

2SA2084

Silicon PNP epitaxial planar type

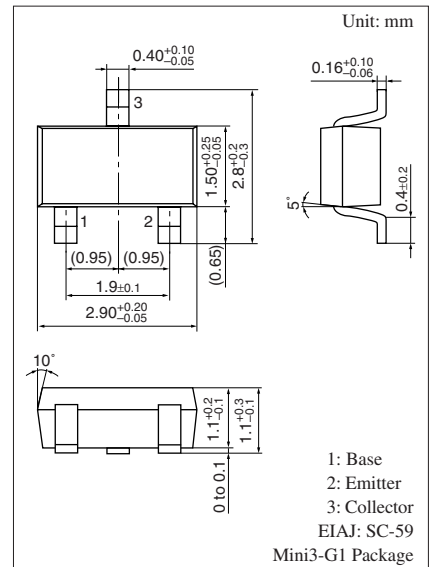
For general amplification

■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

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

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|-----------|-------------|------------------|
| Collector-base voltage (Emitter open) | V_{CBO} | -300 | V |
| Collector-emitter voltage (Base open) | V_{CEO} | -300 | V |
| Emitter-base voltage (Collector open) | V_{EBO} | -5 | V |
| Collector current | I_C | -70 | mA |
| Peak collector current | I_{CP} | -100 | mA |
| Collector power dissipation | P_C | 200 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |



Marking Symbol: 7N

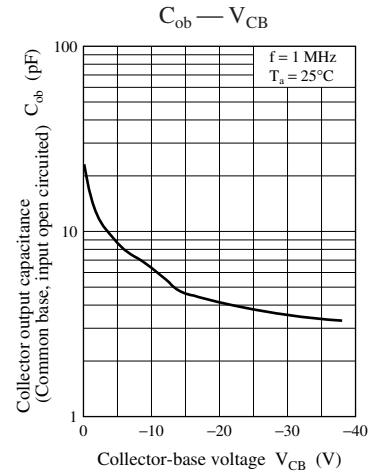
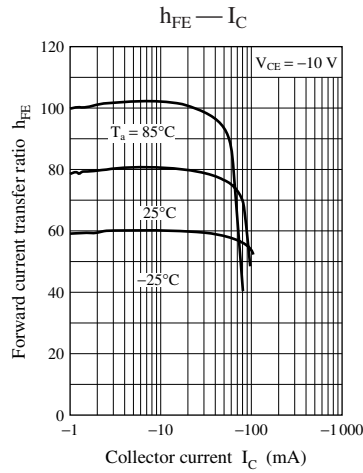
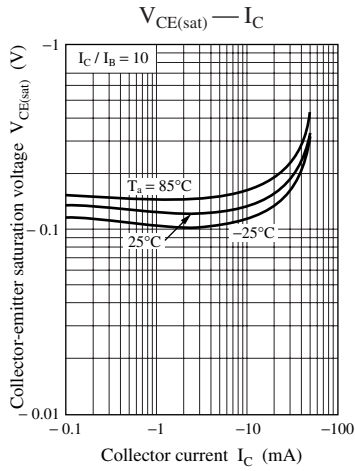
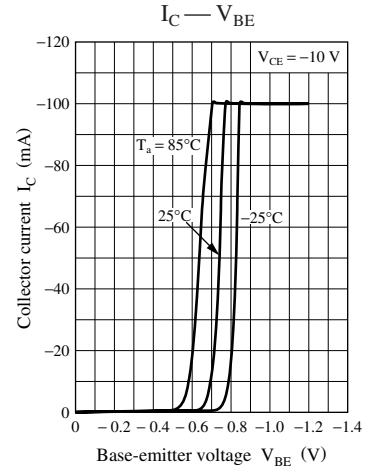
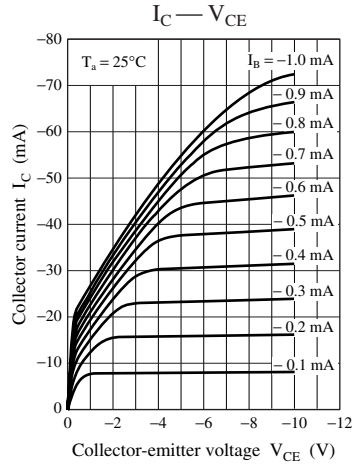
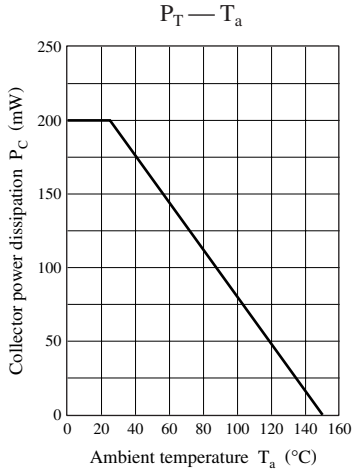
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---------------|---|------|-----|------|------|
| Collector-emitter voltage (Base open) | V_{CEO} | $I_C = -100 \mu\text{A}$, $I_B = 0$ | -300 | | | V |
| Emitter-base voltage (Collector open) | V_{EBO} | $I_E = -1 \mu\text{A}$, $I_C = 0$ | -5 | | | V |
| Forward current transfer ratio * | h_{FE} | $V_{CE} = -10 \text{V}$, $I_C = -5 \text{mA}$ | 30 | | 150 | — |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -10 \text{mA}$, $I_B = -1 \text{mA}$ | | | -0.6 | V |
| Collector output capacitance (Common base, input open circuited) | C_{ob} | $V_{CB} = -10 \text{V}$, $I_E = 0$, $f = 1 \text{MHz}$ | | 7 | | pF |
| Transition frequency | f_T | $V_{CB} = -10 \text{V}$, $I_E = 10 \text{mA}$, $f = 200 \text{MHz}$ | | 50 | | MHz |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

| Rank | P | Q |
|----------|-----------|-----------|
| h_{FE} | 30 to 100 | 60 to 150 |



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