

# **2SA0720A** (2SA720A)

## Silicon PNP epitaxial planar type

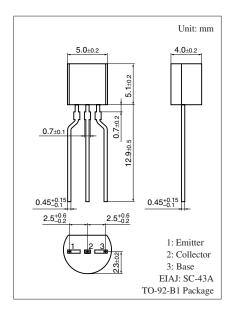
For low-frequency driver amplification Complementary to 2SC1318A

### ■ Features

- ullet High collector-emitter voltage (Base open)  $V_{CEO}$
- Optimum for the driver stage of a low-frequency and 25 W to 30 W output amplifier

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-80	V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-70	V
Emitter-base voltage (Collector open)	$V_{EBO}$	-5	V
Collector current	$I_C$	- 0.5	A
Peak collector current	$I_{CP}$	-1	A
Collector power dissipation	P <sub>C</sub>	625	mW
Junction temperature	$T_{j}$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C



## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = -10 \mu A, I_E = 0$	-80			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-70			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu A, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -20 \text{ V}, I_{E} = 0$			- 0.1	μΑ
Forward current transfer ratio *1	h <sub>FE1</sub> *2	$V_{CE} = -10 \text{ V}, I_{C} = -150 \text{ mA}$	85		240	_
	h <sub>FE2</sub>	$V_{CE} = -10 \text{ V}, I_{C} = -500 \text{ mA}$	40			_
Collector-emitter saturation voltage *1	V <sub>CE(sat)</sub>	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		- 0.2	- 0.6	V
Base-emitter saturation voltage *1	V <sub>BE(sat)</sub>	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		- 0.85	-1.50	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		120		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		20	30	pF
(Common base, input open circuited)						

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

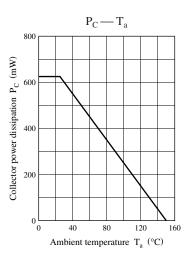
#### 2. \*1: Pulse measurment

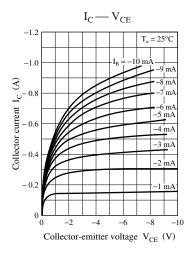
#### \*2: Rank classification

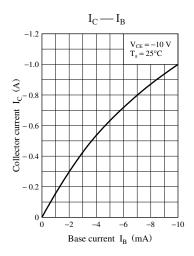
Rank	Q	R		
h <sub>FE1</sub>	85 to 170	120 to 240		

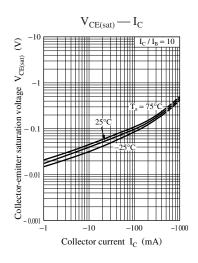
Note) The part number in the parenthesis shows conventional part number.

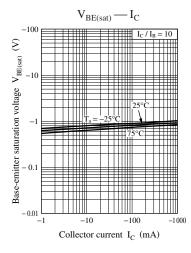
## **Panasonic**

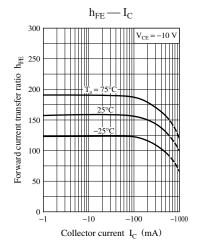


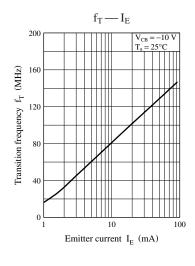


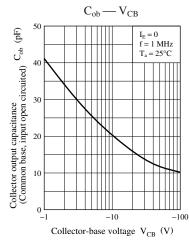


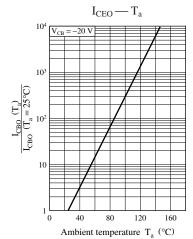












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