# 2SB1321A

### Silicon PNP epitaxial planar type

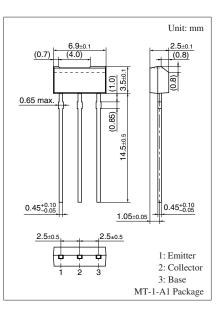
For low-frequency output amplification and driver amplification Complementary to 2SD1992A

#### Features

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

Parameter	Symbol	Rating	Unit			
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-60	V			
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V			
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	-7	V			
Collector current	I <sub>C</sub>	- 0.5	А			
Peak collector current	I <sub>CP</sub>	-1	А			
Collector power dissipation	P <sub>C</sub>	600	mW			
Junction temperature	Tj	150	°C			
Storage temperature	T <sub>stg</sub>	-55 to +150	°C			





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

Parameter	Symbol	Conditions Min		Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \ \mu A, \ I_{\rm E} = 0$	-60			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-50			V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	$I_E = -10 \ \mu A, \ I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	I <sub>CBO</sub>	$V_{CB} = -20 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	I <sub>CEO</sub>	$V_{CE} = -20 \text{ V}, I_B = 0$			-1	μΑ
Forward current transfer ratio	h <sub>FE1</sub> *2	$V_{CE} = -10 \text{ V}, I_C = -10 \text{ mA}$	85		340	
	h <sub>FE2</sub> *1	$V_{CE} = -10 \text{ V}, I_C = -500 \text{ mA}$	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{\rm C} = -300 \text{ mA}, I_{\rm B} = -30 \text{ mA}$		- 0.35	- 0.60	V
Transition frequency	f <sub>T</sub>	$V_{CB} = -10 \text{ V}, I_E = 10 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		6	15	pF

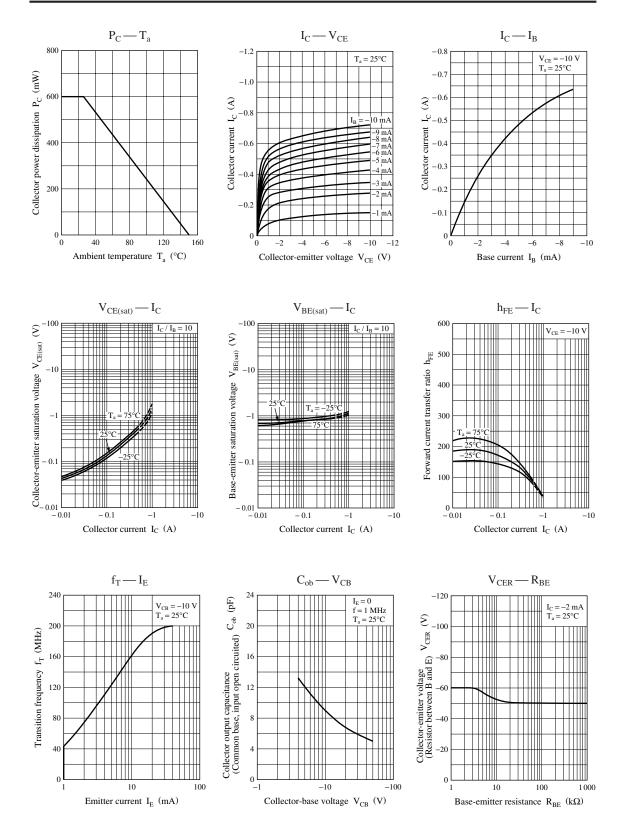
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

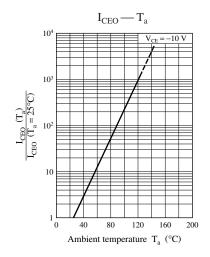
2. \*1: Pulse measurement

\*2: Rank classification

Rank	Q	R	S	No-rank
h <sub>FE1</sub>	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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