

2SA0794 (2SA794), 2SA0794A (2SA794A)

Silicon PNP epitaxial planar type

For low-frequency output driver

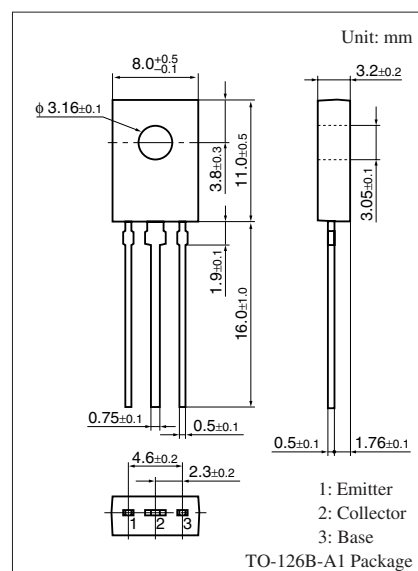
Complementary to 2SC1567, 2SC1567A

■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- Optimum for the driver stage of low-frequency and 40 W to 100 W output amplifier
- TO-126B package which requires no insulation plate for installation to the heat sink

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

Parameter		Symbol	Rating	Unit
Collector-base voltage (Emitter open)	2SA0794	V_{CBO}	−100	V
	2SA0794A		−120	
Collector-emitter voltage (Base open)	2SA0794	V_{CEO}	−100	V
	2SA0794A		−120	
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_C	1.2	W
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C



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

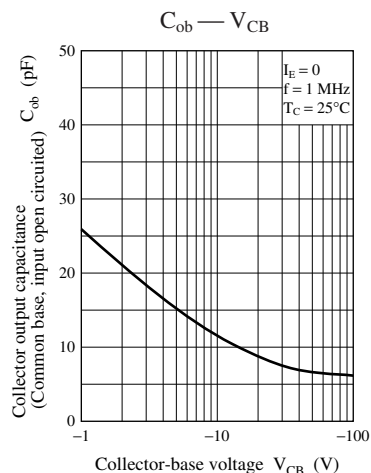
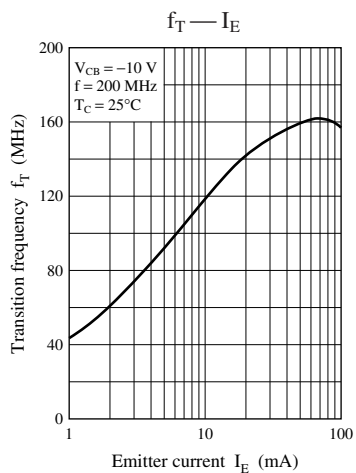
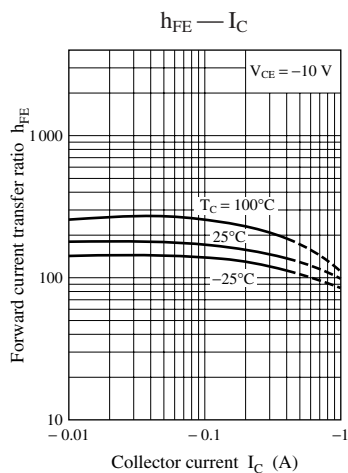
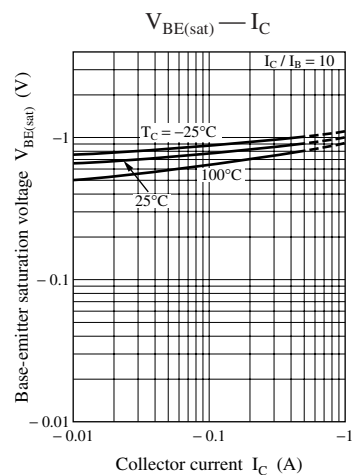
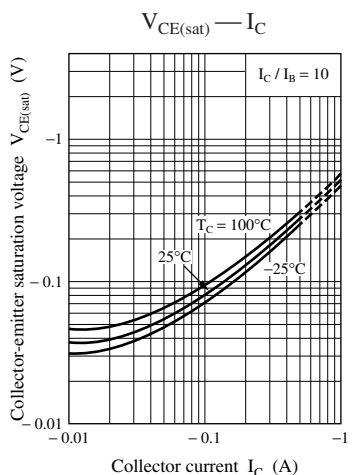
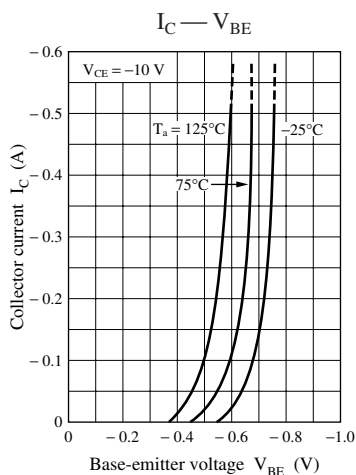
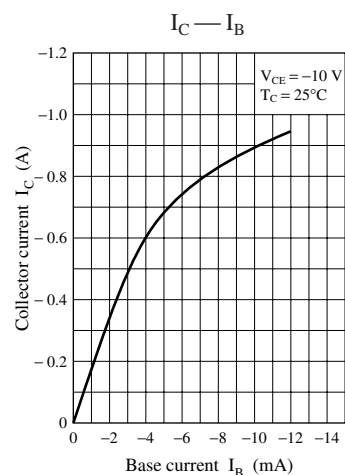
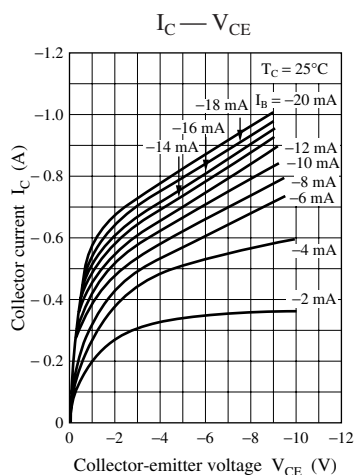
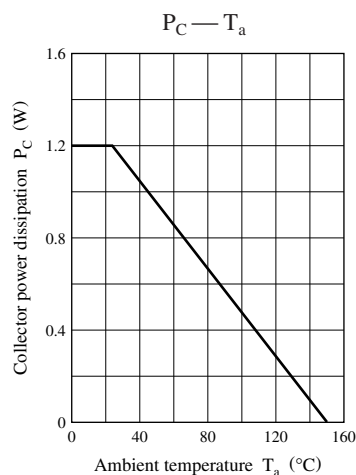
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SA0794 2SA0794A	V_{CEO} $I_C = -100 \mu\text{A}$, $I_B = 0$	-100			V
			-120			
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -1 \mu\text{A}$, $I_C = 0$	-5			V
Forward current transfer ratio	h_{FE1}^* h_{FE2}	$V_{CE} = -10 \text{ V}$, $I_C = -150 \text{ mA}$	90		220	—
		$V_{CE} = -5 \text{ V}$, $I_C = -500 \text{ mA}$	50	100		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}$, $I_B = -50 \text{ mA}$		-0.2	-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 \text{ mA}$, $I_B = -50 \text{ mA}$		-0.85	-1.20	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}$, $I_E = 50 \text{ mA}$, $f = 200 \text{ MHz}$		120		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		20	30	pF

