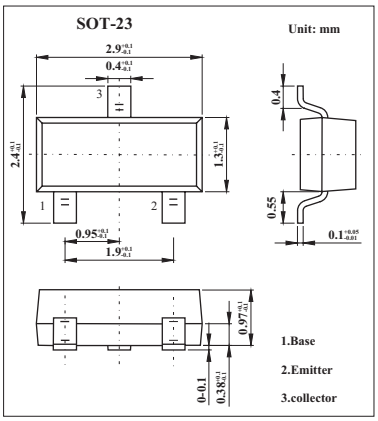
# NPN Epitaxial Planar Silicon Transistor

# 2SC4852




## ■ Features

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

## ■ Absolute Maximum Ratings Ta = 25℃

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector-base voltage | $V_{CBO}$ | 25 | V |
| Collector-emitter voltage | $V_{CEO}$ | 15 | V |
| Emitter-base voltage | $V_{EBO}$ | 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 | ℃ |
| Storage temperature | $T_{stg}$ | -55 to +150 | ℃ |

## ■ Electrical Characteristics Ta = 25℃

| 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 , $I_C$ = 5mA | 800 | | 3200 | |
| Gain bandwidth product | $f_T$ | $V_{CE}$ = 5V , $I_C$ = 10mA | | 240 | | MHz |
| Output capacitance | $C_{ob}$ | $V_{CB}$ = 10V , f = 1.0MHz | | 1.4 | | pF |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C$ = 10mA , $I_B$ = 1mA | | 14 | 30 | mV |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C$ = 10mV , $I_B$ = 1mA | | 0.74 | 1.1 | V |
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C$ = 10μA , $I_E$ = 0 | 25 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C$ = 1mA , $R_{BE}$ = ∞ | 15 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E$ = 10μA , $I_C$ = 0 | 5 | | | V |
| On resistance | $R_{on}$ | $I_B$ = 3mA, f = 1.0MHz | | 0.9 | | Ω |

## ■ Marking

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



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