

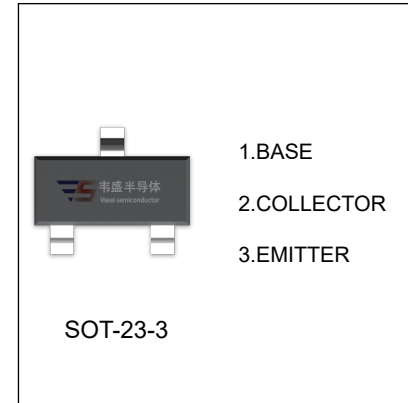
BC807 TRANSISTOR (PNP)

FEATURE

- Ideally suited for automatic insertion
- Epitaxial planar die construction
- Complementary NPN type available(BC817)

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|-----------------|--|----------|-----------------------------|
| V_{CBO} | Collector-Base Voltage | -50 | V |
| V_{CEO} | Collector-Emitter Voltage | -45 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current | -500 | mA |
| P_C | Collector Power Dissipation | 300 | mW |
| $R_{\theta JA}$ | Thermal Resistance From Junction To Ambient | 417 | $^{\circ}\text{C}/\text{W}$ |
| T_J, T_{stg} | Operation Junction and Storage Temperature Range | -55~+150 | $^{\circ}\text{C}$ |



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|--------------------------------------|---------------|--|-----|------|---------------|
| Collector-base breakdown voltage | V_{CBO} | $I_C = -10\mu\text{A}, I_E = 0$ | -50 | | V |
| Collector-emitter breakdown voltage | V_{CEO} | $I_C = -10\text{mA}, I_B = 0$ | -45 | | V |
| Emitter-base breakdown voltage | V_{EBO} | $I_E = -1\mu\text{A}, I_C = 0$ | -5 | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -45\text{V}, I_E = 0$ | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -4\text{V}, I_C = 0$ | | -0.1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -1\text{V}, I_C = -100\text{mA}$ | 100 | 600 | |
| | $h_{FE(2)}$ | $V_{CE} = -1\text{V}, I_C = -500\text{mA}$ | 40 | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -500\text{mA}, I_B = -50\text{mA}$ | | -0.7 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -500\text{mA}, I_B = -50\text{mA}$ | | -1.2 | V |
| Transition frequency | f_T | $V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $f = 100\text{MHz}$ | 100 | | MHz |

CLASSIFICATION OF $h_{FE(1)}$

| Rank | BC807-16 | BC807-25 | BC807-40 |
|---------|----------|----------|----------|
| Range | 100-250 | 160-400 | 250-600 |
| Marking | 5A | 5B | 5C |

