

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

## Silicon PNP epitaxial planar type

For low-frequency output driver

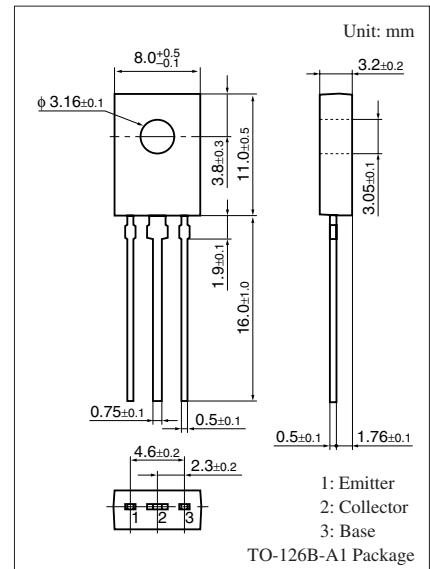
Complementary to 2SC1567, 2SC1567A

### ■ 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	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	



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

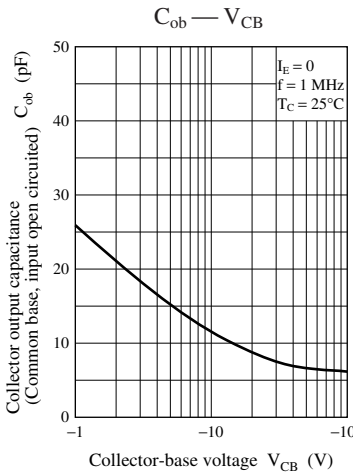
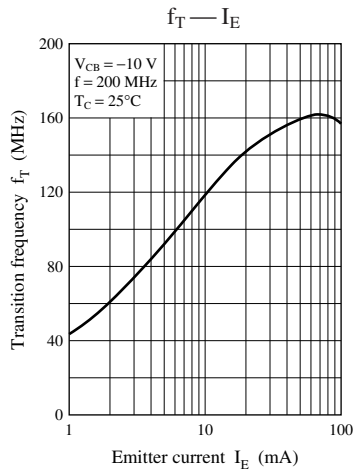
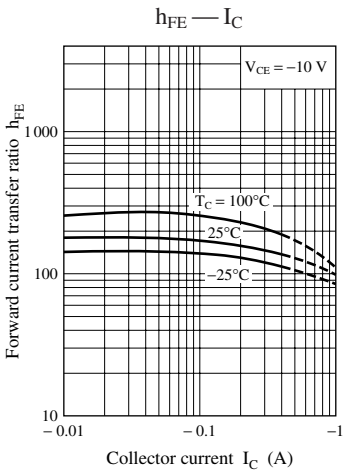
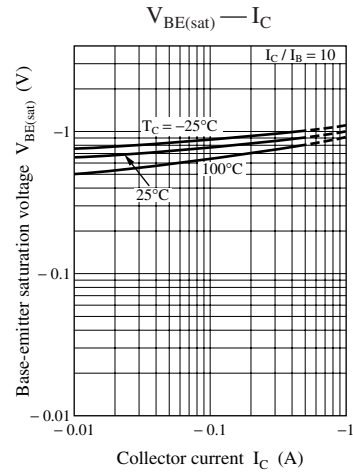
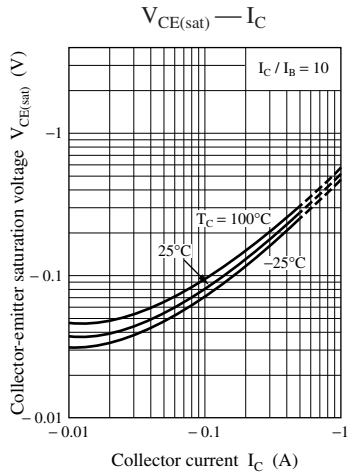
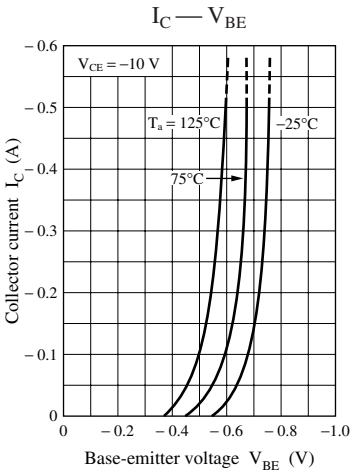
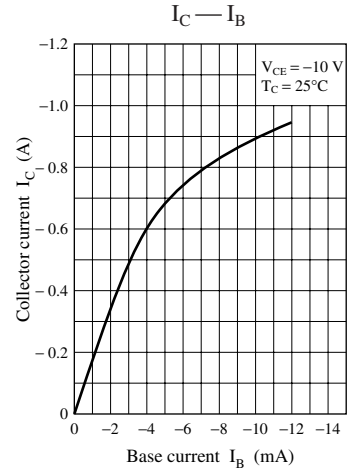
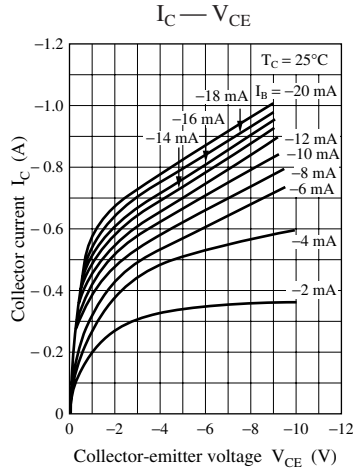
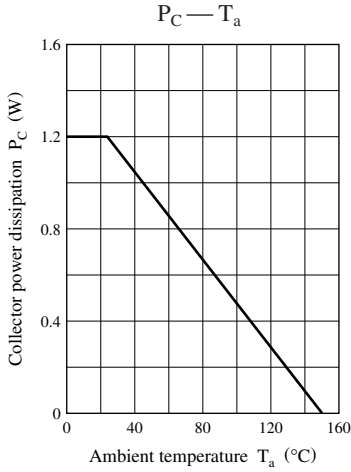
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SA0794	$V_{CEO}$	$I_C = -100 \mu\text{A}, I_B = 0$	-100		V
	2SA0794A			-120		
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -1 \mu\text{A}, I_C = 0$	-5			V
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = -10 \text{ V}, I_C = -150 \text{ mA}$	90		220	—
	$h_{FE2}$	$V_{CE} = -5 \text{ V}, I_C = -500 \text{ mA}$	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

