

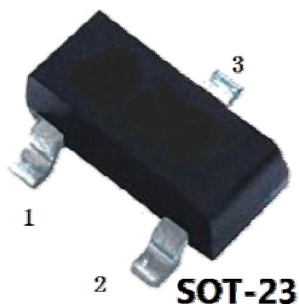
## ■ 描述 DESCRIPTIONS

SOT-23 塑封封装 PNP 三极管。PNP transistor in a SOT-23 Plastic Package .

## ■ 应用 APPLICATIONS

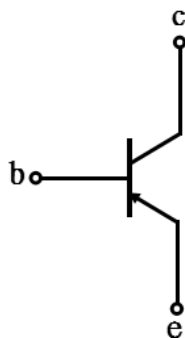
常规应用、开关电路。General purpose application,switching.

## ■ 引脚说明 PIN ASSIGNMENT



- 1 BASE
- 2 EMITTER
- 3 COLLECTOR

## ■ 内部等效电路 Equivalent Circuit



## ■ 型号构成 Name rule

| 基本名称<br>Name   |                |                | 辅助识别代码<br>Additional code |                   |                 |                        |
|----------------|----------------|----------------|---------------------------|-------------------|-----------------|------------------------|
| 第一部分<br>Part 1 | 第二部分<br>Part 2 | 第三部分<br>Part 3 | 第四部分<br>Part 4            | 第五部分<br>Part 5    | 第六部分<br>Part 6  | 第七部分<br>Part 7         |
| 品牌<br>Brand    | 产品类别<br>Type   | 产品型号<br>Model  | 分档<br>Value               | 分隔号<br>Separatrix | 封装代码<br>Package | 附加码 (备用)<br>Extra-code |
| FH             | S :<br>开关三极管   | 2907A          |                           | "—"               | M: SOT-23       | E : ROHS               |

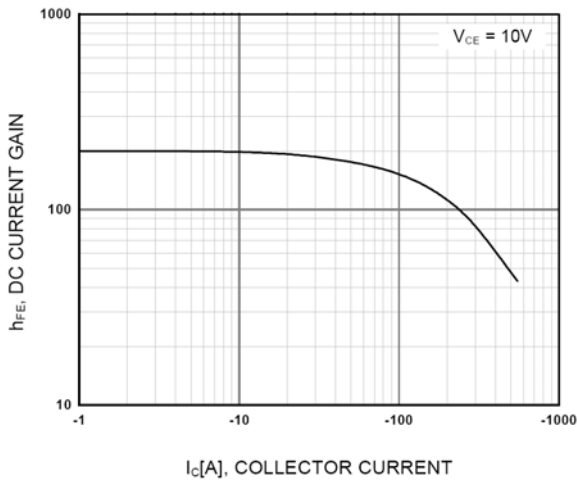
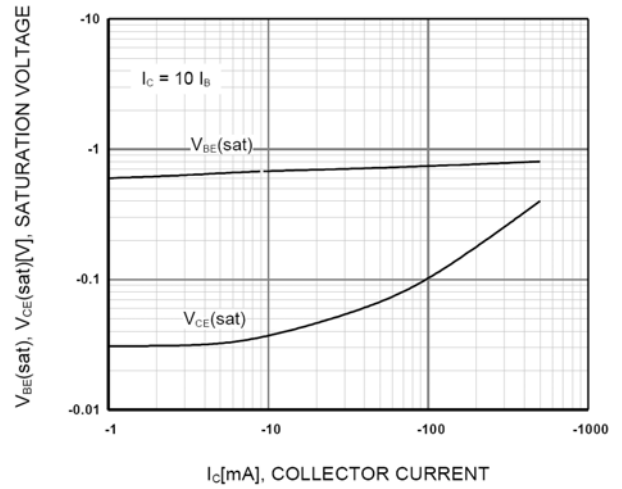
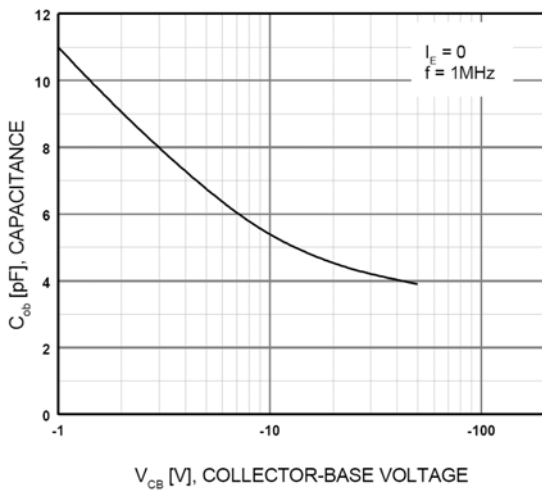
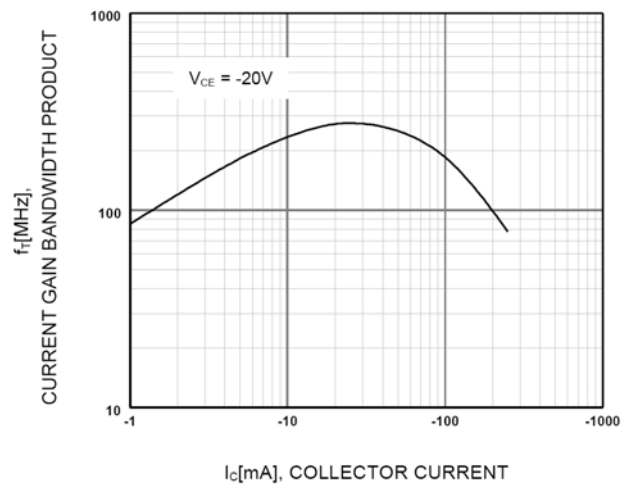
## ■ 额定值 ABSOLUTE MAXIMUM RATINGS (TC=25°C unless otherwise noted)

