

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 5.0 *	W
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 $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

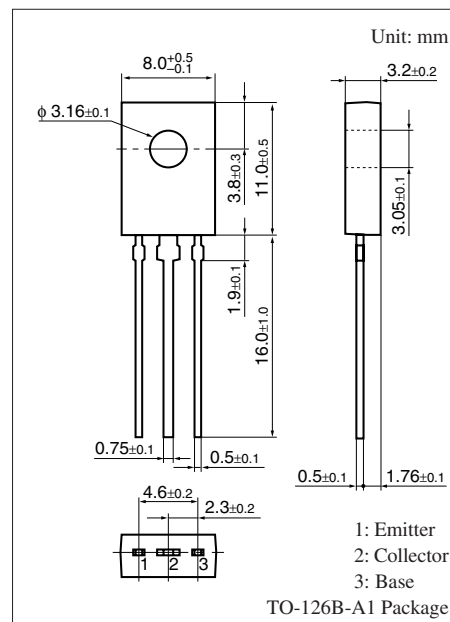
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_{\text{C}} = -10 \mu\text{A}$, $I_{\text{E}} = 0$	-45			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_{\text{C}} = -2 \text{mA}$, $I_{\text{B}} = 0$	-35			V
Collector-base cutoff current (Emitter open)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

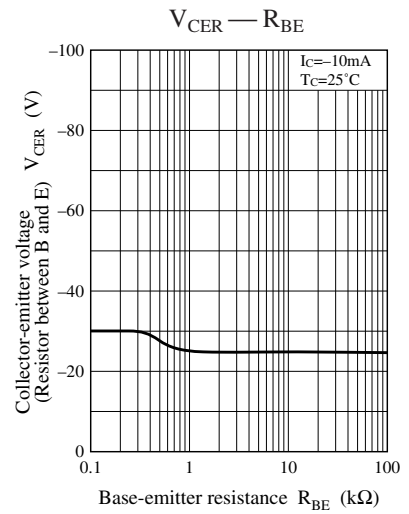
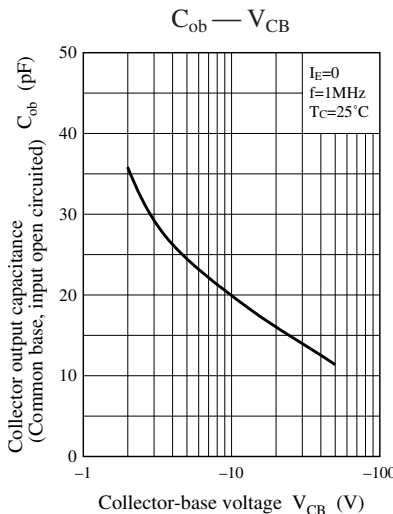
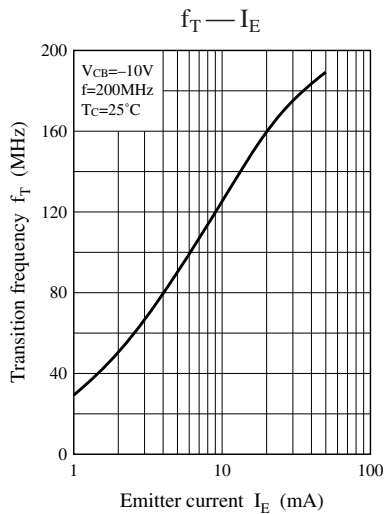
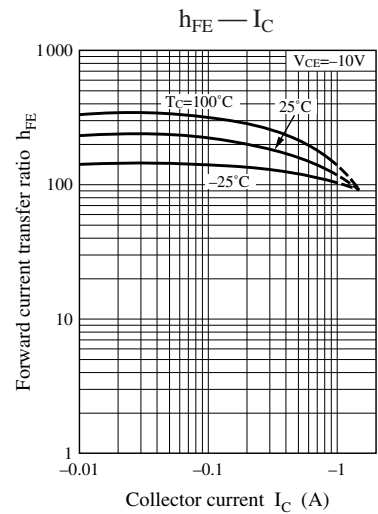
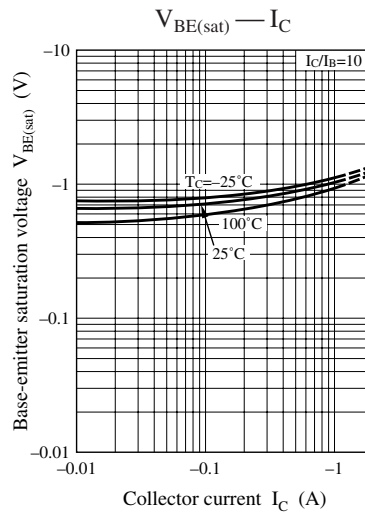
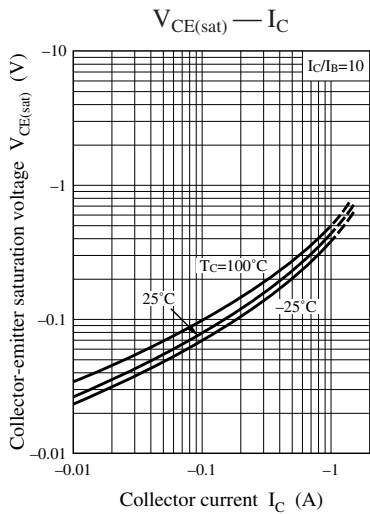
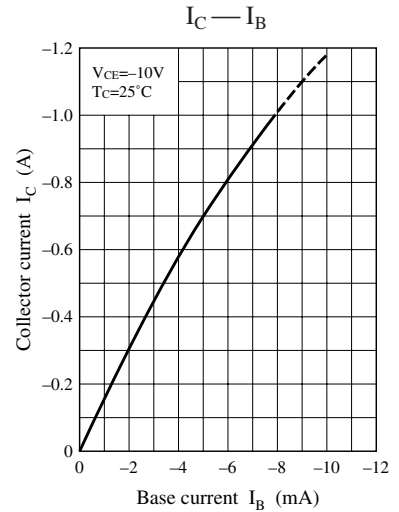
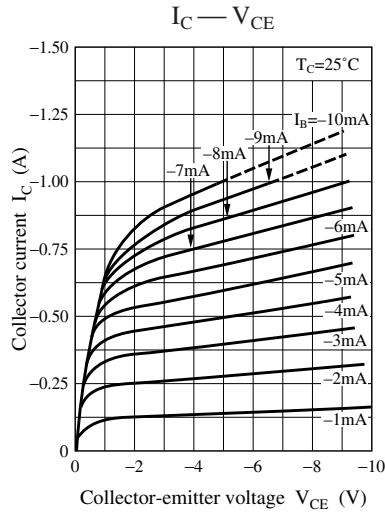
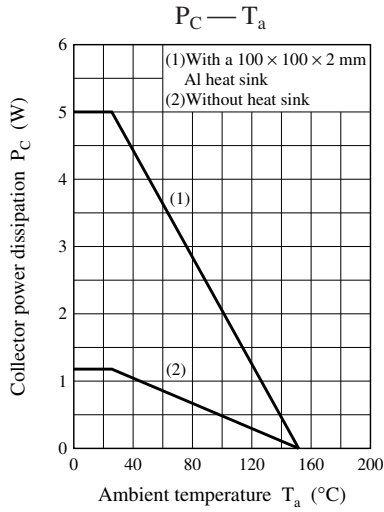
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

