

2SA0900 (2SA900)

Silicon PNP epitaxial planar type

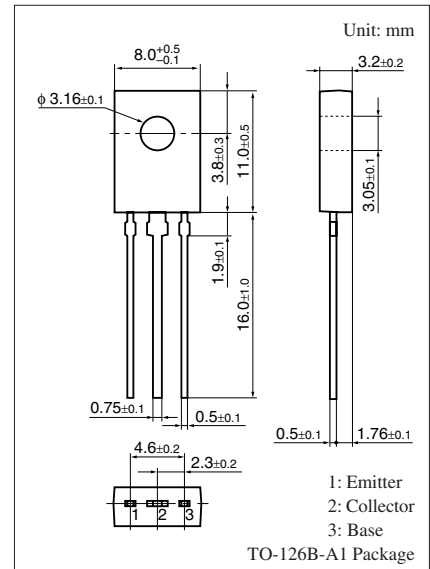
For low-frequency Power amplification
Complementary to 2SC1868

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- 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}	-20	V
Collector-emitter voltage (Base open)	V_{CEO}	-18	V
Emitter-base voltage (Collector open)	V_{EBO}	-5	V
Collector current	I_C	-1	A
Peak collector current	I_{CP}	-2	A
Collector power dissipation	P_C	1.2	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



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

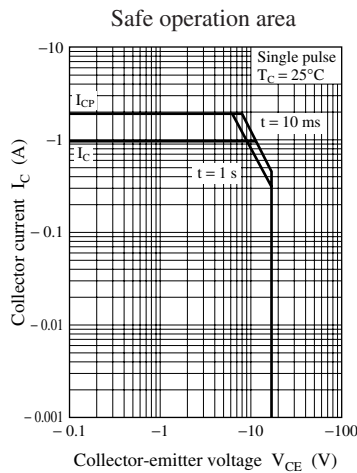
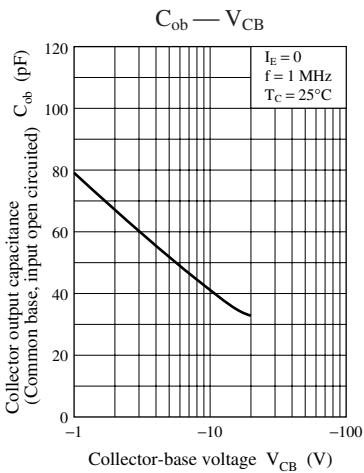
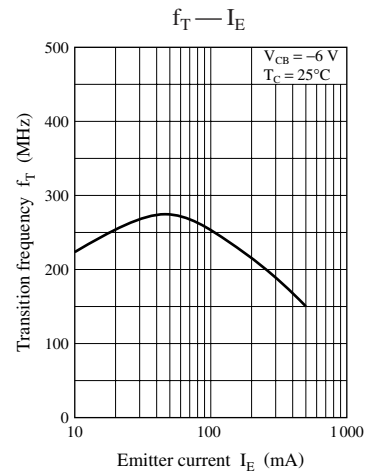
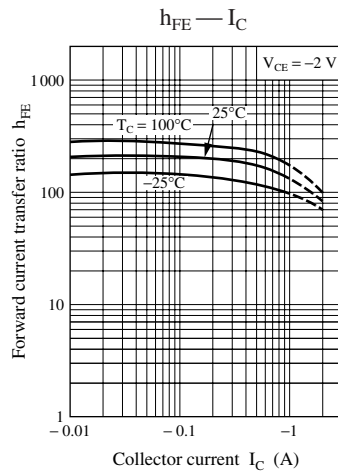
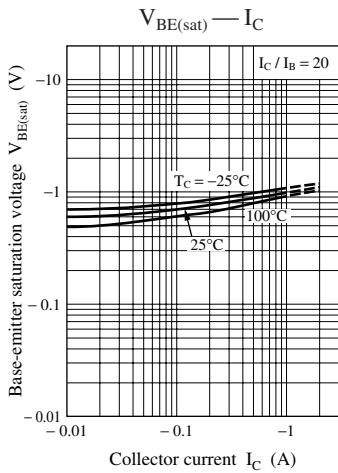
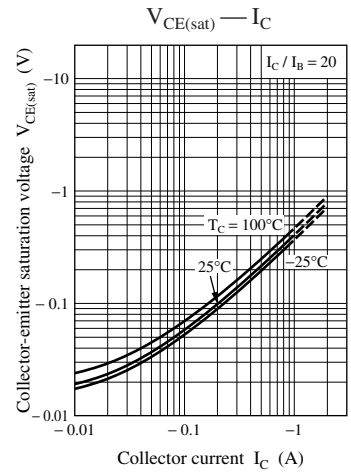
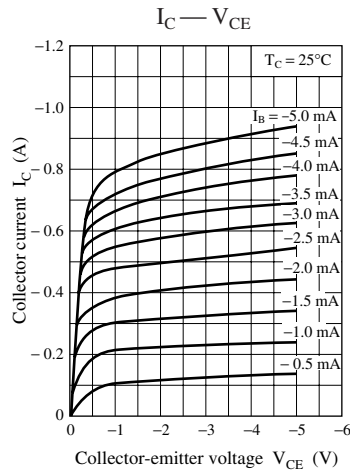
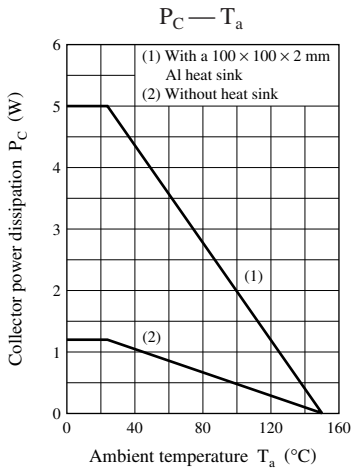
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10 \mu\text{A}$, $I_E = 0$	-20			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -1 \text{ mA}$, $I_B = 0$	-18			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \mu\text{A}$, $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -10 \text{ V}$, $I_E = 0$			-1	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = -18 \text{ V}$, $I_B = 0$			-10	μA
Forward current transfer ratio	h_{FE1} *	$V_{CE} = -2 \text{ V}$, $I_C = -500 \text{ mA}$	130		280	—
	h_{FE2}	$V_{CE} = -2 \text{ V}$, $I_C = -1.5 \text{ A}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 \text{ A}$, $I_B = -50 \text{ mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 \text{ mA}$, $I_B = -50 \text{ mA}$			-1.2	V
Transition frequency	f_T	$V_{CB} = -6 \text{ V}$, $I_E = 50 \text{ mA}$, $f = 200 \text{ MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -6 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		40		pF

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

2. *: Rank classification

Rank	R	S
h_{FE1}	130 to 210	180 to 280

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



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