

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

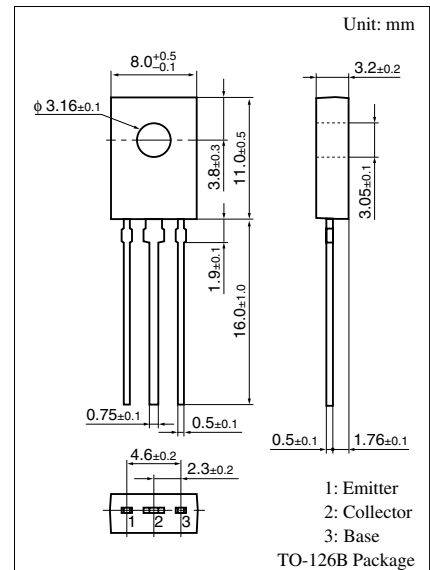
*2: With a $100 \times 100 \times 2$ mm A1 heat sink

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

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

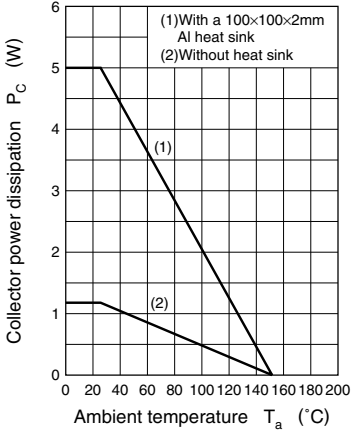
Note) *: Rank classification

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

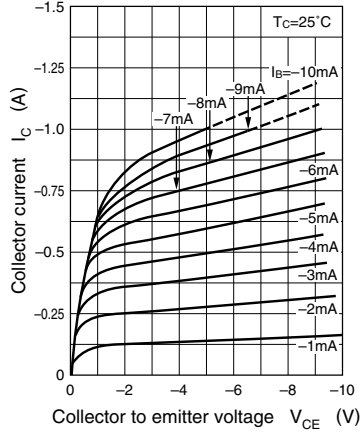


Note.) The Part number in the Parenthesis shows conventional part number.

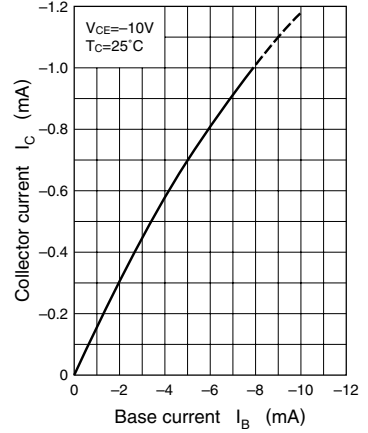
$P_C - T_a$



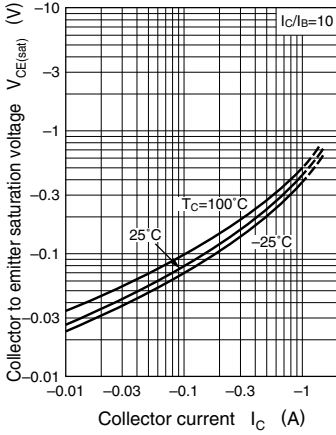
$I_C - V_{CE}$



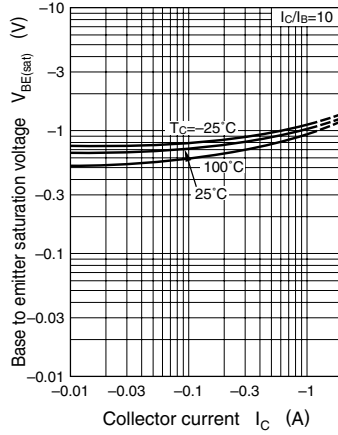
$I_C - I_B$



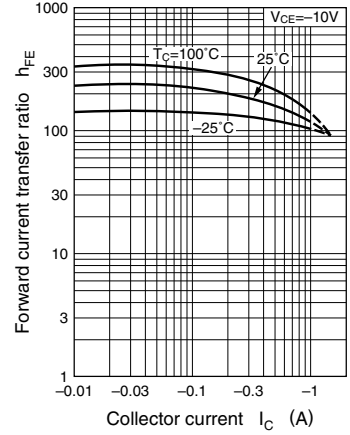
$V_{CE(sat)} - I_C$



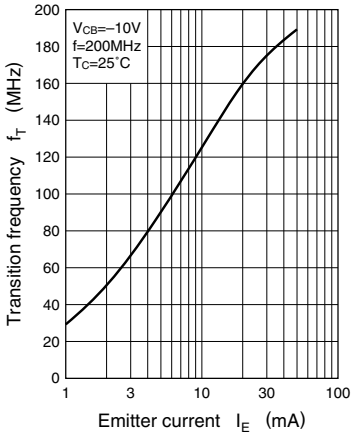
$V_{BE(sat)} - I_C$



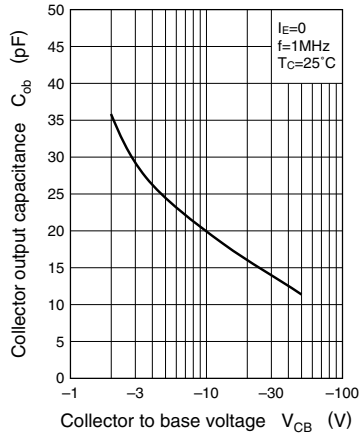
$h_{FE} - I_C$



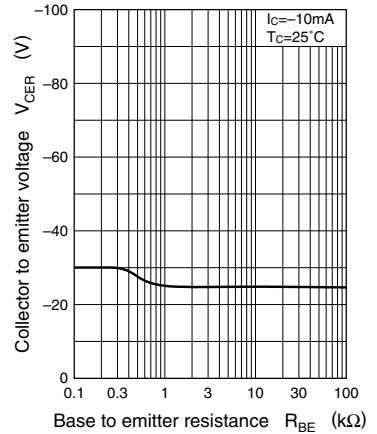
$f_T - I_E$

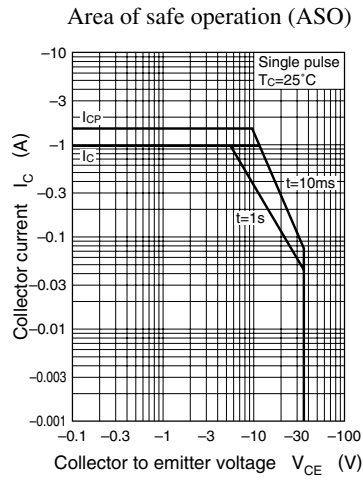
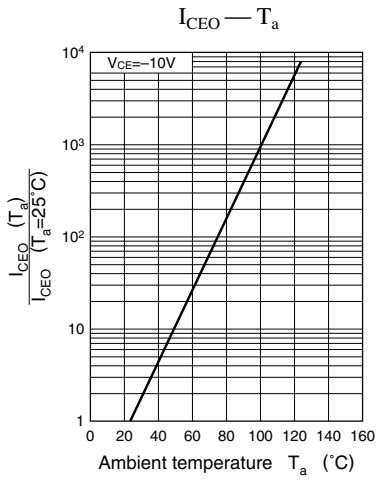


$C_{ob} - V_{CB}$



$V_{CER} - R_{BE}$





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