

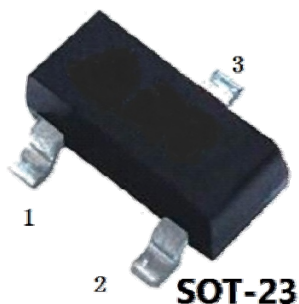
## ■ 描述 DESCRIPTIONS

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

## ■ 应用 APPLICATIONS

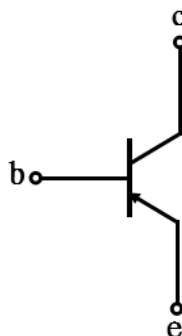
常规应用、开关电路。General purpose application,switching.

## ■ 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              |
| DX             | T：三极管          | 5401           |                           | “—”               | M: SOT-23       | E：ROHS<br>G: 绿色封装<br>Green Package |

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

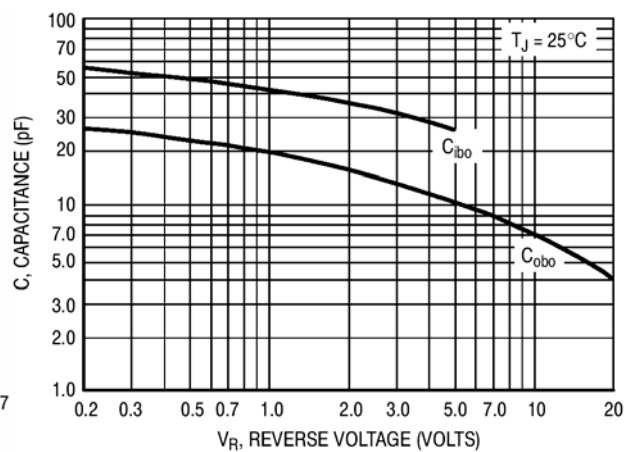
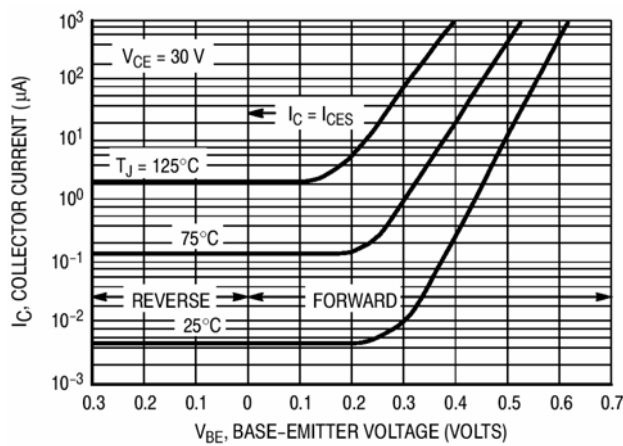
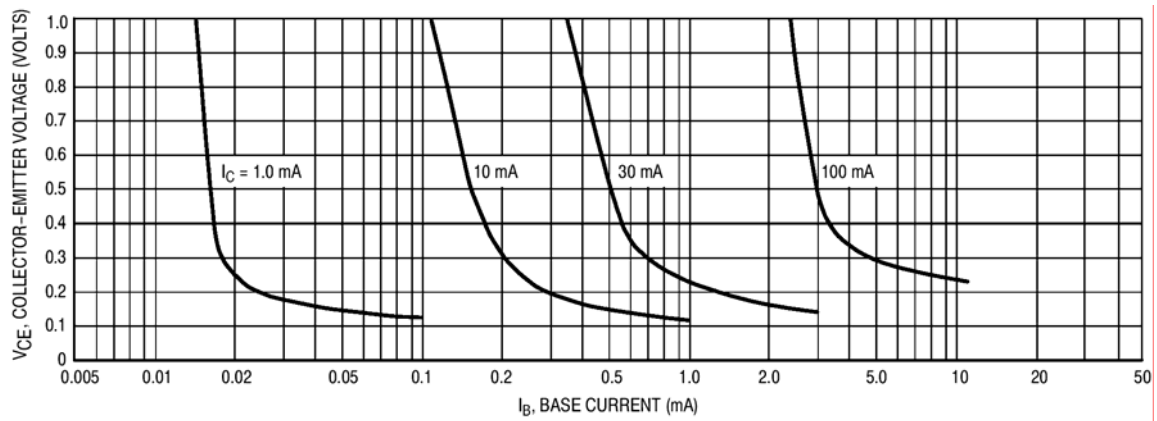
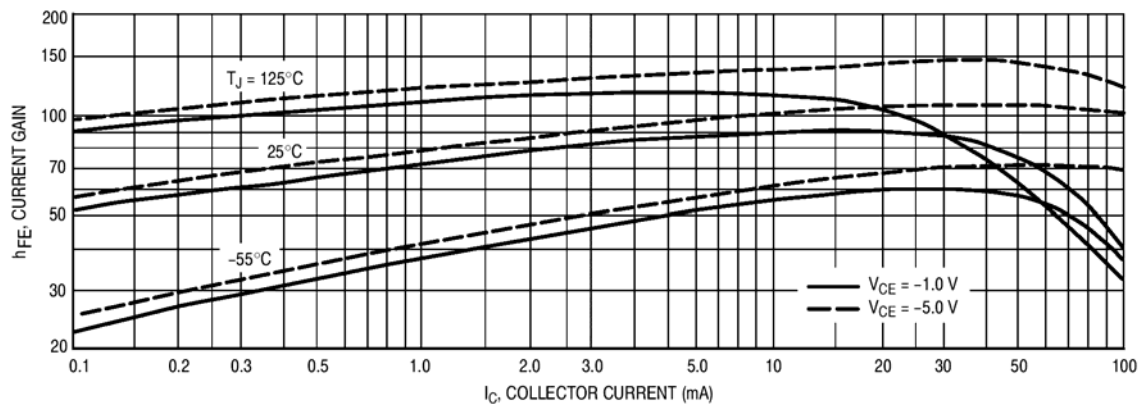
| 特性参数<br>CHARACTERISTIC                   | 符号<br>SYMBOL | 额定值<br>RATING | 单位<br>UNIT |
|------------------------------------------|--------------|---------------|------------|
| 集电极-基极电压<br>Collector-Base Voltage       | $V_{CBO}$    | -160          | Vdc        |
| 集电极-发射极电压<br>Collector-Emitter Voltage   | $V_{CEO}$    | -150          | Vdc        |
| 发射极-基极电压<br>Emitter-Base Voltage         | $V_{EBO}$    | -5            | Vdc        |
| 集电极电流-连续<br>Collector Current—Continuous | $I_C$        | -600          | mAdc       |
| 集电极耗散功率<br>Collector Power Dissipation   | $P_C$        | 225           | mW         |
| 结温<br>Junction Temperature               | $T_j$        | 150           | °C         |
| 储存温度<br>Storage Temperature Range        | $T_{stg}$    | -55 ~ 150     | °C         |

