

# 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 $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	-45	V
Collector to emitter voltage	$V_{CEO}$	-35	V
Emitter to base voltage	$V_{EBO}$	-5	V
Peak collector current	$I_{CP}$	-1.5	A
Collector current	$I_C$	-1	A
Collector power dissipation	$P_C$	1.2 *1	W
		5 *2	
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \*1: Without heat sink

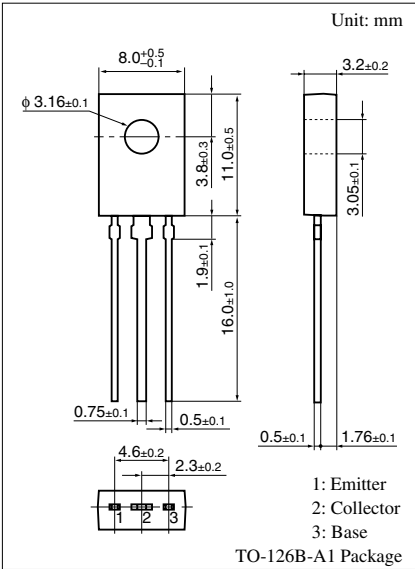
\*2: With a  $100 \times 100 \times 2$  mm A1 heat sink

## ■ Electrical Characteristics $T_C = 25^\circ\text{C}$

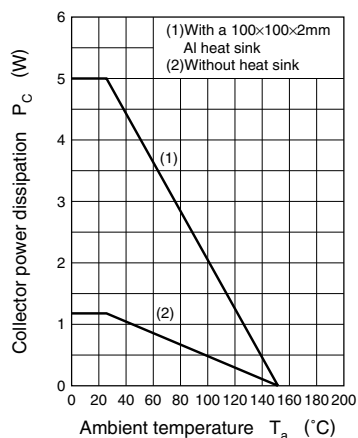
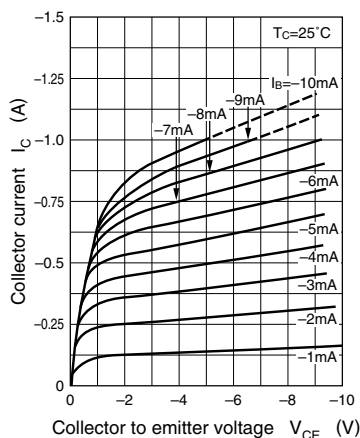
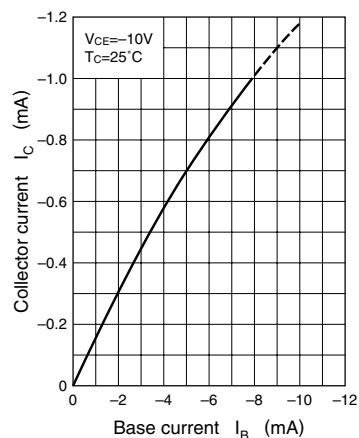
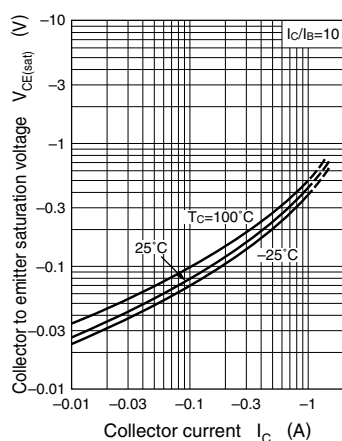
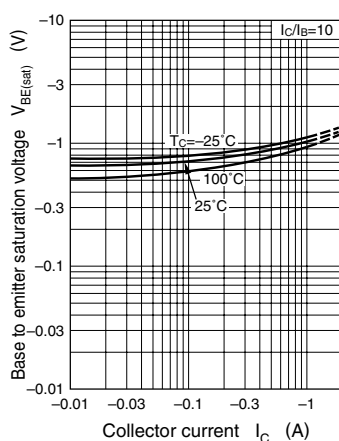
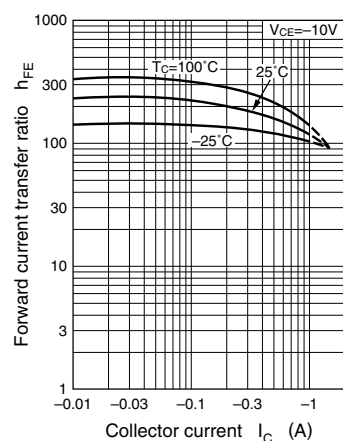
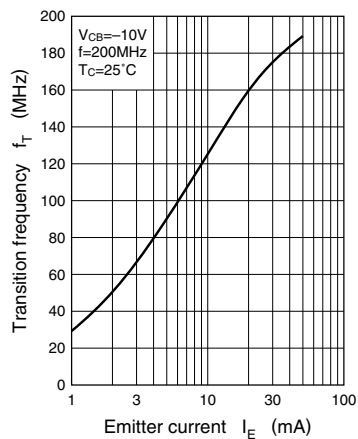
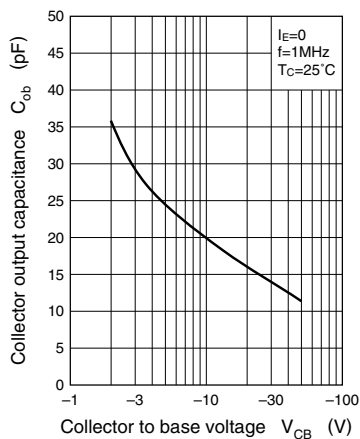
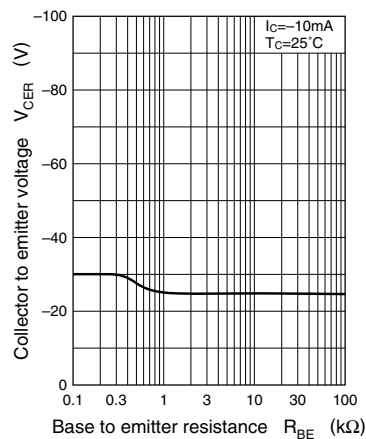
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -20\text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
	$I_{CEO}$	$V_{CE} = -20\text{ V}, I_B = 0$			-100	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -5\text{ V}, I_C = 0$			-10	$\mu\text{A}$
Collector to base voltage	$V_{CBO}$	$I_C = -10\text{ }\mu\text{A}, I_E = 0$	-45			V
Collector to emitter voltage	$V_{CEO}$	$I_C = -2\text{ mA}, I_B = 0$	-35			V
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 to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{ mA}, I_B = -50\text{ mA}$			-0.5	V
Transition frequency	$f_T$	$V_{CB} = -10\text{ V}, I_E = 50\text{ mA}, f = 200\text{ MHz}$		200		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$		20	30	pF