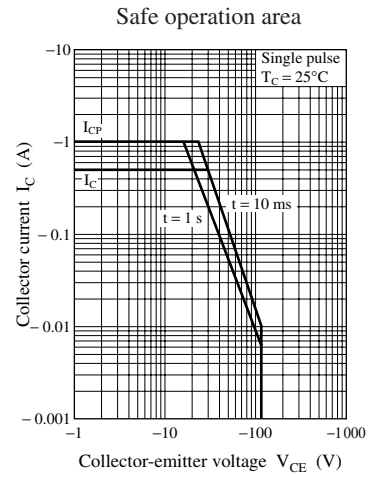
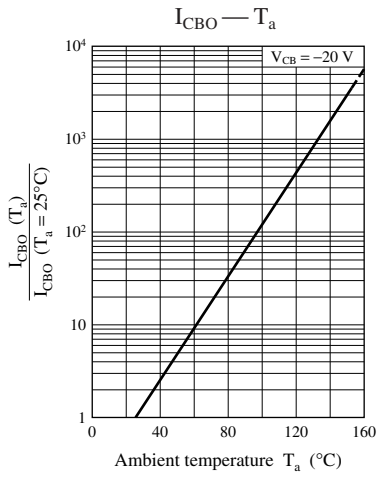
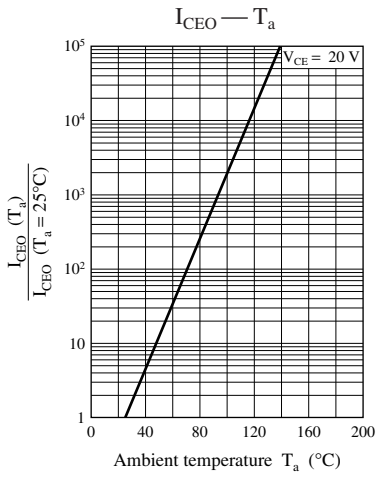
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

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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