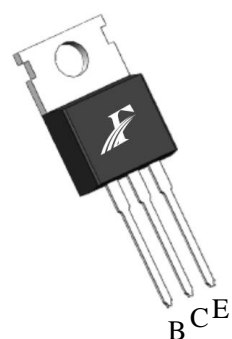
主要参数 MAIN CHARACTERISTICS

| | |
|-----------|------|
| I_c | 8A |
| V_{CB0} | 700V |
| V_{CE0} | 400V |
| P_c | 80W |

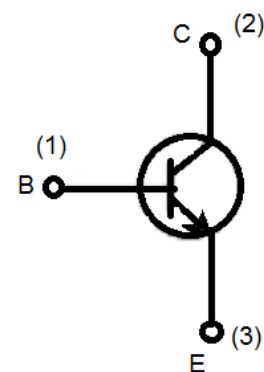
用途 APPLICATIONS

| | |
|----------|---------------------------------------|
| 节能灯 | Energy-saving light |
| 电子镇流器 | Electronic ballasts |
| 高频开关电源 | High frequency switching power supply |
| 高频功率变换 | High frequency power transform |
| 一般功率放大电路 | Commonly power amplifier circuit |

封装形式 Package



TO-220



绝对最大额定值 ABSOLUTE RATINGS ($T_c=25^\circ\text{C}$)

| 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} | 700 | V |
| 集电极—发射极直流电压 Collector- Emitter Voltage ($I_B=0$) | V_{CE0} | 400 | V |
| 发射极—基极直流电压 Emitter-Base Voltage ($I_C=0$) | V_{EB0} | 9 | V |
| 最大集电极直流电流 Collector Current (DC) | I_c | 8 | A |
| 最大集电极耗散功率 Total Dissipation (TO-92) | P_c | 80 | W |
| 最高结温 Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| 贮存温度 Storage Temperature | T_{stg} | -55~+150 | $^\circ\text{C}$ |

热特性 THERMAL CHARACTERISTIC

| 项目 Parameter | 符号 Symbol | 最小值 (min) | 最大值 (max) | 单位 Unit |
|--|---------------|--------------|--------------|--------------------|
| 结到环境的热阻 Thermal Resistance Junction Ambient | $R_{th(j-a)}$ | - | 125 | $^\circ\text{C/W}$ |

