

# 2SB0792 (2SB792), 2SB0792A (2SB792A)

## Silicon PNP epitaxial planar type

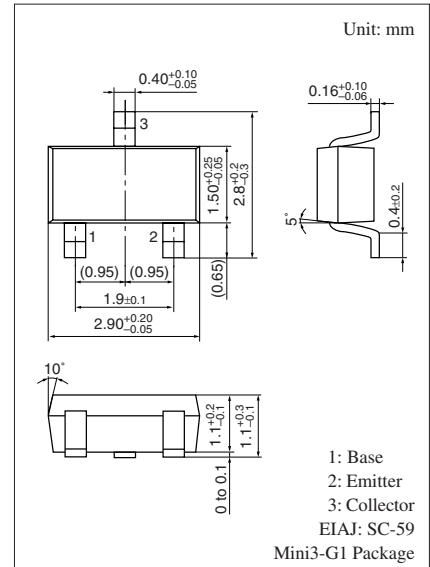
For high breakdown voltage low-noise amplification

### ■ Features

- High collector-emitter voltage (Base open)  $V_{CEO}$
- Low noise voltage NV
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing

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

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	2SB0792	$V_{CBO}$	-150	V
	2SB0792A		-185	
Collector-emitter voltage (Base open)	2SB0792	$V_{CEO}$	-150	V
	2SB0792A		-185	
Emitter-base voltage (Collector open)	$V_{EBO}$	-5	V	
Collector current	$I_C$	-50	mA	
Peak collector current	$I_{CP}$	-100	mA	
Collector power dissipation	$P_C$	200	mW	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	



Marking Symbol:

- 2SB0792: I
- 2SB0792A: 2F

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

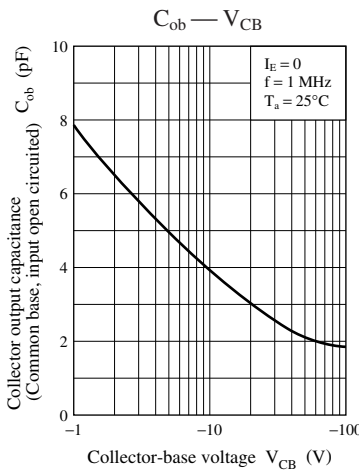
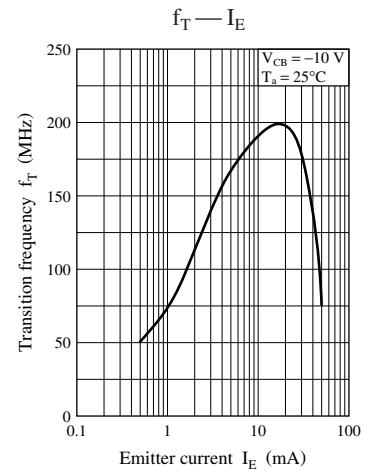
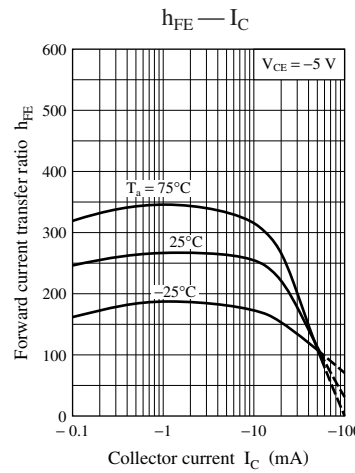
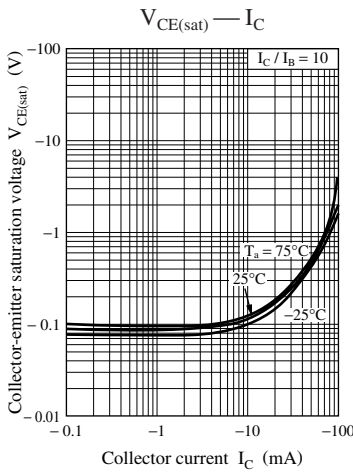
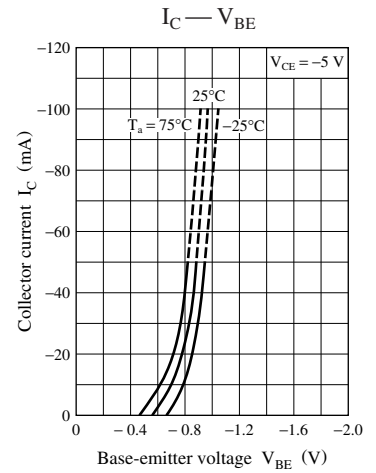
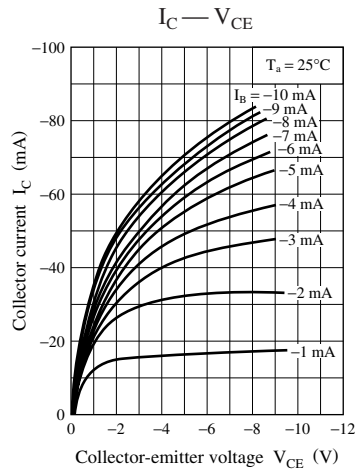
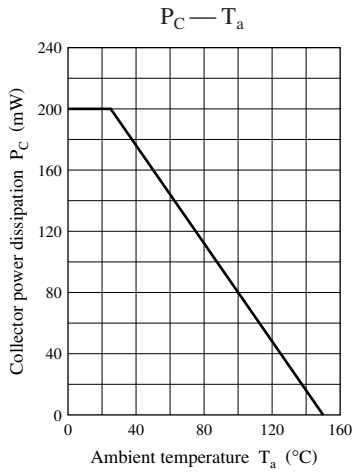
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SB0792	$V_{CEO}$ $I_C = -100 \mu\text{A}$ , $I_B = 0$	-150			V
	2SB0792A		-185			
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu\text{A}$ , $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -100 \text{V}$ , $I_E = 0$			-1	$\mu\text{A}$
Forward current transfer ratio *	2SB0792	$h_{FE}$ $V_{CE} = -5 \text{V}$ , $I_C = -10 \text{mA}$	130		450	—
	2SB0792A		130		330	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -30 \text{mA}$ , $I_B = -3 \text{mA}$			-1	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)	$C_{ob}$	$V_{CB} = -10 \text{V}$ , $I_E = 0$ , $f = 1 \text{MHz}$		4		pF
Noise voltage	NV	$V_{CE} = -10 \text{V}$ , $I_C = -1 \text{mA}$ , $G_V = 80 \text{dB}$ $R_g = 100 \text{k}\Omega$ , Function = FLAT		150		mV

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

2. \*: Rank classification

Rank	R	S	T
$h_{FE}$	130 to 220	185 to 330	260 to 450
Marking symbol	2SB0792	IR	IS
	2SB0792A	2FR	2FS

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



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