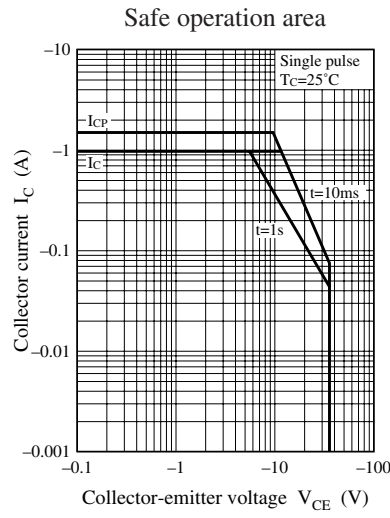
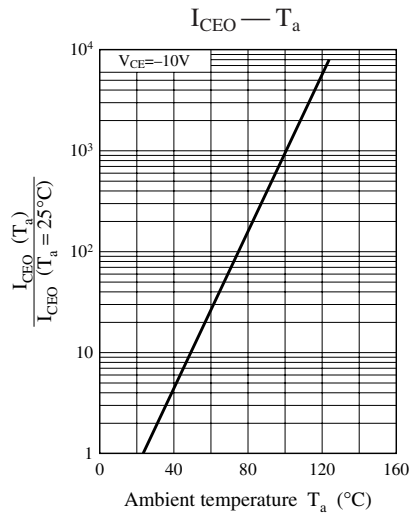
2. *: Rank classification

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.







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