电特性 ELECTRICAL CHARACTERISTICS

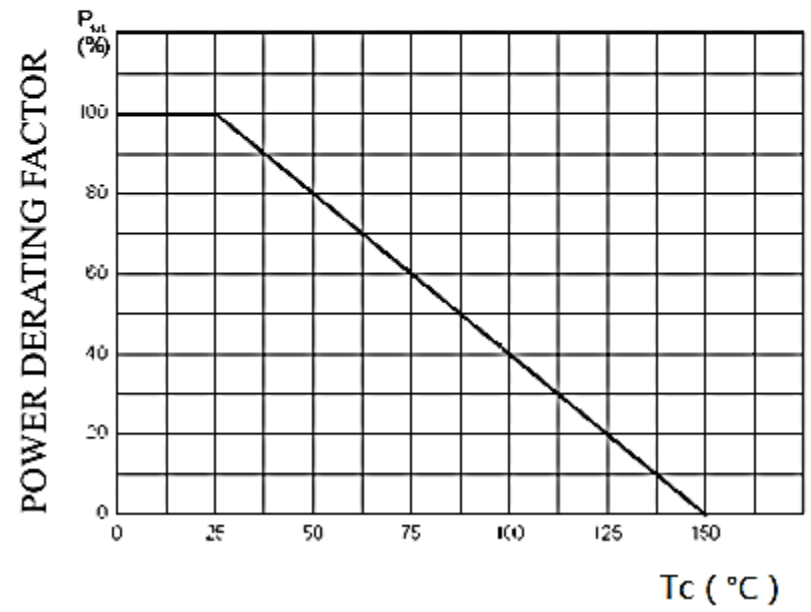
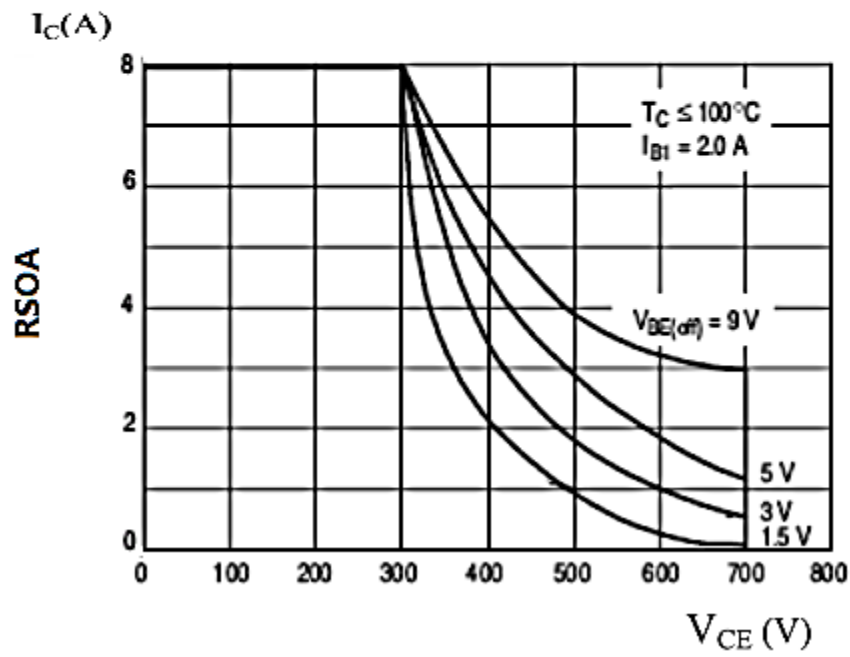
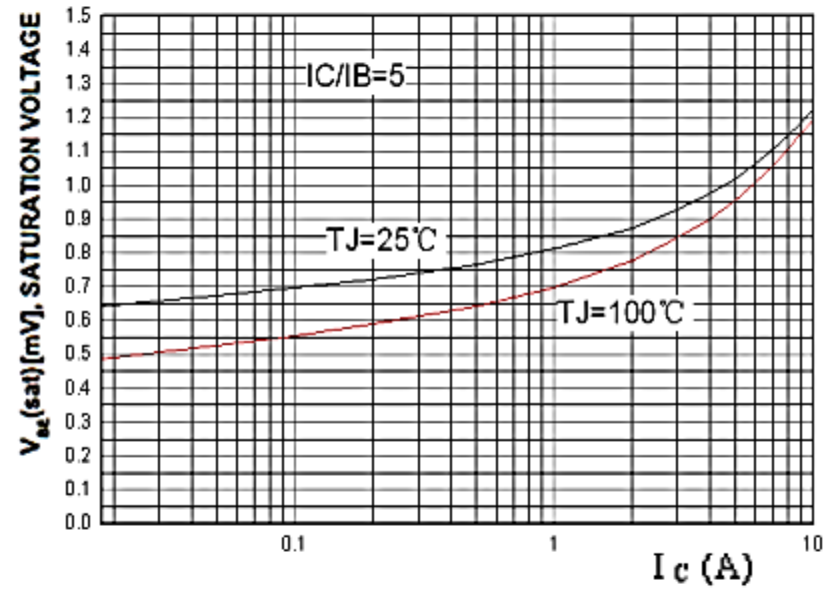
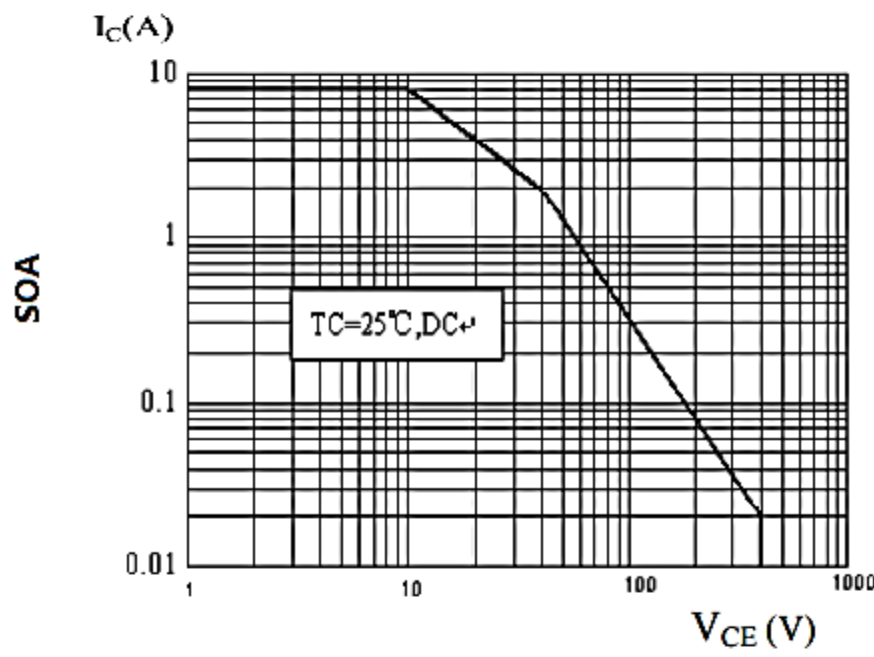
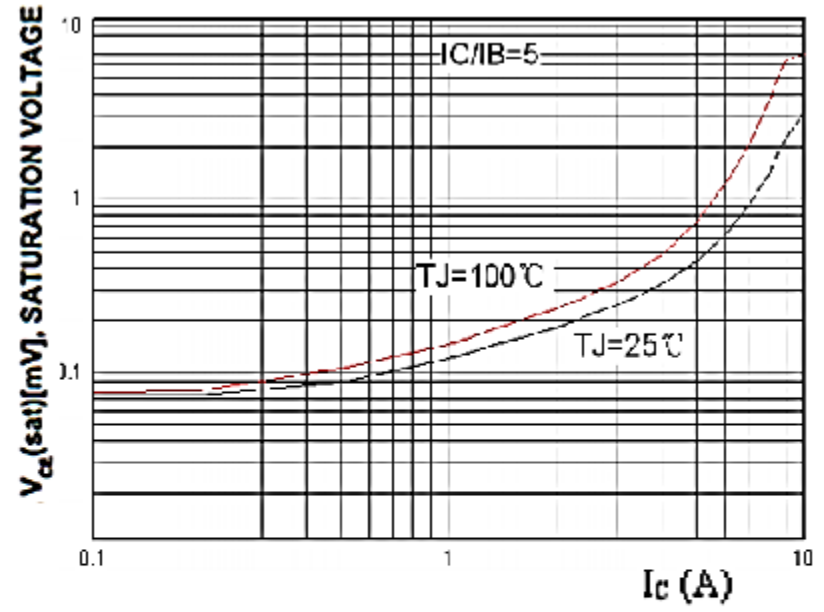
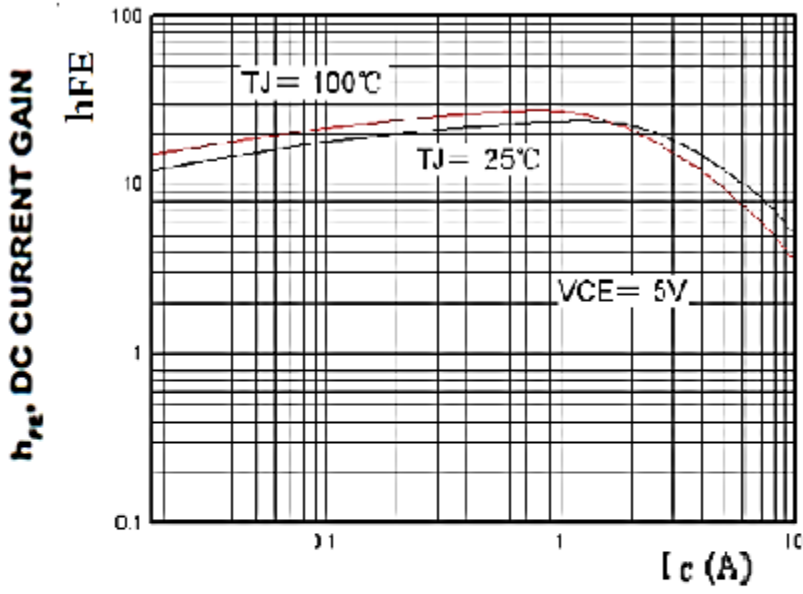
| 项目 Parameter | 测试条件 Tests conditions | 最小值 (min) | 典型值 (typ) | 最大值 (max) | 单位 Unit |
|----------------------|--------------------------|--------------|--------------|--------------|------------|
| V(BR) _{CBO} | IC=100uA, IE=0 | 700 | - | - | V |
| V(BR) _{CEO} | IC=10mA, IB=0 | 400 | | - | V |
| V(BR) _{EBO} | IE=1mA, IC=0 | 9 | - | - | V |
| ICEO | VCE=400V, IE=0 | - | - | 10 | uA |
| IEBO | VEB=9V, IC=0 | - | - | 1 | uA |
| ICBO | VCB=700V, IE=0 | | | 1 | uA |
| hFE(1) | VCE =5V, IC=2A | 15 | - | 35 | |
| hFE(2) | VCE =5V, IC=5A | 5 | - | - | |
| VCE(sat) | IC=5A, IB=1A | - | - | 1.0 | V |
| ts | IC=0.5A | 2 | | 6 | us |
| f _T | VCE=10V, Ic=0.5A | 4 | | | MHz |