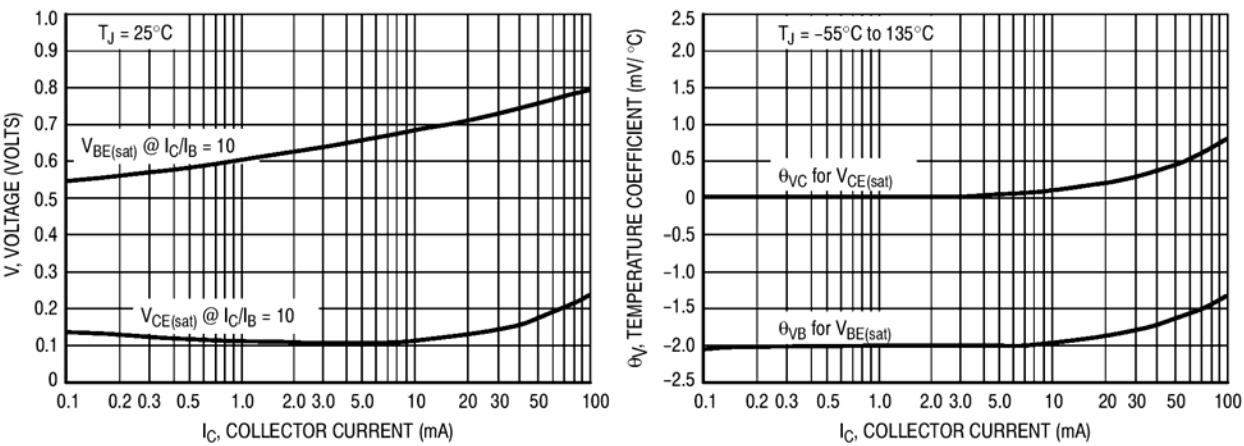
## ■ 电特性 ELECTRICAL CHARACTERISTICS

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

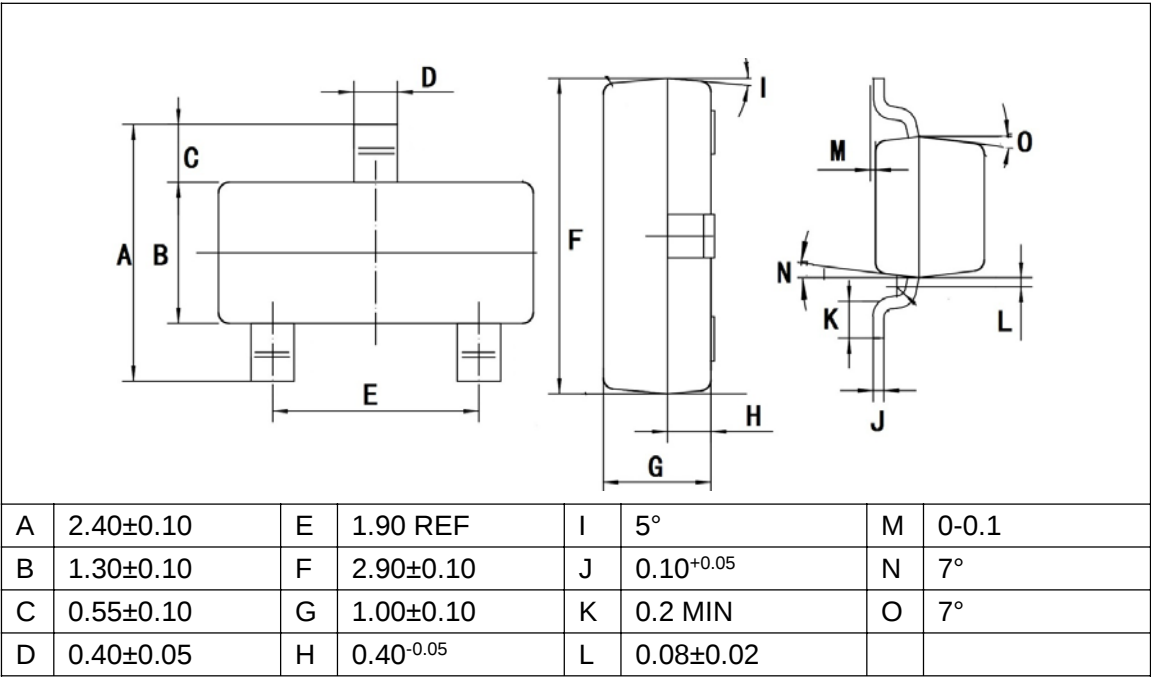
| 特性参数<br>CHARACTERISTIC                                 | 符号<br>SYMBOL | 测试条件<br>TEST CONDITIONS                   | 最小值<br>MIN. | 典型值<br>TYP. | 最大值<br>MAX. | 单位<br>UNIT |
|--------------------------------------------------------|--------------|-------------------------------------------|-------------|-------------|-------------|------------|
| 直流电流增益<br>DC Current Gain                              | hFE          | VCE= -5V , Ic= -10mA                      | 60          |             | 240         |            |
| 集电极-基极反向截止电流<br>Collector Cut-off Current              | ICBO         | VCB= -100V , IE=0                         |             |             | -0.05       | μA         |
| 发射极-基极反向截止电流<br>Emitter Cut-off Current                | IEBO         | VEB= -3V , Ic=0                           |             |             | -0.05       | μA         |
| 集电极-基极反向击穿电压<br>Collector-Base Voltage                 | BVCBO        | Ic= -0.1mA , IE=0                         | -160        |             |             | V          |
