



晶体管  
TRANSISTOR  
J13007-2A

主要参数 MAIN CHARACTERISTICS

|      |      |
|------|------|
| Ic   | 8A   |
| Vcbo | 700V |
| Vceo | 400V |
| Pc   | 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      |

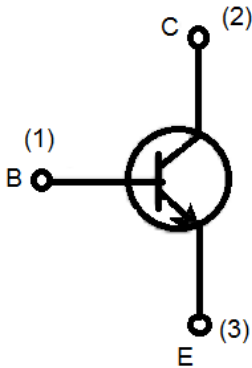
产品特性 FEATURES

|         |                         |
|---------|-------------------------|
| 高耐压     | High breakdown voltage  |
| 高开关速度   | High switching speed    |
| 高电流容量   | High current capability |
| 高可靠性    | High reliability        |
| RoHS 产品 | RoHS product            |

封装形式 Package



TO-220



绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)

| 项目<br>Parameter                                    | 符号<br>Symbol | 数值<br>Value | 单位<br>Unit |
|----------------------------------------------------|--------------|-------------|------------|
| 集电极—基极直流电压<br>Collector- Base Voltage ( IE=0 )     | Vcbo         | 700         | V          |
| 集电极—发射极直流电压<br>Collector- Emitter Voltage ( IB=0 ) | Vceo         | 400         | V          |
| 发射极—基极直流电压<br>Emitter-Base Voltage ( IC=0 )        | Vebo         | 9           | V          |
| 最大集电极直流电流<br>Collector Current ( DC )              | Ic           | 8           | A          |
| 最大集电极耗散功率<br>Total Dissipation (TO-92)             | Pc           | 80          | W          |
| 最高结温<br>Junction Temperature                       | Tj           | 150         | ℃          |
| 贮存温度<br>Storage Temperature                        | Tstg         | -55~+150    | ℃          |

热特性 THERMAL CHARACTERISTIC

| 项目<br>Parameter                                | 符号<br>Symbol | 最小值<br>(min) | 最大值<br>(max) | 单位<br>Unit |
|------------------------------------------------|--------------|--------------|--------------|------------|
| 结到环境的热阻<br>Thermal Resistance Junction Ambient | Rth(j-a)     | -            | 125          | ℃/W        |