放大倍数h_{FE} Classifications

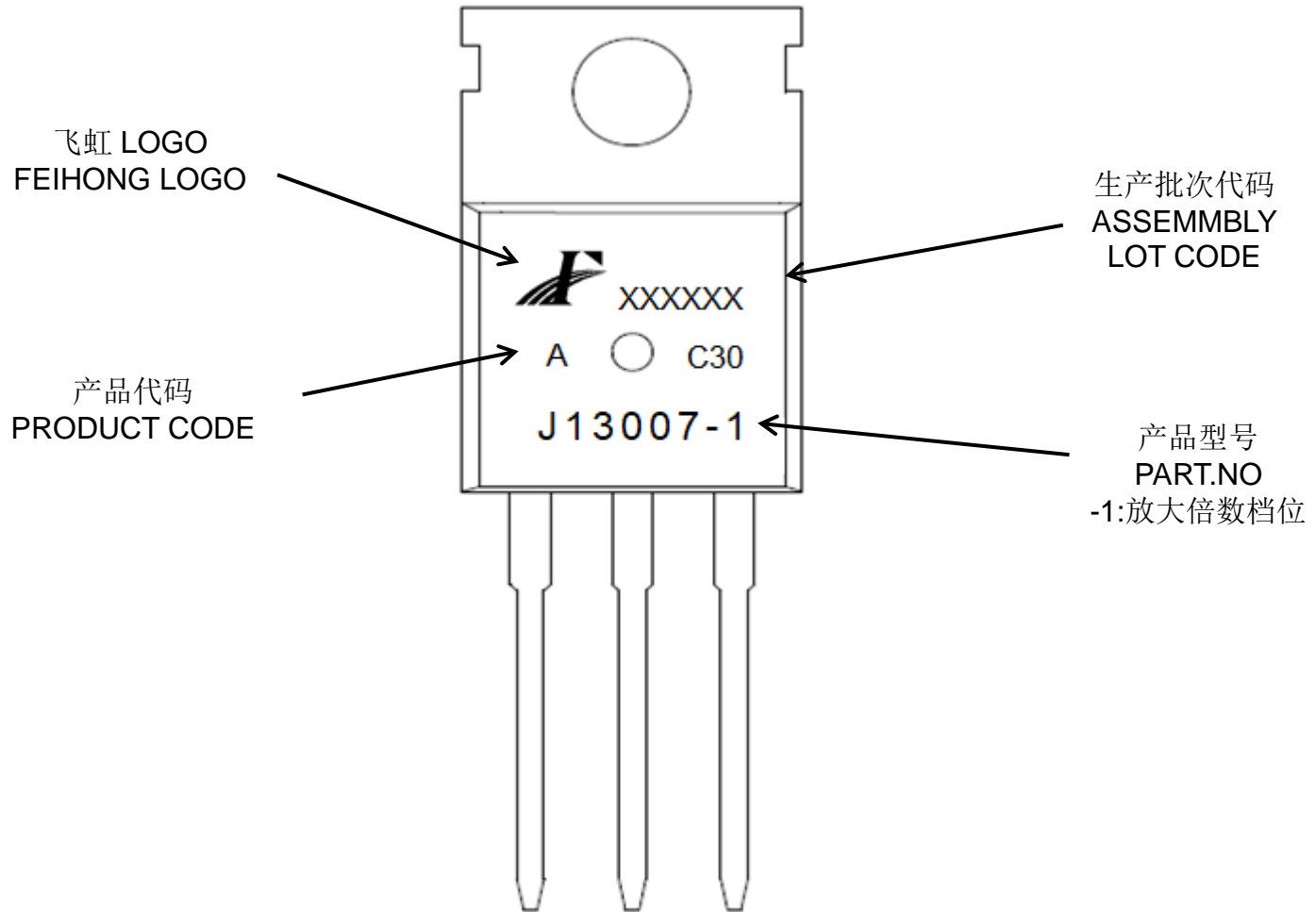
| Classifications | H1 | H2 |
|-----------------|-------|-------|
| hFE (1) | 15-25 | 25-35 |

