

# 2SB1321A

## Silicon PNP epitaxial planar type

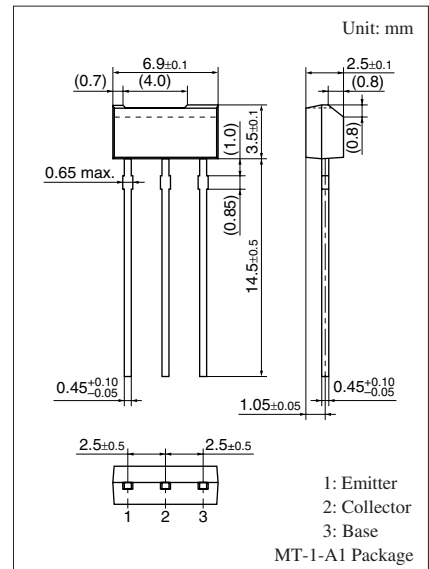
For low-frequency output amplification and driver amplification  
Complementary to 2SD1992A

### ■ Features

- Allowing supply with the radial taping
- Large collector power dissipation  $P_C$  (600 mW)

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	-60	V
Collector-emitter voltage (Base open)	$V_{CEO}$	-50	V
Emitter-base voltage (Collector open)	$V_{EBO}$	-7	V
Collector current	$I_C$	-0.5	A
Peak collector current	$I_{CP}$	-1	A
Collector power dissipation	$P_C$	600	mW
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)	$V_{CBO}$	$I_C = -10 \mu\text{A}$ , $I_E = 0$	-60			V
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = -2 \text{ mA}$ , $I_B = 0$	-50			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu\text{A}$ , $I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -20 \text{ V}$ , $I_E = 0$			-0.1	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = -20 \text{ V}$ , $I_B = 0$			-1	$\mu\text{A}$
Forward current transfer ratio	$h_{FE1}^{*2}$	$V_{CE} = -10 \text{ V}$ , $I_C = -10 \text{ mA}$	85		340	—
	$h_{FE2}^{*1}$	$V_{CE} = -10 \text{ V}$ , $I_C = -500 \text{ mA}$	40			—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -300 \text{ mA}$ , $I_B = -30 \text{ mA}$		-0.35	-0.60	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}$ , $I_E = 10 \text{ mA}$ , $f = 200 \text{ MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = -10 \text{ V}$ , $I_E = 0$ , $f = 1 \text{ MHz}$		6	15	pF

