

# 2SA0886 (2SA886)

## Silicon PNP epitaxial planar type

For low-frequency power amplification

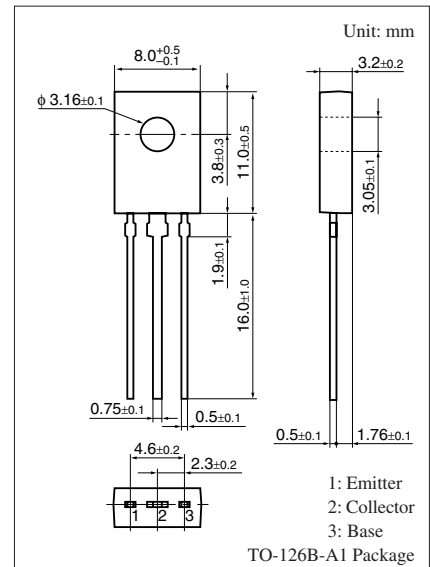
Complementary to 2SC1847

### ■ Features

- Output of 4 W can be obtained by a complementary pair with 2SC1847
- 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)	$V_{\text{CBO}}$	-50	V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	-40	V
Emitter-base voltage (Collector open)	$V_{\text{EBO}}$	-5	V
Collector current	$I_{\text{C}}$	-1.5	A
Peak collector current	$I_{\text{CP}}$	-3	A
Collector power dissipation	$P_{\text{C}}$	1.2	W
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$



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

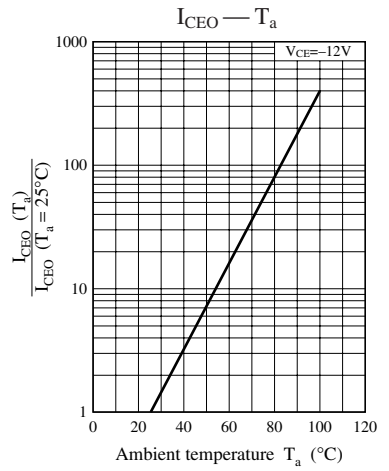
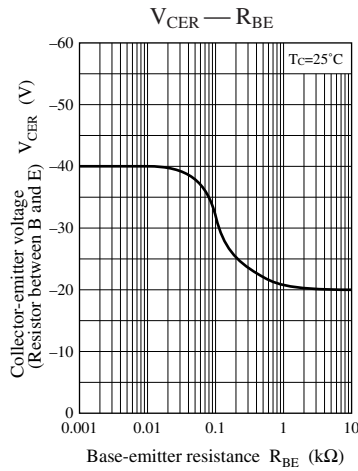
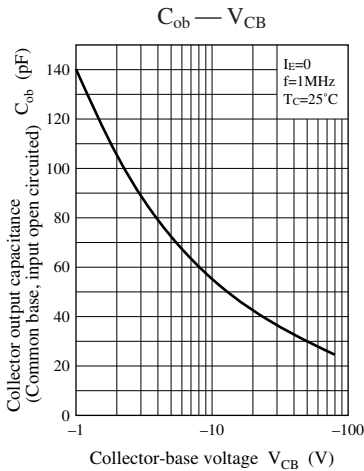
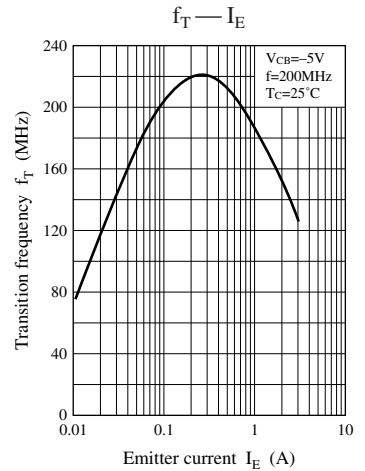
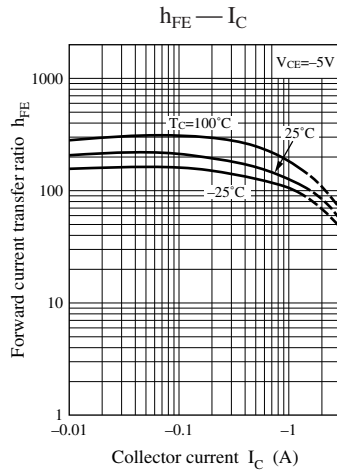
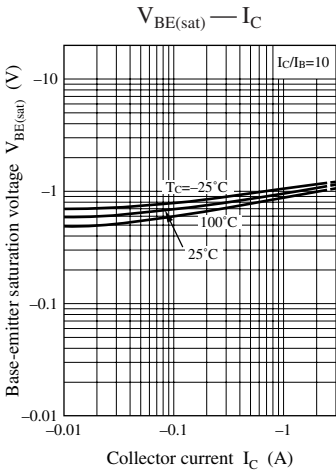
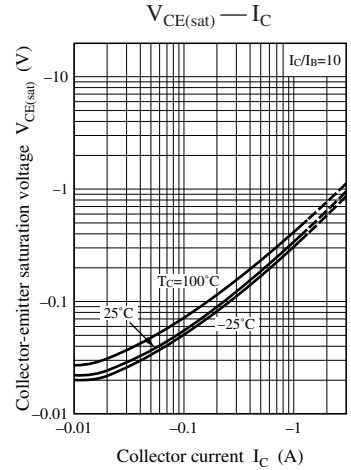
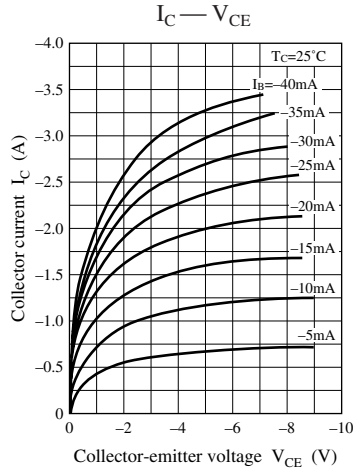
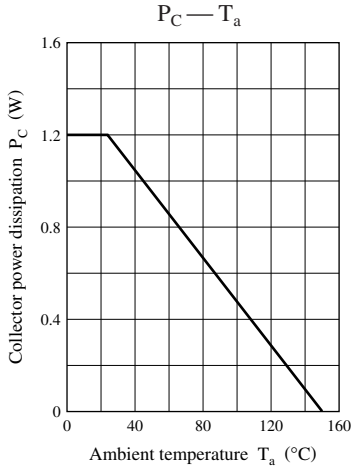
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	$I_{\text{C}} = -1 \text{ mA}, I_{\text{E}} = 0$	-50			V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	$I_{\text{C}} = -2 \text{ mA}, I_{\text{B}} = 0$	-40			V
Collector-base cutoff current (Emitter open)	$I_{\text{CBO}}$	$V_{\text{CB}} = -20 \text{ V}, I_{\text{E}} = 0$			-1	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{\text{CEO}}$	$V_{\text{CE}} = -10 \text{ V}, I_{\text{B}} = 0$			-100	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{\text{EBO}}$	$V_{\text{EB}} = -5 \text{ V}, I_{\text{C}} = 0$			-10	$\mu\text{A}$
Forward current transfer ratio *	$h_{\text{FE}}$	$V_{\text{CE}} = -5 \text{ V}, I_{\text{C}} = -1 \text{ A}$	80		220	—
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = -1.5 \text{ A}, I_{\text{B}} = -0.15 \text{ A}$			-1.0	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_{\text{C}} = -2 \text{ A}, I_{\text{B}} = -0.2 \text{ A}$			-1.5	V
Transition frequency	$f_{\text{T}}$	$V_{\text{CB}} = -5 \text{ V}, I_{\text{E}} = 0.5 \text{ A}, f = 200 \text{ MHz}$		150		MHz
Collector output capacitance (Common base, input open circuited)	$C_{\text{ob}}$	$V_{\text{CB}} = -20 \text{ V}, I_{\text{E}} = 0, f = 1 \text{ MHz}$		45		pF

