

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	°C
Storage temperature		T_{stg}	-55 to +150	°C

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

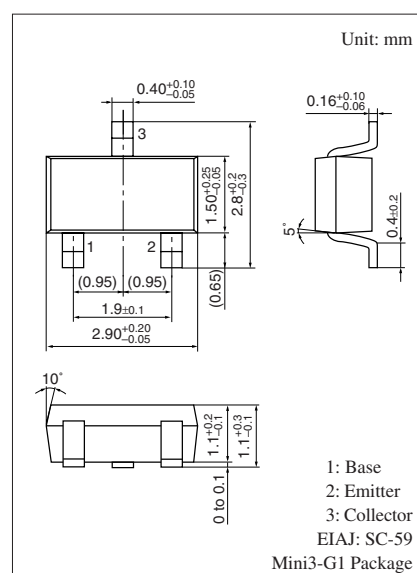
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SB0792 2SB0792A	V_{CEO} $I_C = -100\ \mu\text{A}$, $I_B = 0$	-150			V
			-185			
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10\ \mu\text{A}$, $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -100\ \text{V}$, $I_E = 0$			-1	μA
Forward current transfer ratio *	2SB0792 2SB0792A	h_{FE} $V_{CE} = -5\ \text{V}$, $I_C = -10\ \text{mA}$	130		450	—
			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

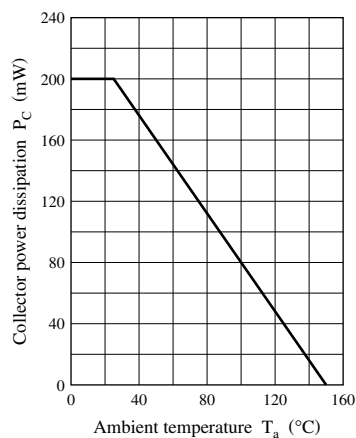
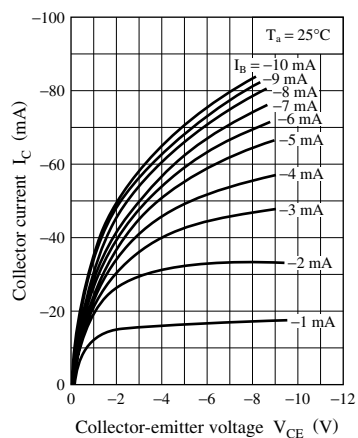
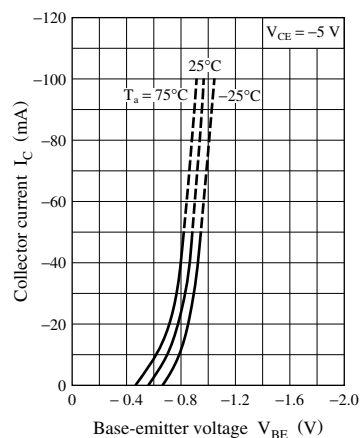
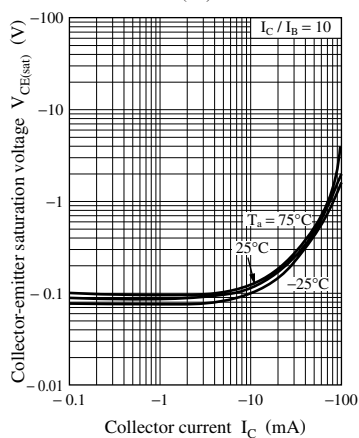
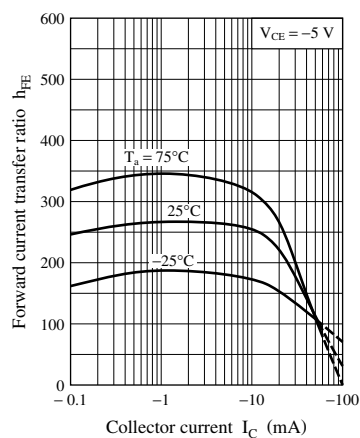
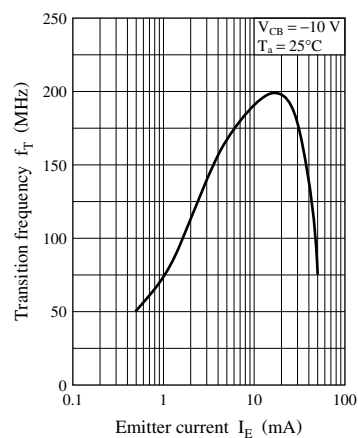
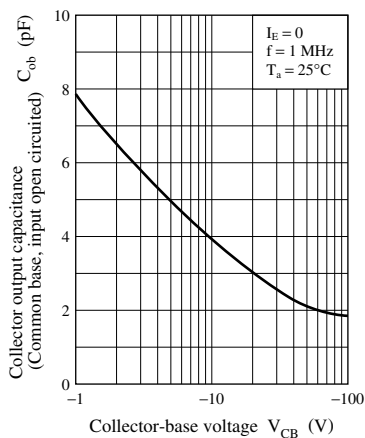
Rank		R	S	T
h_{FE}		130 to 220	185 to 330	260 to 450
Marking symbol	2SB0792	IR	IS	IT
	2SB0792A	2FR	2FS	—

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



Marking Symbol:

- 2SB0792: I
- 2SB0792A: 2F

$P_C - T_a$  $I_C - V_{CE}$  $I_C - V_{BE}$  $V_{CE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$ 

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