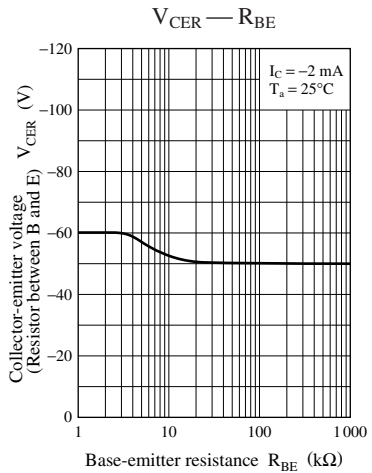
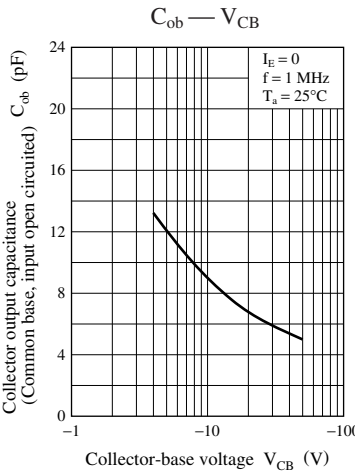
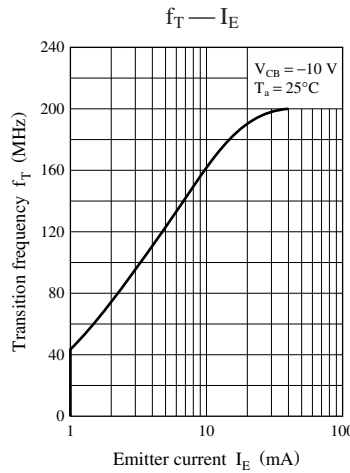
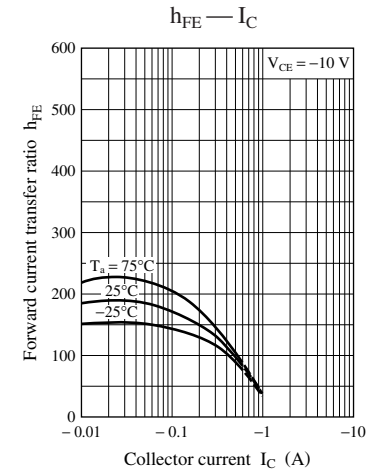
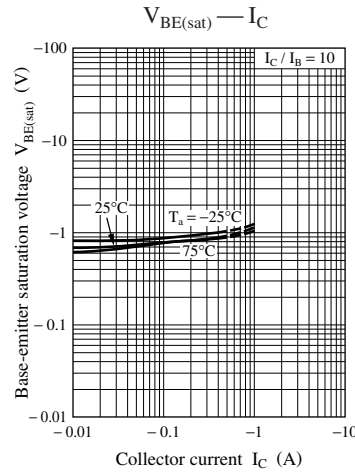
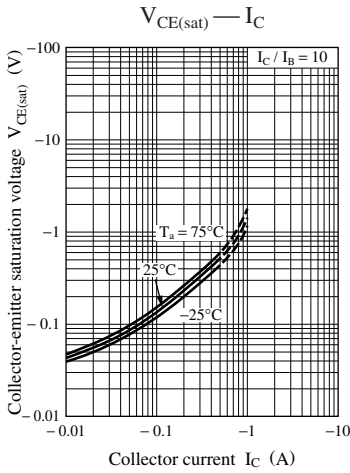
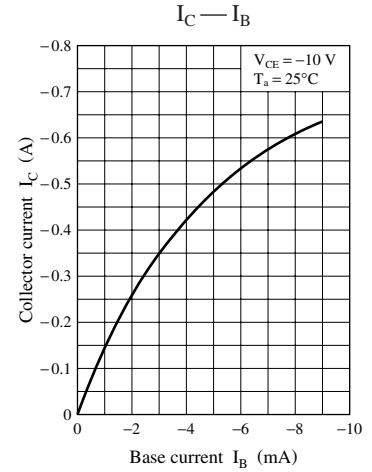
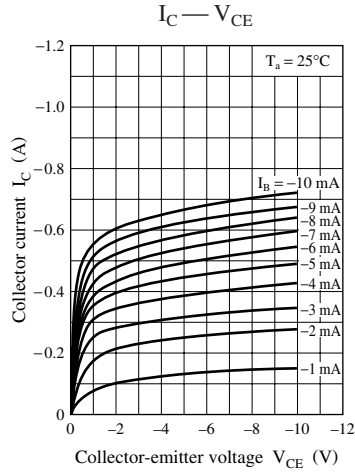
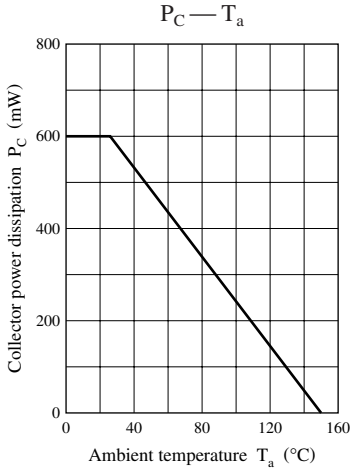
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

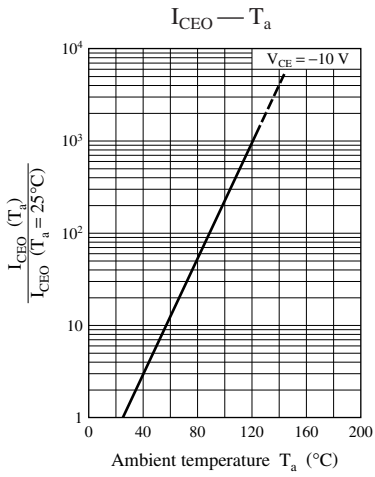
2. \*1: Pulse measurement

\*2: Rank classification

Rank	Q	R	S	No-rank
$h_{FE1}$	85 to 170	120 to 240	170 to 340	85 to 340

Product of no-rank is not classified and have no marking symbol for rank.





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