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

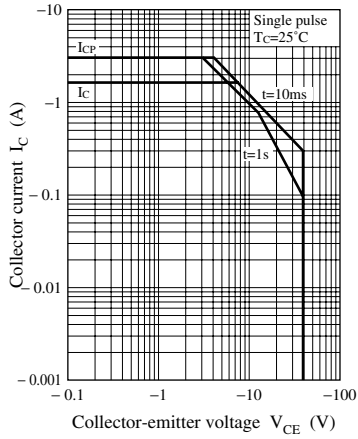
2. \*: Rank classification

Rank	Q	R
$h_{\text{FE1}}$	80 to 160	120 to 220

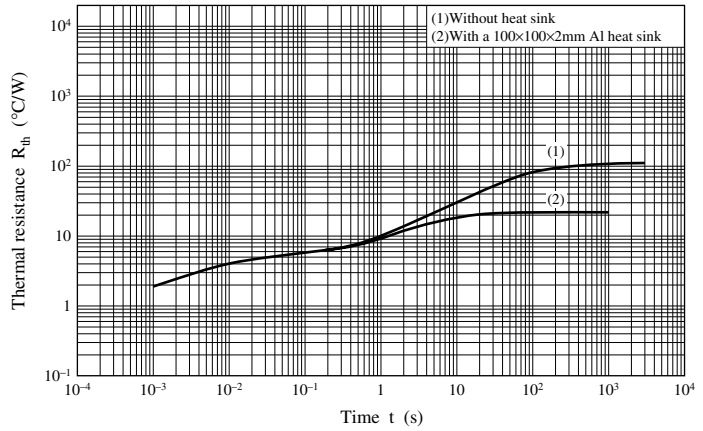
Note) The part numbers in the parenthesis show conventional part number.



Safe operation area



$R_{th} - t$



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