

# 2SC1567, 2SC1567A

## Silicon NPN epitaxial planar type

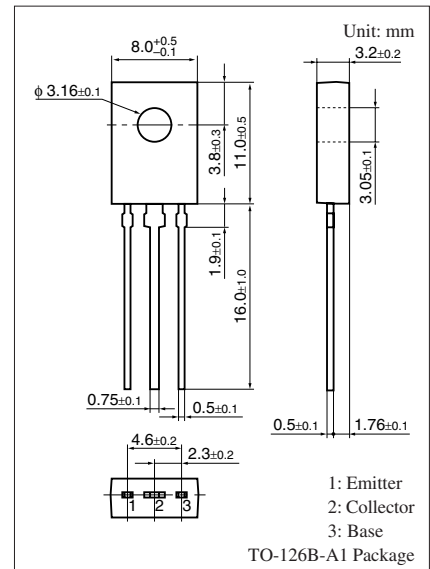
For low-frequency high power driver  
Complementary to 2SA0794, 2SA0794A

### ■ 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)	2SC1567	100	V
	2SC1567A	120	
Collector-emitter voltage (Base open)	2SC1567	100	V
	2SC1567A	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	$^\circ\text{C}$



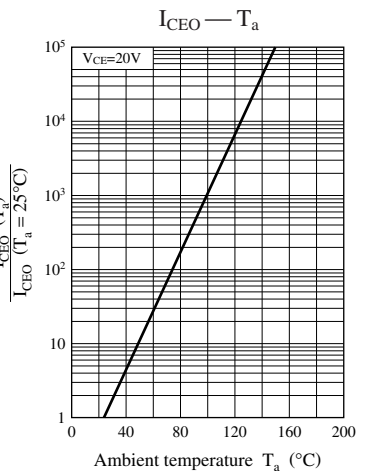
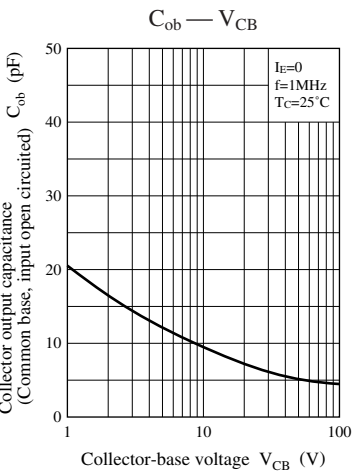
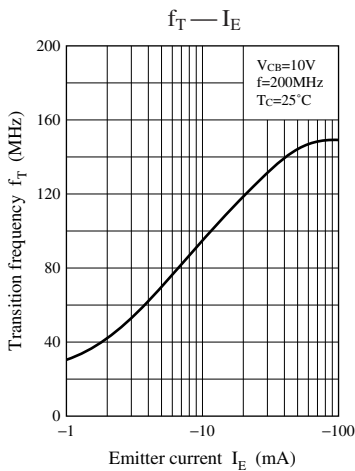
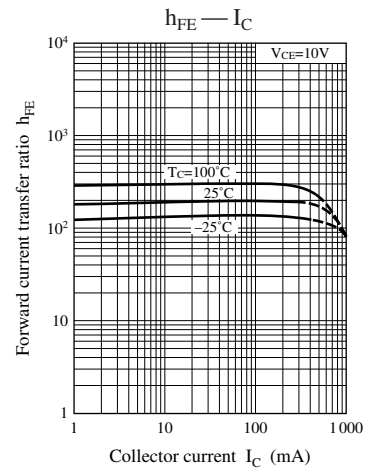
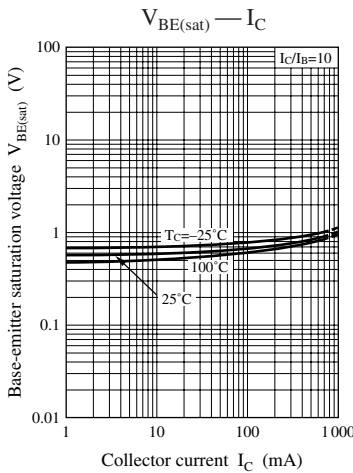
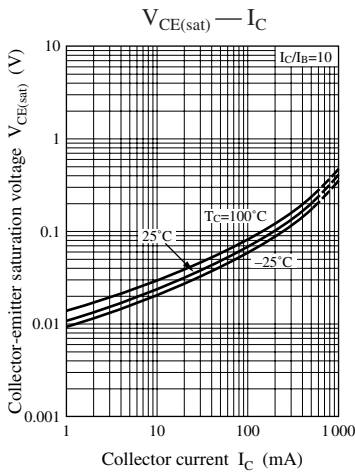
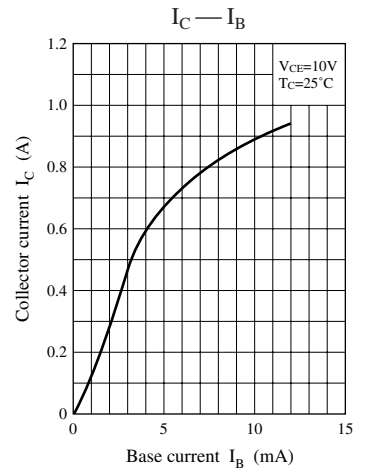
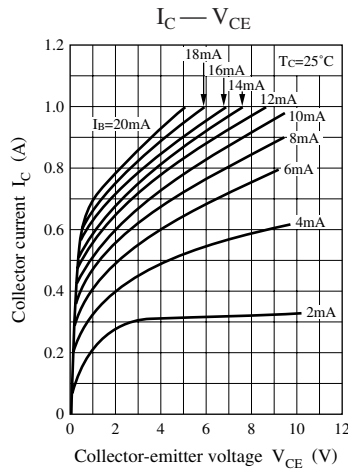
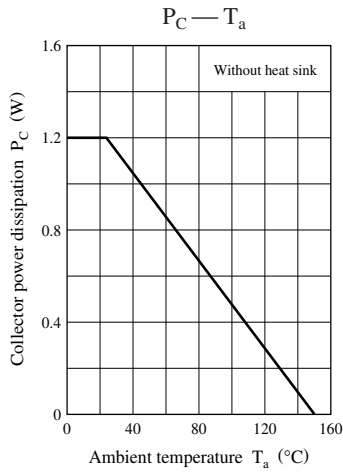
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

