

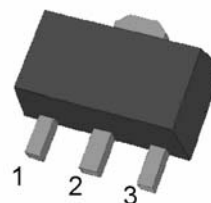
Epitaxial Planar NPN Transistor 三极管

FHD3205

DESCRIPTION & FEATURES 概述及特点

High current application
 Complement to FHB1273

SOT-89



PIN ASSIGNMENT 引脚说明

| PIN NAME 管脚符号 | PIN NUMBER 引脚序号 | FUNCTION 功能 |
|------------------|-----------------|----------------|
| | SOT-89 | |
| B | 1 | BASE |
| C | 2 | COLLECTOR |
| E | 3 | EMITTER |

MAXIMUM RATINGS(T_a=25°C) 最大额定值

| CHARACTERISTIC 特性参数 | Symbol 符号 | Rating 额定值 | Unit 单位 |
|-------------------------------------|------------------|------------|---------|
| Collector-Emitter Voltage 集电极-发射极电压 | V _{CEO} | 30 | Vdc |
| Collector-Base Voltage 集电极-基极电压 | V _{CBO} | 30 | Vdc |
| Emitter-Base Voltage 发射极-基极电压 | V _{EBO} | 5 | Vdc |
| Collector Current 集电极电流 | I _C | 2 | Adc |

THERMAL CHARACTERISTICS 热特性

| CHARACTERISTIC 特性参数 | Symbol 符号 | Max 最大值 | Unit 单位 |
|--|------------------------------------|-------------------|---------|
| Collector Power Dissipation 集电极耗散功率 | P _c | 1 | W |
| Junction and Storage Temperature 结温和储存温度 | T _J T _{stg} | 150, -55 ~ 150 | °C |

DEVICE MARKING 打标

FHD3025Q=5Q(100~200),FHD3205P=5P(160~320)

ELECTRICAL CHARACTERISTICS 电特性

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

| Characteristic 特性参数 | Symbol 符号 | Test Condition 测试条件 | Min 最小值 | Type 典型值 | Max 最大值 | Unit 单位 |
|--|----------------------|---|---------|----------|---------|---------|
| Collector-Emitter Breakdown Voltage 集电极-发射极击穿电压 | V _{(BR)CEO} | I _C =10mA, | 30 | — | — | V |
| Collector-Base Breakdown Voltage 集电极-基极击穿电压 | V _{(BR)CBO} | I _C =100μA | 30 | — | — | V |
| Emitter-Base Breakdown Voltage 发射极-基极击穿电压 | V _{(BR)EBO} | I _E =1mA | 5 | — | — | V |
| Collector Cutoff Current 集电极截止电流 | I _{CBO} | V _{CB} =30V | — | — | 100 | nA |
| Emitter Cutoff Current 发射极截止电流 | I _{EBO} | V _{EB} =5V | — | — | 100 | nA |
| DC Current Gain 直流电流增益 | h _{FE} | V _{CE} =2V, I _C =500mA | 100 | — | 320 | — |
| Collector-Emitter Saturation Voltage 集电极-发射极饱和电压 | V _{CE(sat)} | I _C =1.5A, I _B =30mA | — | — | 600 | mV |
| Base-Emitter Voltage 发射极-基极电压 | V _{BE} | V _{CE} =2V, I _E =500mA, | — | — | 950 | mV |
| Transition Frequency 特征频率 | f _T | V _{CE} =2V, I _E =500mA, | — | 120 | — | MHz |
| Collect Output Capacitance 输出电容 | C _{Ob} | V _{CB} =10V, I _E =0, f=1MHZ | — | 13 | — | pF |