

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

## Silicon PNP epitaxial planar type

For low-frequency output driver

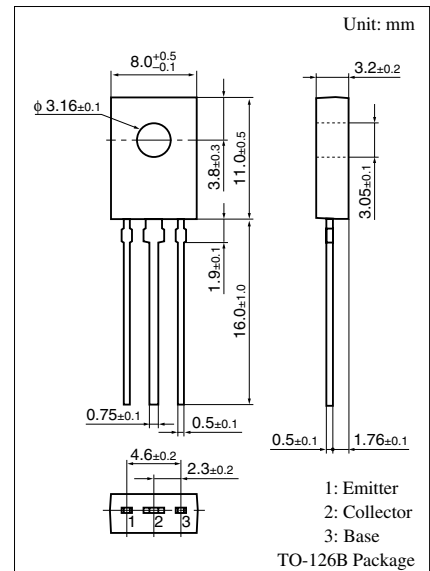
Complementary to 2SC1567 and 2SC1567A

### ■ Features

- High collector to emitter voltage  $V_{CEO}$
- 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 $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	2SA0794	-100	V
	2SA0794A	-120	
Collector to emitter voltage	2SA0794	-100	V
	2SA0794A	-120	
Emitter to base voltage	$V_{EBO}$	-5	V
Peak collector current	$I_{CP}$	-1	A
Collector current	$I_C$	-0.5	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 $T_C = 25^\circ\text{C}$

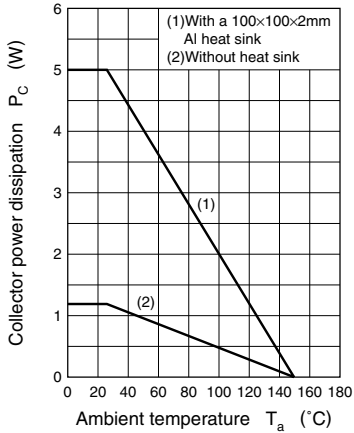
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector to emitter voltage	2SA0794	$I_C = -100 \mu\text{A}, I_B = 0$	-100			V
	2SA0794A		-120			
Emitter to base voltage	$V_{EBO}$	$I_E = -1 \mu\text{A}, I_C = 0$	-5			V
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = -10 \text{ V}, I_C = -150 \text{ mA}$	90	160	220	
	$h_{FE2}$	$V_{CE} = -5 \text{ V}, I_C = -500 \text{ mA}$	50	100		
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		-0.2	-0.4	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		-0.85	-1.2	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		120		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		20	30	pF

Note) \*: Rank classification

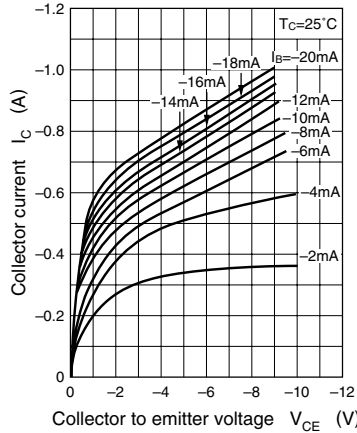
Rank	Q	R
$h_{FE1}$	90 to 155	130 to 220

Note.) The Part numbers in the Parenthesis show conventional part number.