电特性 ELECTRICAL CHARACTERISTICS

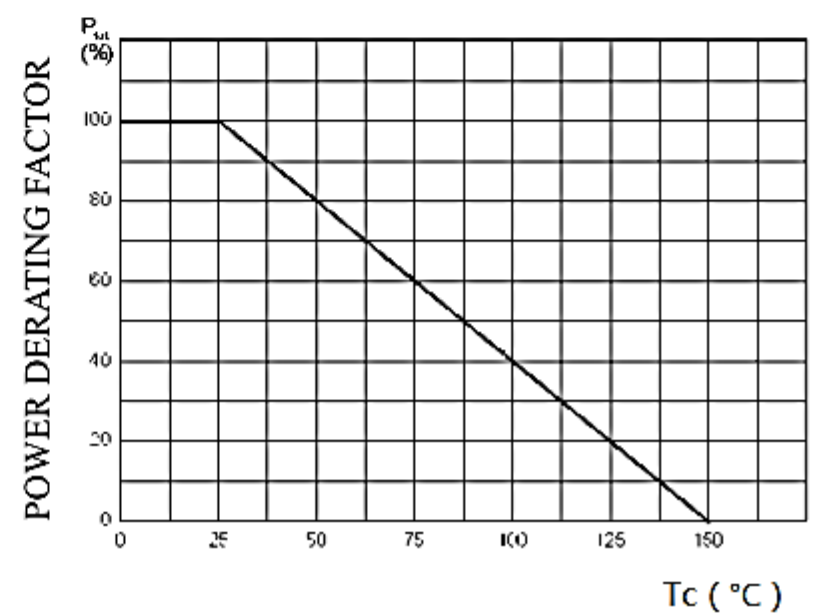
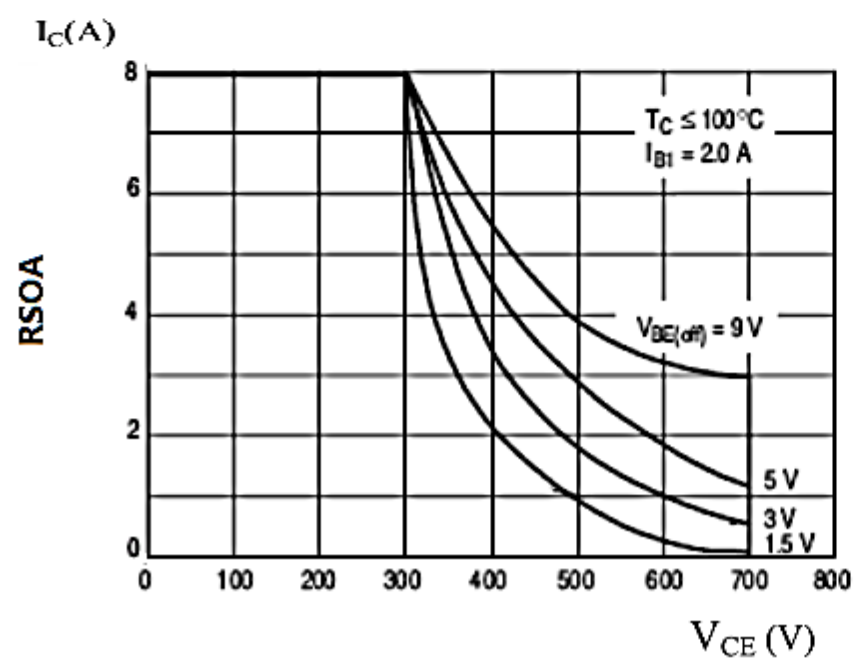
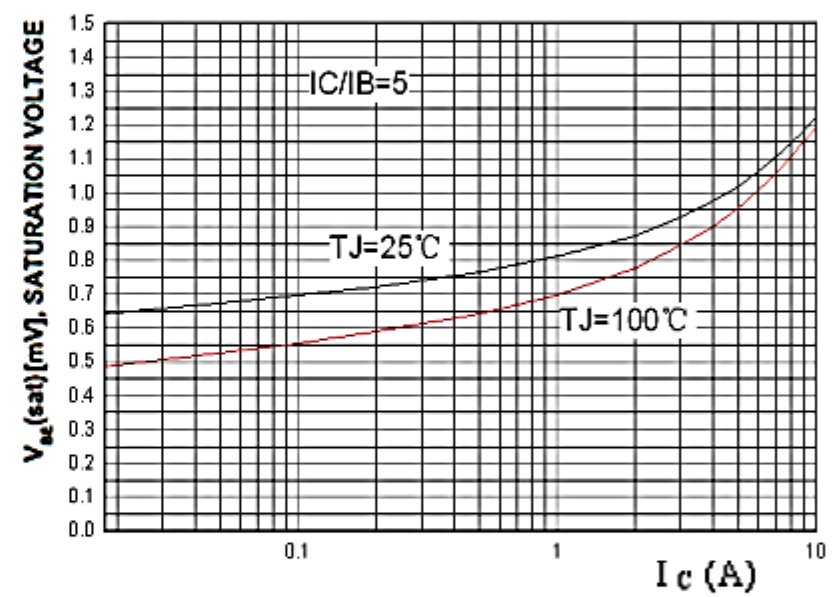
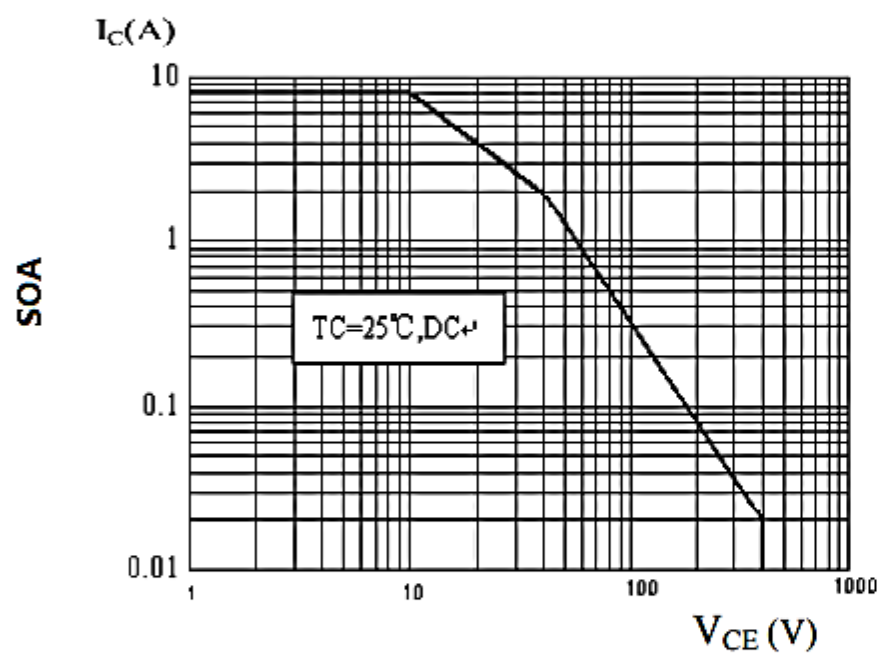
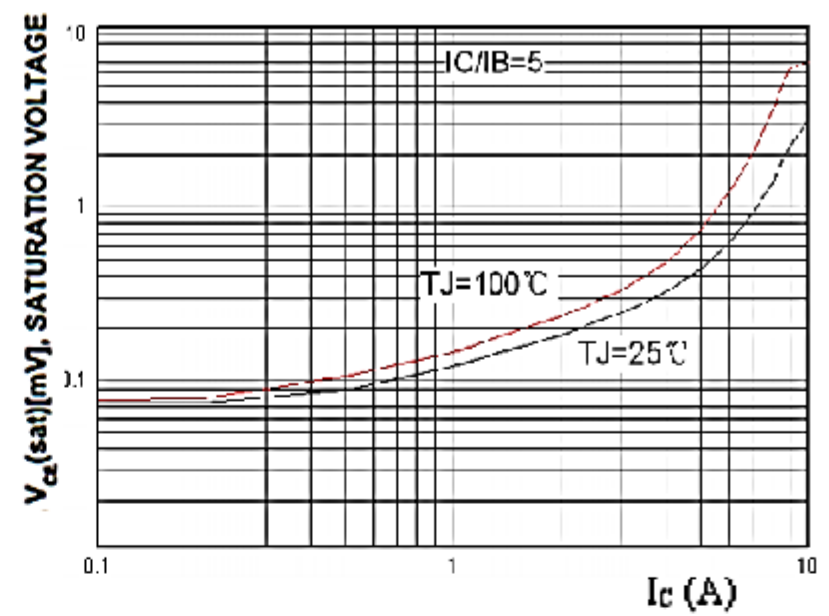
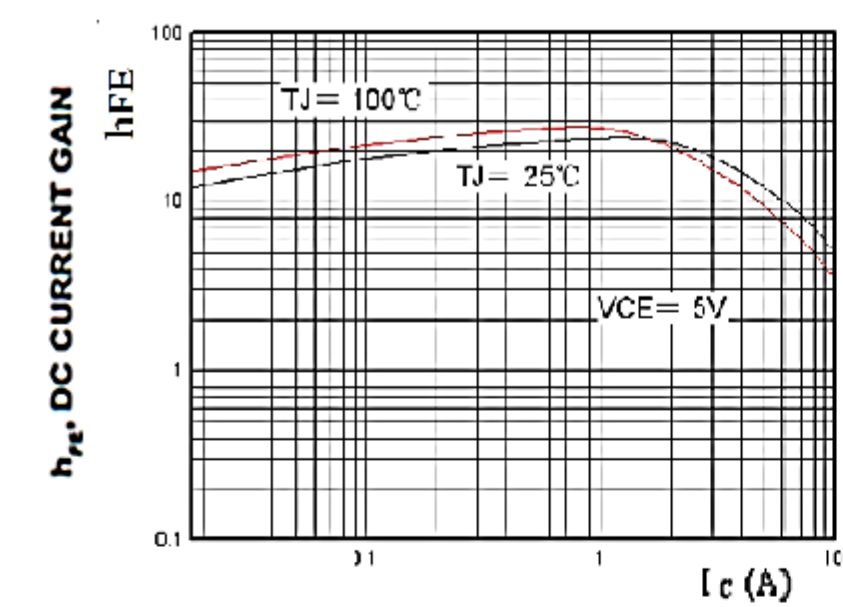
| 项目<br>Parameter      | 测试条件<br>Tests conditions | 最小值<br>(min) | 典型值<br>(typ) | 最大值<br>(max) | 单位<br>Unit |
|----------------------|--------------------------|--------------|--------------|--------------|------------|
| V(BR) <sub>CBO</sub> | IC=100uA,IE=0            | 700          | -            | -            | V          |
| V(BR) <sub>CEO</sub> | IC=10mA,IB=0             | 400          |              | -            | V          |
| V(BR) <sub>EBO</sub> | 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 <sub>T</sub>       | VCE=10V, Ic=0.5A         | 4            |              |              | MHz        |