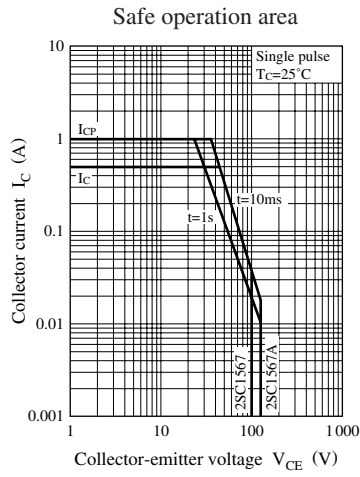
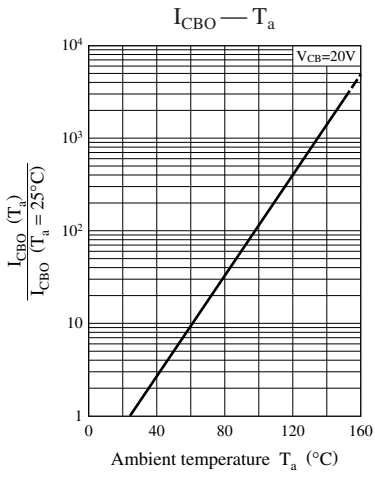
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SC1567	$I_C = 100 \mu\text{A}, I_B = 0$	100			V
	2SC1567A		120			
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 1 \mu\text{A}, I_C = 0$	5			V
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = 10 \text{ V}, I_C = 150 \text{ mA}$	130		330	—
	$h_{FE2}$	$V_{CE} = 5 \text{ V}, I_C = 500 \text{ mA}$	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)	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		11	20	pF

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

2. \*: Rank classification

Rank	R	S
$h_{FE1}$	130 to 220	185 to 330





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