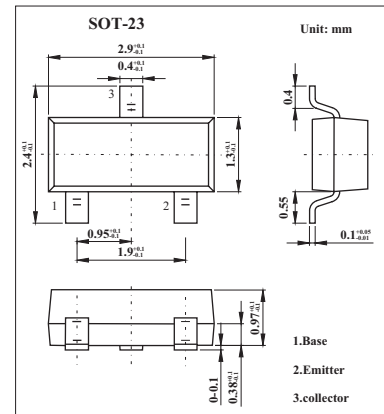


NPN Epitaxial Planar Silicon Transistor

2SC4852

■ Features

- Small output capacitance.
- Low collector-to-emitter saturation voltage.
- Small ON resistance.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---------------------------|-----------|-------------|------------------|
| Collector-base voltage | V_{CB0} | 25 | V |
| Collector-emitter voltage | V_{CE0} | 15 | V |
| Emitter-base voltage | V_{EB0} | 5 | V |
| Collector current | I_C | 100 | mA |
| Collector current (pulse) | I_{CP} | 200 | mA |
| Base current | I_B | 20 | mA |
| Collector dissipation | P_C | 250 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--------------------------------------|---------------|---------------------------------------|-----|------|------|---------------|
| Collector cutoff current | I_{CBO} | $V_{CB} = 15V, I_E = 0$ | | | 0.1 | μA |
| Emitter cutoff current | I_{EBO} | $V_{EB} = 4V, I_C = 0$ | | | 0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = 2V, I_C = 5\text{mA}$ | 800 | | 3200 | |
| Gain bandwidth product | f_T | $V_{CE} = 5V, I_C = 10\text{mA}$ | | 240 | | MHz |
| Output capacitance | C_{ob} | $V_{CB} = 10V, f = 1.0\text{MHz}$ | | 1.4 | | pF |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 10\text{mA}, I_B = 1\text{mA}$ | | 14 | 30 | mV |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = 10\text{mA}, I_B = 1\text{mA}$ | | 0.74 | 1.1 | V |
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = 10\mu\text{A}, I_E = 0$ | 25 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = 1\text{mA}, R_{BE} = \infty$ | 15 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = 10\mu\text{A}, I_C = 0$ | 5 | | | V |
| On resistance | R_{on} | $I_B = 3\text{mA}, f = 1.0\text{MHz}$ | | 0.9 | | Ω |

■ Marking

| | |
|---------|----|
| Marking | YT |
|---------|----|