放大倍数h<sub>FE</sub> Classifications

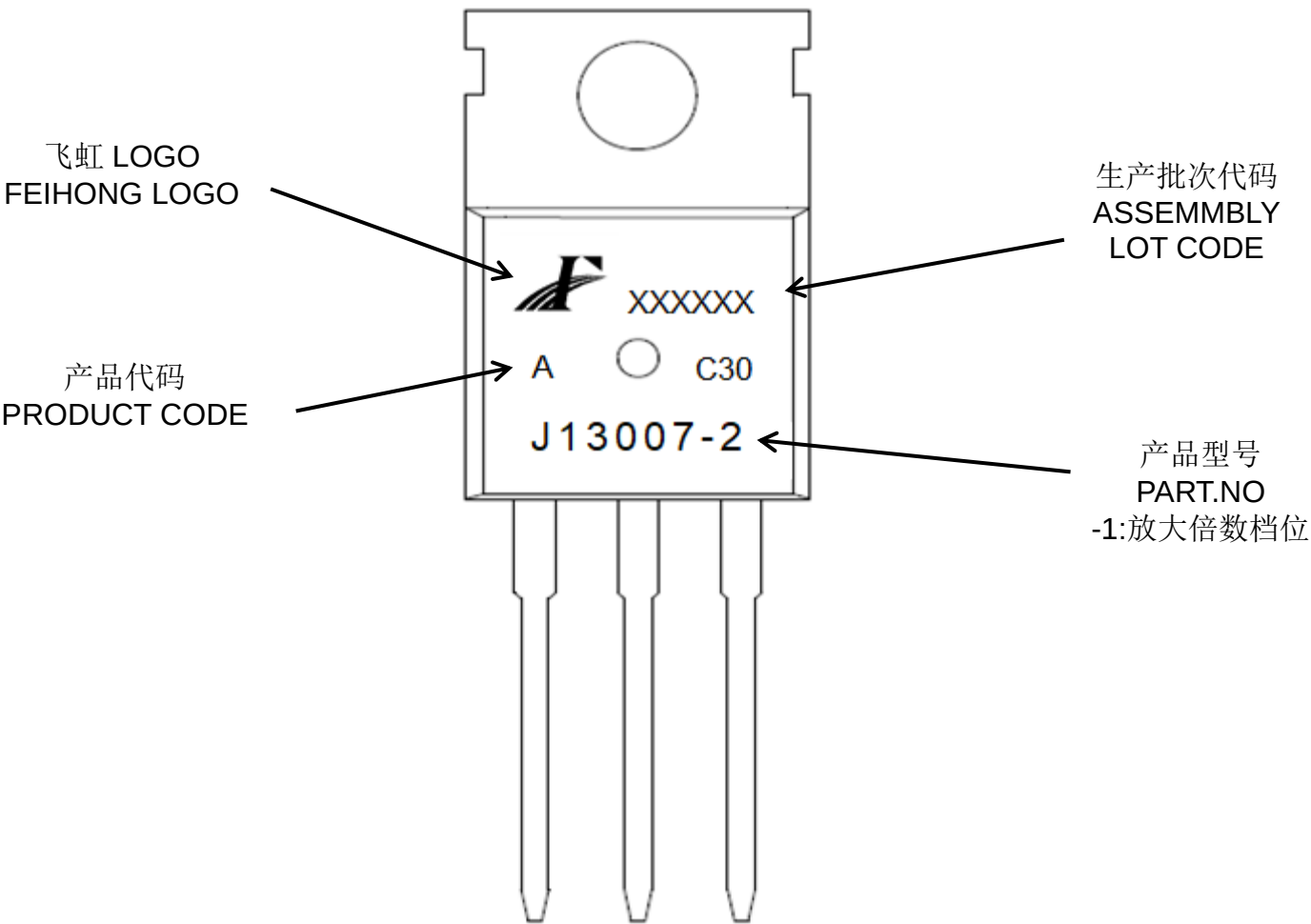
| Classifications     | H1    | H2    |
|---------------------|-------|-------|
| h <sub>FE</sub> （1） | 15-25 | 25-35 |

