

2SA0885 (2SA885)

Silicon PNP epitaxial planar type

For low-frequency power amplification

Complementary to 2SC1846

■ Features

- Output of 3 W can be obtained by a complementary pair with 2SC1846
- TO-126B package which requires no insulation plate for installation to the heat sink

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

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|-----------|-------------|------------------|
| Collector-base voltage (Emitter open) | V_{CBO} | -45 | V |
| Collector-emitter voltage (Base open) | V_{CEO} | -35 | V |
| Emitter-base voltage (Collector open) | V_{EBO} | -5 | V |
| Collector current | I_C | -1 | A |
| Peak collector current | I_{CP} | -1.5 | A |
| Collector power dissipation | P_C | 1.2 | W |
| | | 5.0 * | |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Note) *: With a $100 \times 100 \times 2$ mm Al heat sink

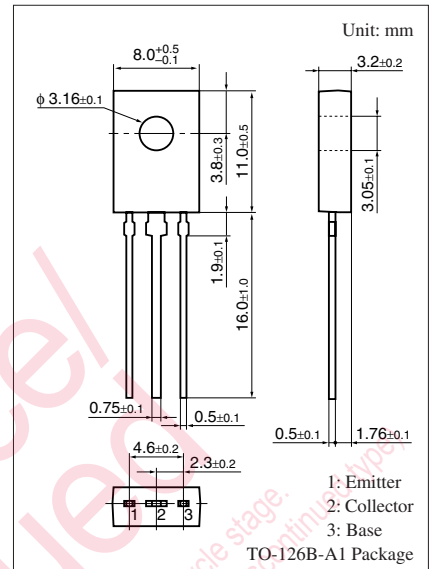
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---------------|--|-----|-----|------|---------------|
| Collector-base voltage (Emitter open) | V_{CBO} | $I_C = -10 \mu\text{A}$, $I_E = 0$ | -45 | | | V |
| Collector-emitter voltage (Base open) | V_{CEO} | $I_C = -2 \text{ mA}$, $I_B = 0$ | -35 | | | V |
| Collector-base cutoff current (Emitter open) | I_{CBO} | $V_{CB} = -20 \text{ V}$, $I_E = 0$ | | | -0.1 | μA |
| Collector-emitter cutoff current (Base open) | I_{CEO} | $V_{CE} = -20 \text{ V}$, $I_B = 0$ | | | -100 | μA |
| Emitter-base cutoff current (Collector open) | I_{EBO} | $V_{EB} = -5 \text{ V}$, $I_C = 0$ | | | -10 | μA |
| Forward current transfer ratio | h_{FE1} * | $V_{CE} = -10 \text{ V}$, $I_C = -500 \text{ mA}$ | 85 | | 340 | — |
| | h_{FE2} | $V_{CE} = -5 \text{ V}$, $I_C = -1 \text{ A}$ | 50 | | | — |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -500 \text{ mA}$, $I_B = -50 \text{ mA}$ | | | -0.5 | V |
| Transition frequency | f_T | $V_{CE} = -10 \text{ V}$, $I_E = 50 \text{ mA}$, $f = 200 \text{ MHz}$ | | 200 | | MHz |
| Collector output capacitance (Common base, input open circuited) | C_{ob} | $V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$ | | 20 | 30 | pF |

