



MJE15033

用途

音频放大电路  
通用电路

APPLICATIONS

Audio Amplifier Circuit  
General Purpose Circuit

产品特性

高集电极电压Vceo=250V(min)  
低饱和压降  
与MJE15032互补  
RoHS 产品

FEATURE

High collector Vceo=250V(min)  
Low Collector-emitter saturation voltage  
Complementary to MJE15032  
RoHS product

封装 Package

(1) B (2) C (3) E

TO-220

1. 基极 BASE  
2. 集电极 COLLECTOR  
3. 发射极 EMITTER

绝对最大额定值Absolute Ratings (Tc=25℃)

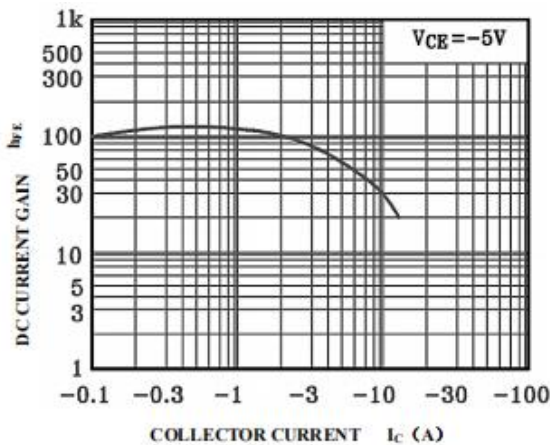
| 项目 Parameter                          | 符号Symbol         | 数值Value  | 单位Unit |
|---------------------------------------|------------------|----------|--------|
| 集电极—发射极直流电压 Collector-Base Voltage    | V <sub>CB0</sub> | 250      | V      |
| 集电极—发射极直流电压 Collector-Emitter Voltage | V <sub>CEO</sub> | 250      | V      |
| 发射极-基极直流电压 Emitter-Base Voltage       | V <sub>EB0</sub> | 5        | V      |
| 集电极电流 Collector Current (DC)          | I <sub>C</sub>   | 8        | A      |
| 集电极脉冲电流 Collector Current (pulse)     | I <sub>CP</sub>  | 16       | A      |
| 最大集电极耗散功率 Total Dissipation           | PD               | 50       | W      |
| 最高结温 Operating Junction Temperature   | T <sub>J</sub>   | +150     | ℃      |
| 存储温度 Storage Temperature Range        | T <sub>STG</sub> | -65~+150 | ℃      |

电特性 Electrical Characteristics

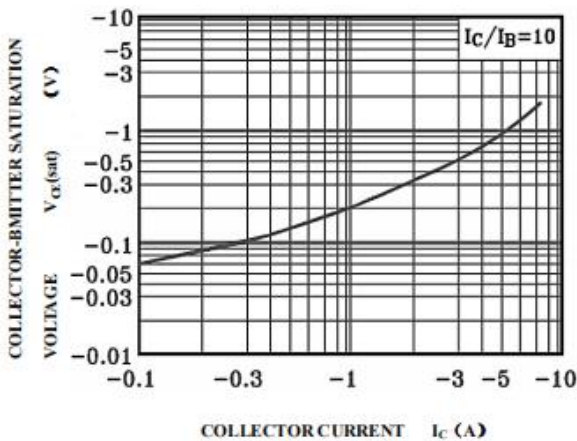
| 项 目<br>Parameter    | 测试条件<br>Tests conditions                    | 最小<br>Min | 典型<br>Typ | 最大<br>Max | 单位<br>Units |
|---------------------|---------------------------------------------|-----------|-----------|-----------|-------------|
| V <sub>CEO</sub>    | I <sub>C</sub> =10mA, I <sub>B</sub> =0     | 250       | -         | -         | V           |
| V <sub>CBO</sub>    | I <sub>C</sub> =1mA, I <sub>B</sub> =0      | 250       | -         | -         | V           |
| V <sub>EBO</sub>    | I <sub>E</sub> =1mA, I <sub>C</sub> =0      | 5         | -         | -         | V           |
| I <sub>CBO</sub>    | V <sub>CBO</sub> =250V, I <sub>E</sub> =0   | -         | -         | 10        | uA          |
| I <sub>CEO</sub>    | V <sub>CEO</sub> =250V, I <sub>B</sub> =0   | -         | -         | 100       | uA          |
| I <sub>EBO</sub>    | V <sub>EBO</sub> =5V, I <sub>C</sub> =0     | -         | -         | 10        | uA          |
| hFE1                | V <sub>CE</sub> =10V, I <sub>C</sub> =500mA | 50        | -         | -         | -           |
| hFE2                | V <sub>CE</sub> =5V, I <sub>C</sub> =2A     | 10        | -         | -         | -           |
| V <sub>CESAT</sub>  | I <sub>C</sub> =1A, I <sub>B</sub> =0.1A    | -         | -         | 0.5       | V           |
| V <sub>BE(on)</sub> | I <sub>C</sub> =1A, V <sub>ce</sub> =5V     | -         | -         | 1         | V           |
| f <sub>T</sub>      | V <sub>ce</sub> =5V, I <sub>C</sub> =1A     | -         | 12        | -         | MHz         |
| R <sub>thjc</sub>   | 结到管壳的热阻<br>Thermal Resistance Junction Case | -         | -         | 2.5       | °C/W        |

特征曲线 Typical Characteristics (curves)

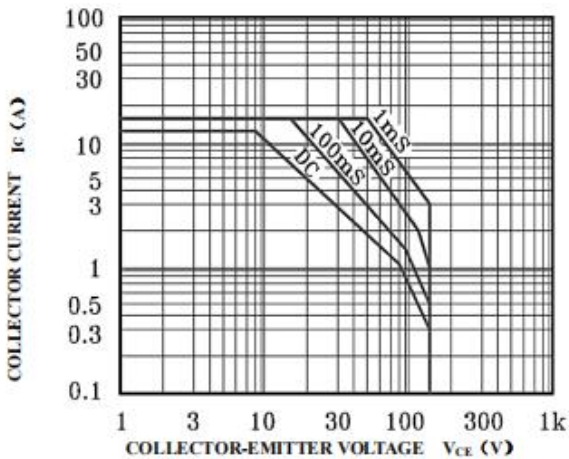
HFE vs  $I_c$



$V_{ce(sat)}$  vs  $I_c$



SOA



$P_D$  vs  $T_c$