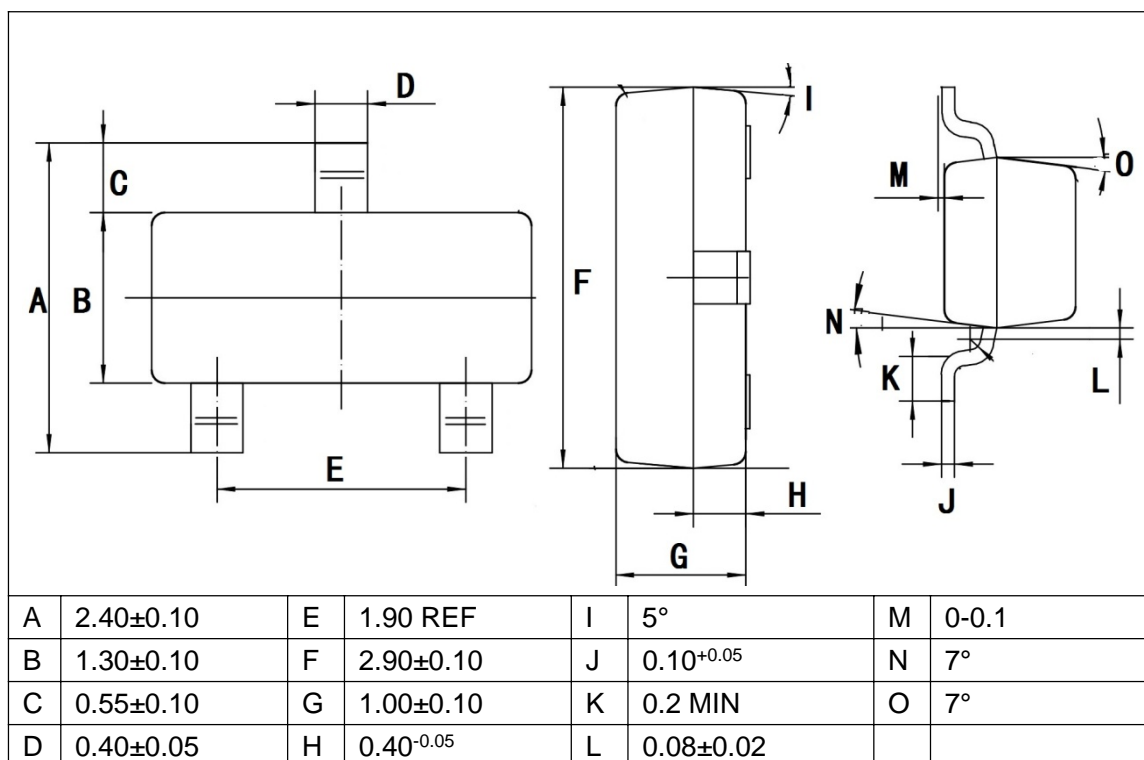
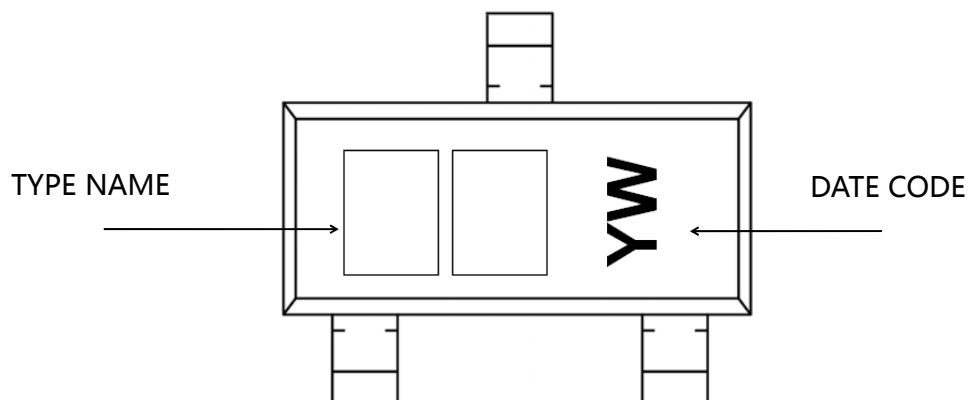
| 特性参数<br>CHARACTERISTIC                 | 符号<br>SYMBOL | 额定值<br>RATING | 单位<br>UNIT |
|--|--------------|---------------|------------|
| 集电极-基极电压<br>Collector-Base Voltage     | $V_{CBO}$    | -60           | V          |
| 集电极-发射极电压<br>Collector-Emitter Voltage | $V_{CEO}$    | -60           | V          |
| 发射极-基极电压<br>Emitter-Base Voltage       | $V_{EBO}$    | -5            | V          |
| 集电极电流<br>Collector Current             | $I_C$        | -600          | mA         |
| 集电极耗散功率<br>Collector Power Dissipation | $P_C$        | 300           | mW         |
| 结温<br>Junction Temperature             | $T_j$        | 150           | °C         |
| 储存温度<br>Storage Temperature            | $T_{stg}$    | - 55~150      | °C         |