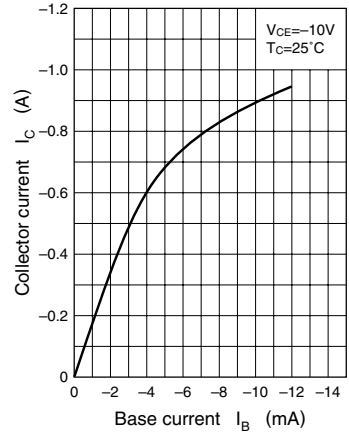
$P_C - T_a$



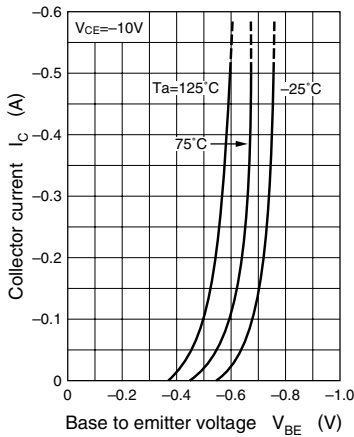
$I_C - V_{CE}$



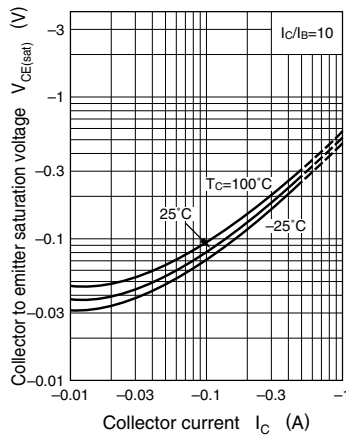
$I_C - I_B$



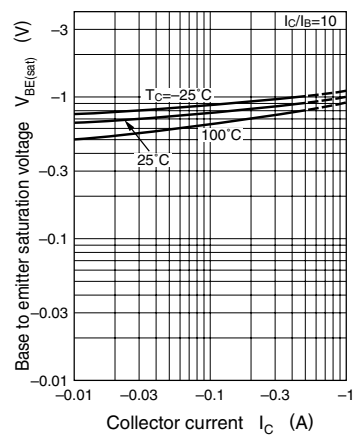
$I_C - V_{BE}$



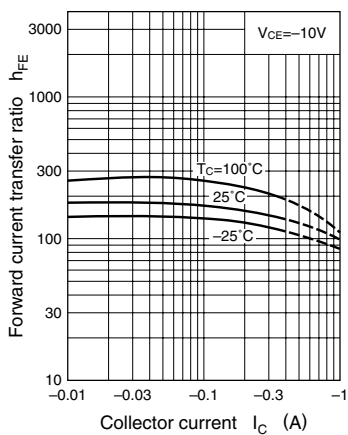
$V_{CE(sat)} - I_C$



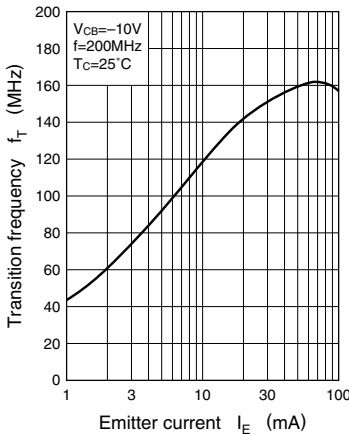
$V_{BE(sat)} - I_C$



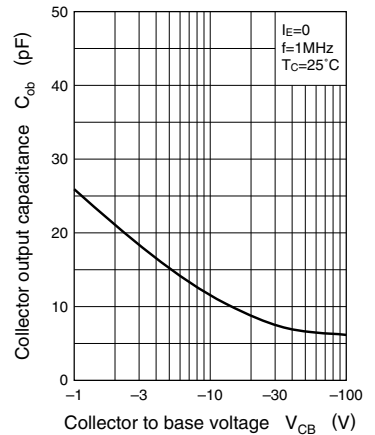
$h_{FE} - I_C$

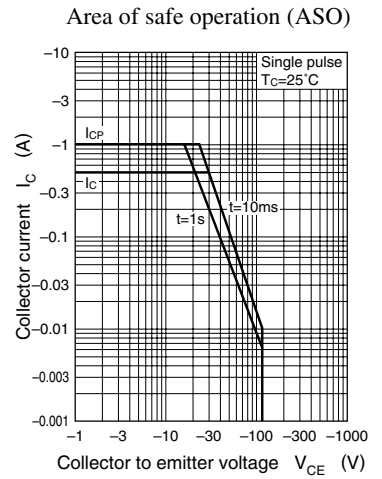
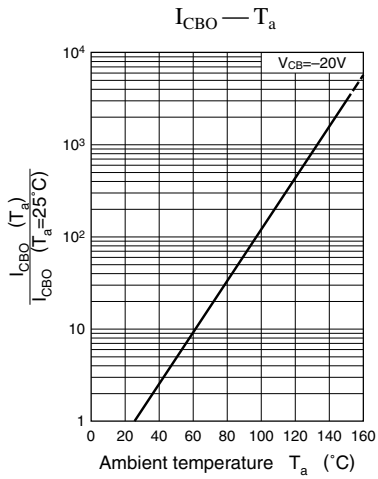
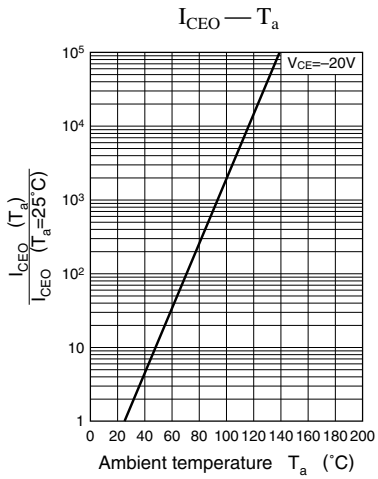


$f_T - I_E$



$C_{ob} - V_{CB}$





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