特性曲线

Typical Performance Characteristics



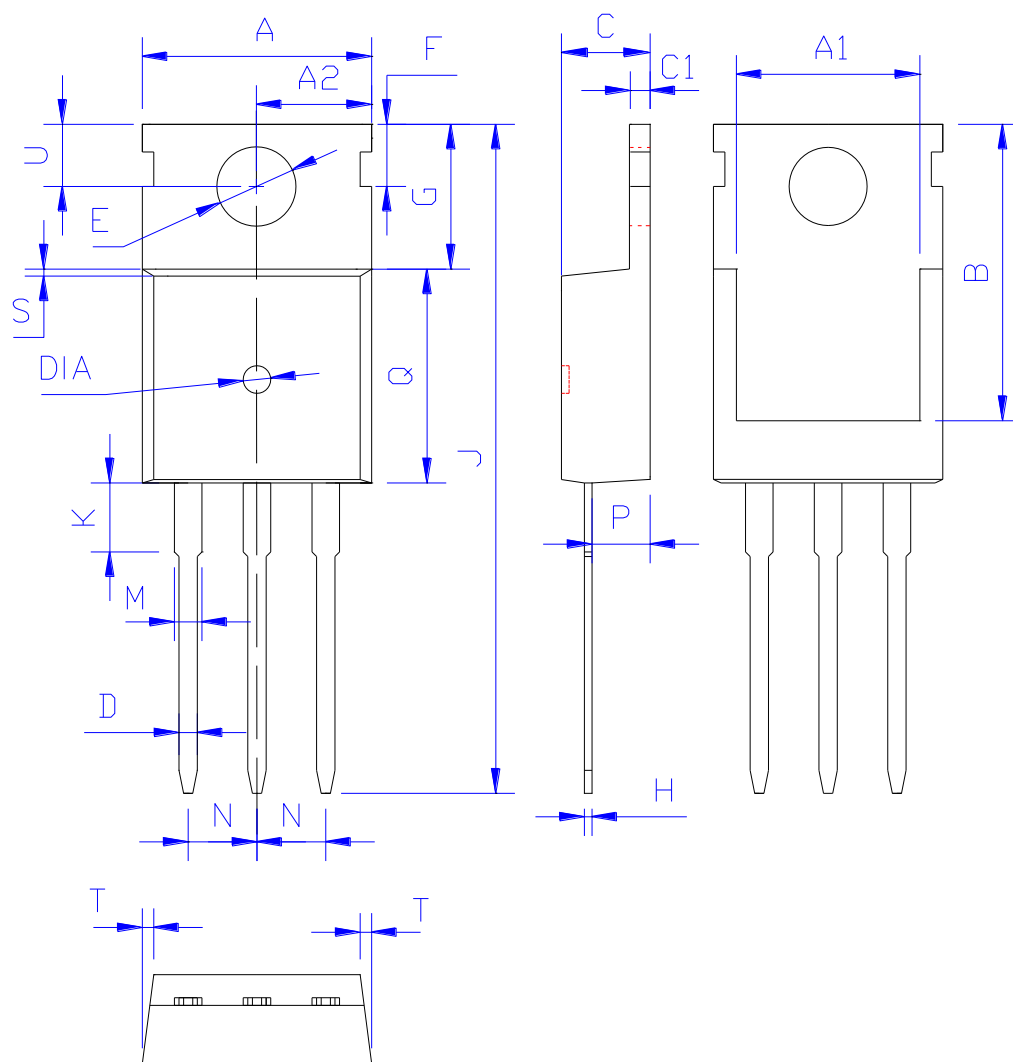
印记 Marking:



外形尺寸:

Package Dimension:

TO-220



| DIM | MILLIMETERS |
|-----|---------------------------|
| A | 10.00±0.30 |
| A1 | 8.00±0.30 |
| A2 | 5.00±0.30 |
| B | 13.20±0.40 |
| C | 4.50±0.20 |
| C1 | 1.30±0.20 |
| D | 0.80±0.20 |
| E | 3.60±0.20 |
| F | 3.00±0.30 |
| G | 6.60±0.40 |
| H | 0.50±0.20 |
| J | 28.88±0.50 |
| K | 3.00±0.30 |
| M | 1.30±0.30 |
| N | Typical 2.54 |
| P | 2.40±0.40 |
| Q | 9.20±0.40 |
| S | 0.25±0.15 |
| T | 0.25±0.15 |
| U | 2.80±0.30 |
| DIA | 宽 1.50±0.10 深 0.50 MAX |

(Units: mm)