

2SA0900 (2SA900)

Silicon PNP epitaxial planar type

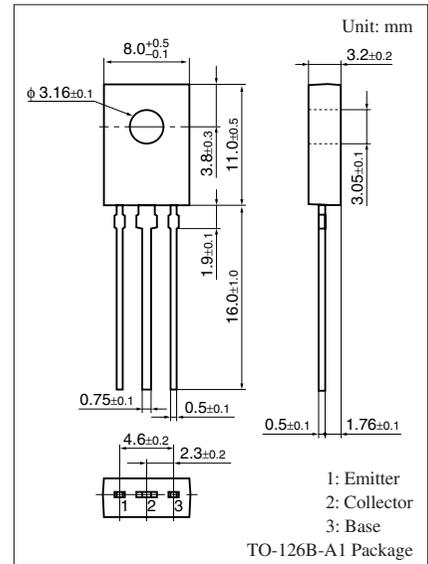
For low-frequency output amplification
Complementary to 2SC1568

■ Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$
- 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}	-20	V
Collector to emitter voltage	V_{CEO}	-18	V
Emitter to base voltage	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	$^\circ\text{C}$



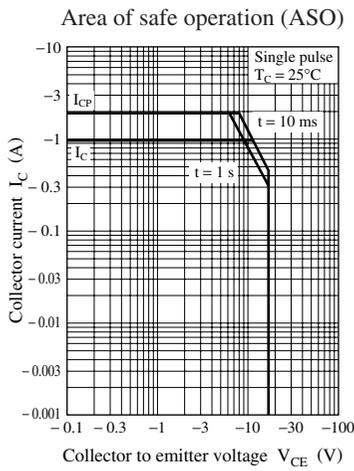
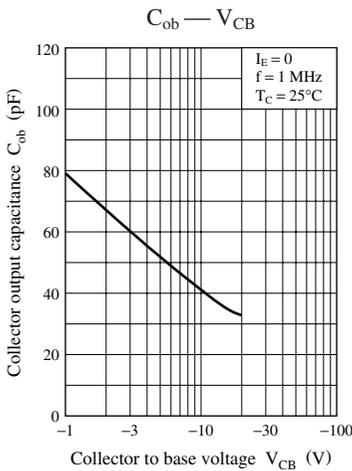
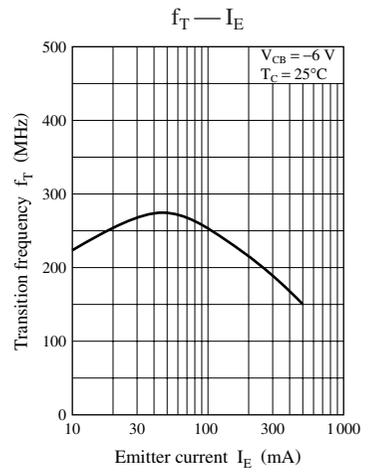
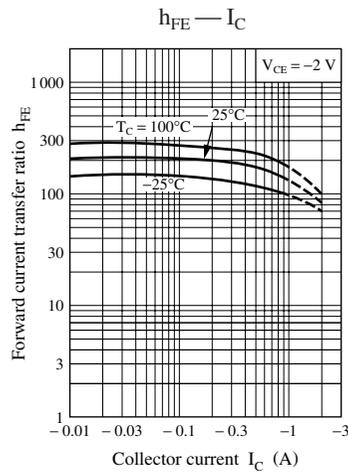
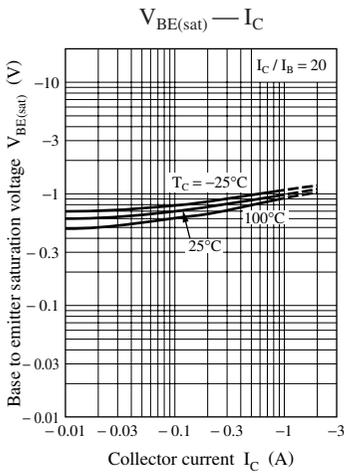
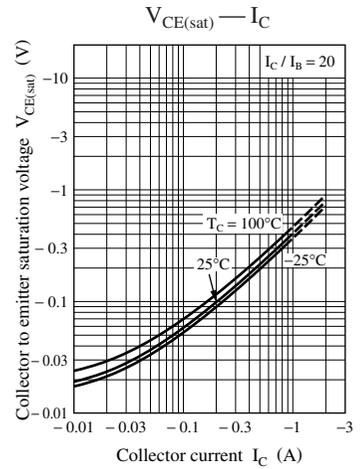
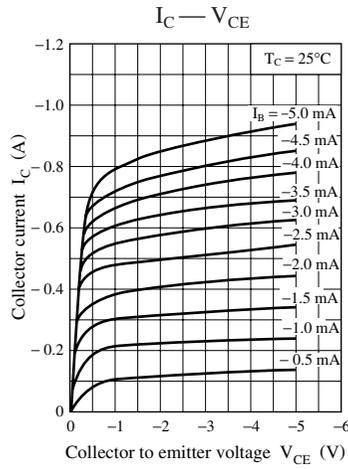
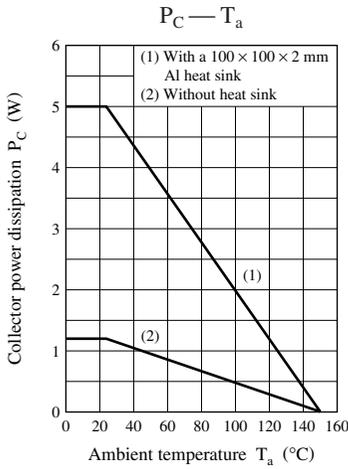
■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector to base voltage	V_{CBO}	$I_C = -10 \mu\text{A}$, $I_E = 0$	-20			V
Collector to emitter voltage	V_{CEO}	$I_C = -1 \text{ mA}$, $I_B = 0$	-18			V
Emitter to base voltage	V_{EBO}	$I_E = -10 \mu\text{A}$, $I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -10 \text{ V}$, $I_E = 0$			-1	μA
	I_{CEO}	$V_{CE} = -18 \text{ V}$, $I_B = 0$			-10	
DC current gain 1 *	h_{FE1}	$V_{CE} = -2 \text{ V}$, $I_C = -500 \text{ mA}$	130		280	
DC current gain 2	h_{FE2}	$V_{CE} = -2 \text{ V}$, $I_B = -1.5 \text{ A}$	50			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 \text{ A}$, $I_B = -50 \text{ mA}$			-0.5	V
Base to 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	C_{ob}	$V_{CB} = -6 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		40		pF

Note) * h_{FE} Rank classification

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

Note) The part number in the parenthesis shows conventional part number.



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