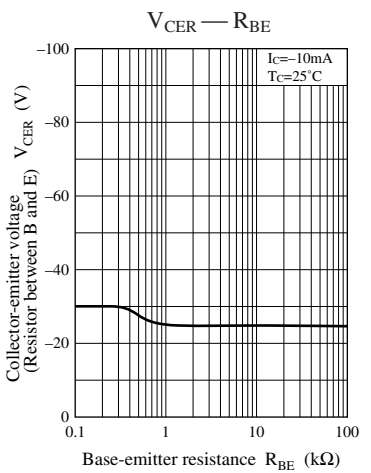
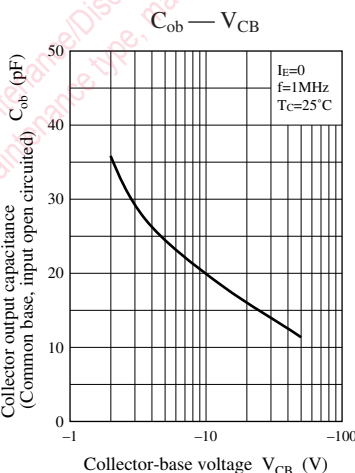
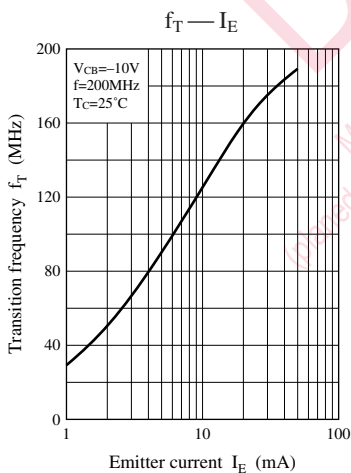
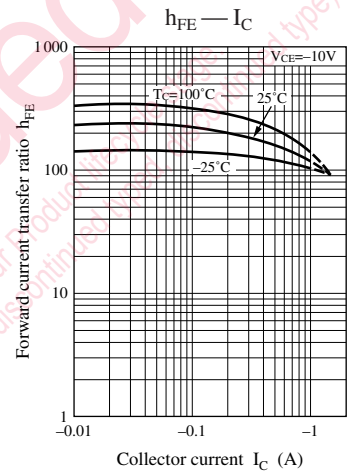
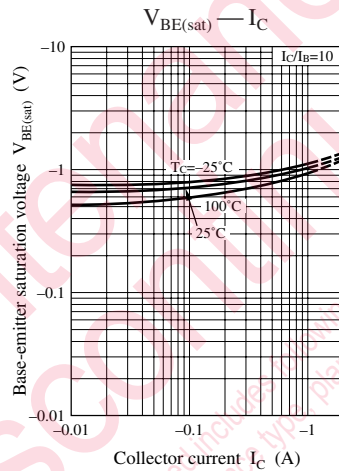
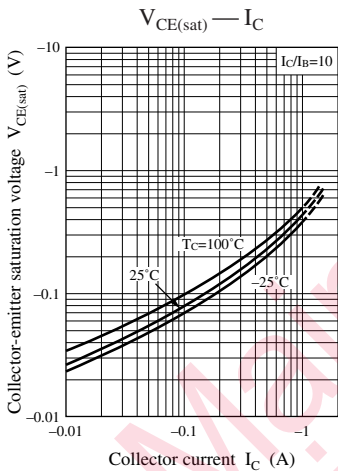
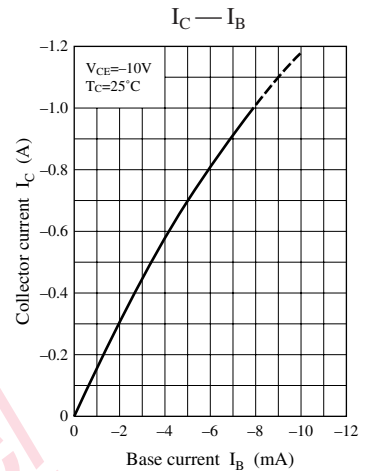
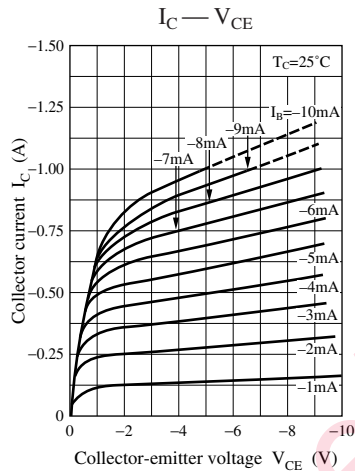
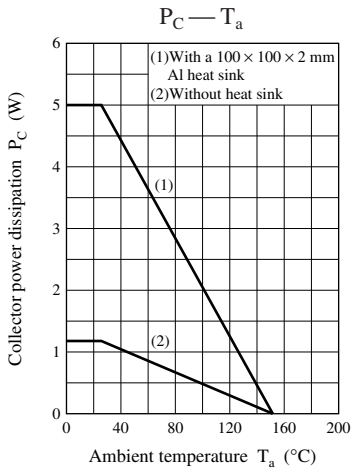
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

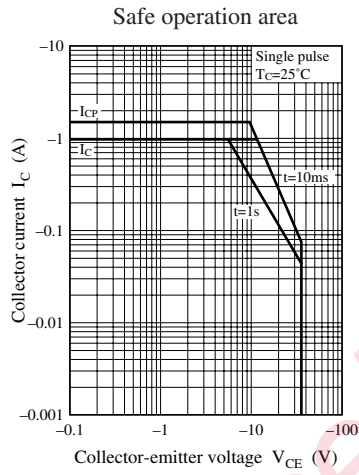
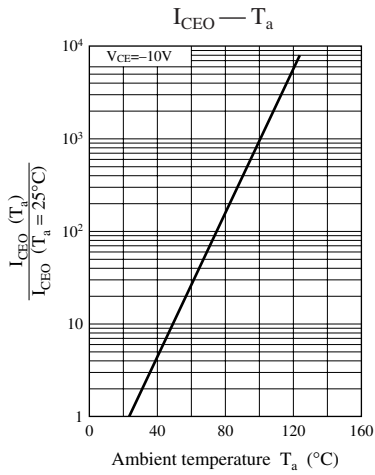
2. *: Rank classification

| Rank | Q | R | S |
|-----------|-----------|------------|------------|
| h_{FE1} | 85 to 170 | 120 to 240 | 170 to 340 |



Note) The part number in the parenthesis shows conventional part number.





Maintenance/Discontinued

Maintenance/Discontinued includes following four Product lifecycle stage.
(planned maintenance type, maintenance type, planned discontinued type, discontinued type)

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