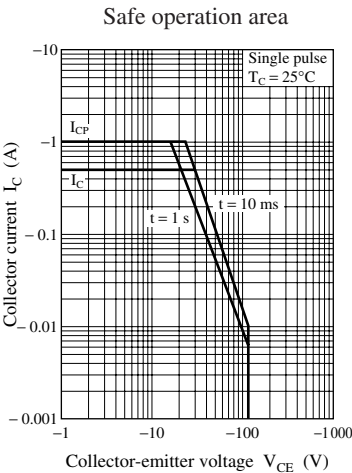
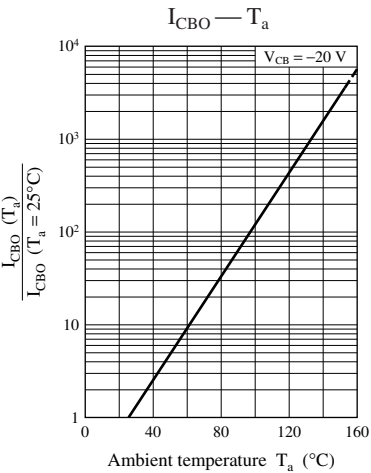
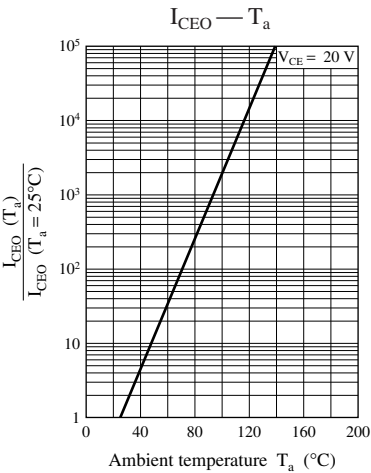
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

Rank	Q	R
h_{FE1}	90 to 155	130 to 220

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





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