**■ 电特性 ELECTRICAL CHARACTERISTICS**

(TA=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

| 特性参数<br>CHARACTERISTIC                              | 符号<br>SYMBOL | 测试条件<br>TEST CONDITIONS                   | 最小值<br>MIN. | 典型值<br>TYP. | 最大值<br>MAX. | 单位<br>UNIT |
|---|--------------|---|-------------|-------------|-------------|------------|
| 直流电流增益<br>DC Current Gain                           | hFE          | VCE= -10V ,<br>Ic= -150mA                 | 100         |             | 300         |            |
| 集电极-基极反向截止电流<br>Collector Cut-off Current           | ICBO         | VCB=-50V , IE=0                           |             |             | -0.01       | μA         |
| 发射极-基极反向截止电流<br>Emitter Cut-off Current             | IEBO         | VEB=-3V , IC=0                            |             |             | -0.01       | μA         |
| 集电极-基极反向击穿电压<br>Collector-Base Voltage              | BVCBO        | Ic= -0.01mA , IE=0                        | -60         |             |             | V          |
| 集电极-发射极反向击穿电压<br>Collector-Emitter Voltage          | BVCEO        | Ic= -10mA , IB=0                          | -60         |             |             | V          |
| 发射极-基极反向击穿电压<br>Emitter-Base Breakdown Voltage      | BVEBO        | IE= -0.01mA , Ic=0                        | -5          |             |             | V          |
| 集电极-发射极饱和压降<br>Collector-Emitter Saturation Voltage | VCE(sat)     | Ic= -150mA ,<br>IB= -15mA                 |             |             | -0.4        | V          |
| 集电极-发射极饱和压降<br>Base-Emitter Saturation Voltage      | VBE(sat)     | Ic= -150mA ,<br>IB= -15mA                 |             |             | -1.3        | V          |
| 电流增益-带宽乘积<br>Gain Bandwidth Product                 | fT           | Ic= -50mA ,<br>VCE= -20V                  | 200         |             |             | MHz        |
| 共基极输出电容<br>Collector Output Capacitance             | Cob          | VCB= -10V, IE=0,<br>f = 1MHz              |             |             | 8           | PF         |
| 开启时间<br>On time                                     | ton          | VCC= -30V , IC= -150mA ,<br>IB1= -15mA    |             |             | 50          | ns         |
| 关断开关<br>Off time                                    | toff         | VCC= -6V , IC= -150mA ,<br>IB1=IB2= -15mA |             |             | 100         | ns         |

**■ 典型特性 TYPICAL CHARACTERISTICS**

**Figure 1. DC current Gain**

**Figure 2. Collector-Emitter Saturation Voltage  
Base-Emitter Saturation Voltage**

**Figure 3. Output Capacitance**

**Figure 4. Current Gain Bandwidth Product**

**■ 外形尺寸 DIMENSION**

**■ 打标 DEVICE MARKING**


|          |             |
|----------|-------------|
| TYPE     | FHS2907A-ME |
| $h_{FE}$ | 100~300     |
| MARK     | 2F          |

## ■ 包装信息 PACKAGE INFORMATION

| 材料名称<br>Material Name | 颜色<br>Color  | 尺寸<br>Size    | 数量<br>Quantity                                 | 备注<br>Note  |
|-----------------------|--------------|---------------|--|---|
| 卷盘<br>Reel            | 蓝色<br>Blue   | 7 " *8mm      | 3K/Reel  |   |
| 内盒<br>Inner Case      | 黄色<br>Yellow | 185*185*140mm | 30K/盒 ( 10 盘/盒 )<br>30K/Case ( 10 Reel/ Case ) | OHO2  |
| 外箱<br>Outer Box       | 黄色<br>Yellow | 460*400*210mm | 180K/箱 ( 6 盒/箱 )<br>180K/Box ( 6 Case/Box )    | OXO2  |
| 标签<br>Label           | 白色<br>White  | 68*40mm       | —  | 贴卷盘、内盒、外箱<br>Label on reel、inner case、<br>outer box |