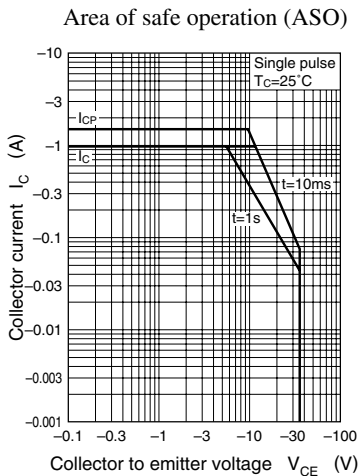
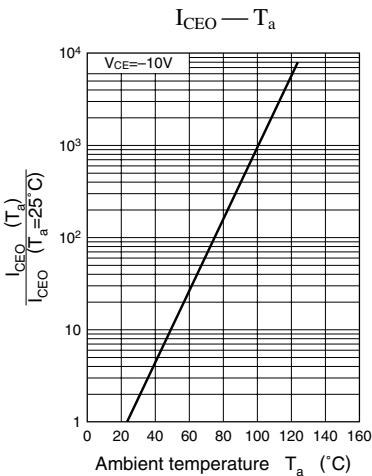
Note) \*: Rank classification

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.

$P_C - T_a$  $I_C - V_{CE}$  $I_C - I_B$  $V_{CE(sat)} - I_C$  $V_{BE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$  $V_{CER} - R_{BE}$ 



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