# 特性曲线

## Typical Performance Characteristics

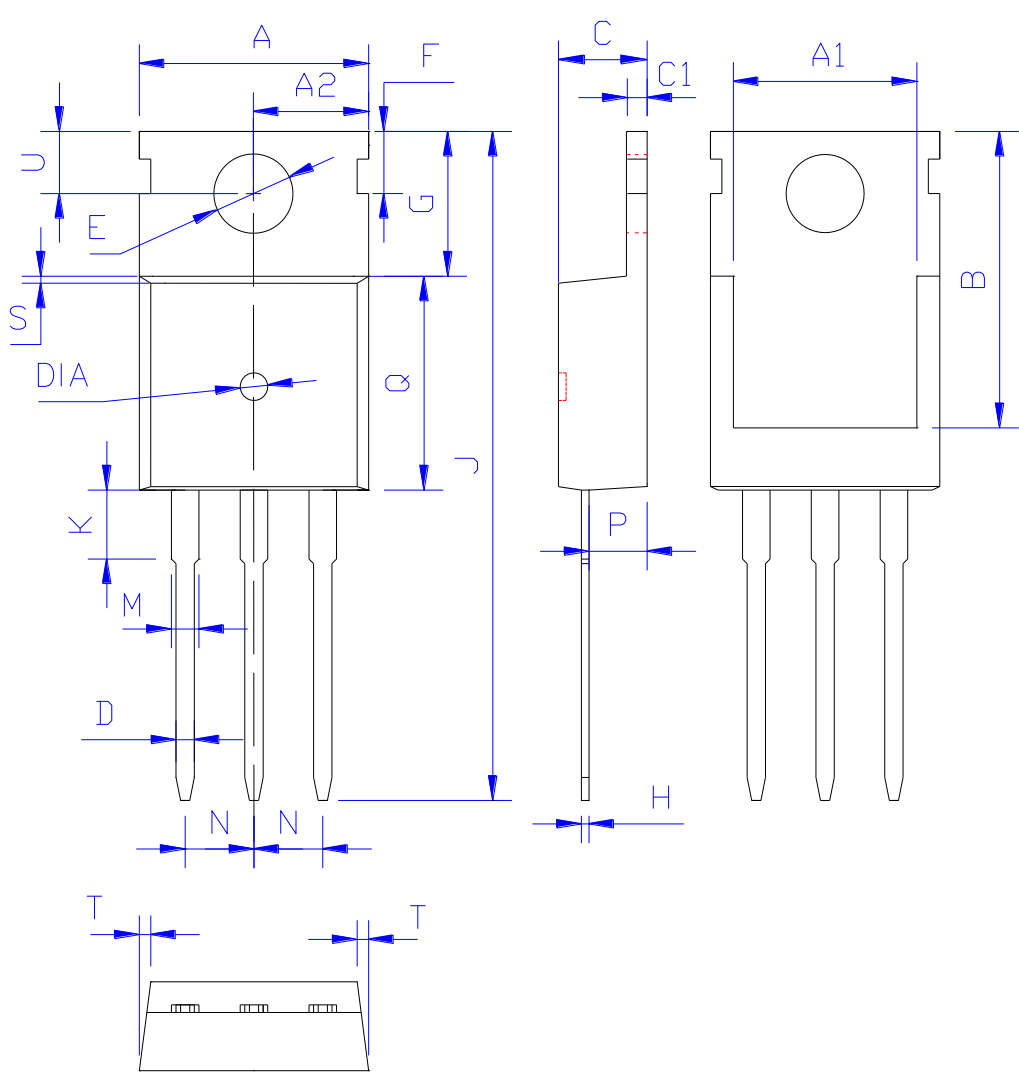


印记 Marking:



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<br>深 0.50 MAX |

(Units: mm)