| 集电极-发射极反向击穿电压<br>Collector-Emitter Voltage             | BVCEO        | Ic= -1mA , IB=0                           | -150        |             |             | 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<br>Voltage | VCE(sat)     | Ic= -10mA , IB= -1mA                      |             |             | -0.2        | V          |
| 电流增益-带宽乘积<br>Gain Bandwidth Product                    | fT           | Ic= -10mA , VCE= -10V                     | 100         |             |             | MHz        |
| 共基极输出电容<br>Collector Output Capacitance                | Cob          | VCB= -10V, IE=0,<br>f = 1MHz              |             |             | 6           | PF         |
| 噪声系数<br>Noise factor                                   | NF           | VCE=-5V, IC=-0.2mA,<br>f =15.7KHz, Rg=1KΩ |             |             | 8           | dB         |

## ■ 典型特性 TYPICAL CHARACTERISTICS

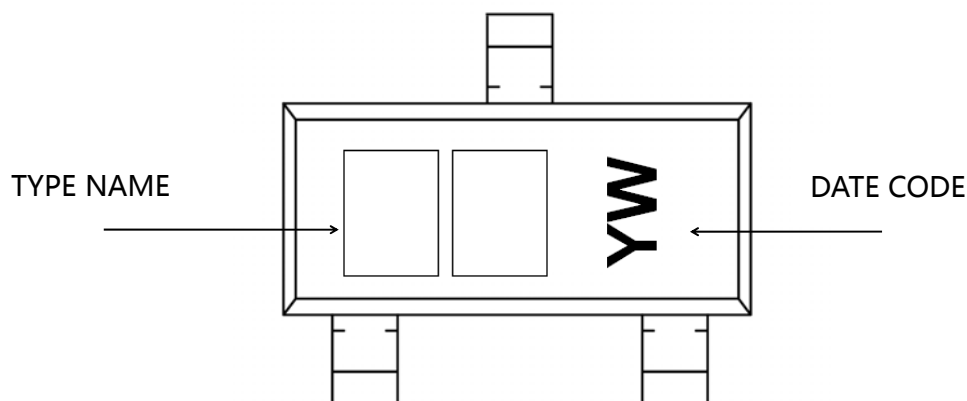




■ 外形尺寸 DIMENSION



### ■ 打标 DEVICE MARKING



|          |            |
|----------|------------|
| TYPE     | DXT5401-ME |
| $h_{FE}$ | 60 ~ 240   |
| MARK     | 2L         |

### ■ 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 |