

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

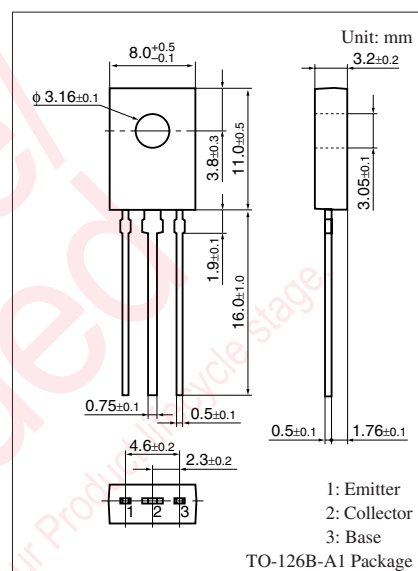
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

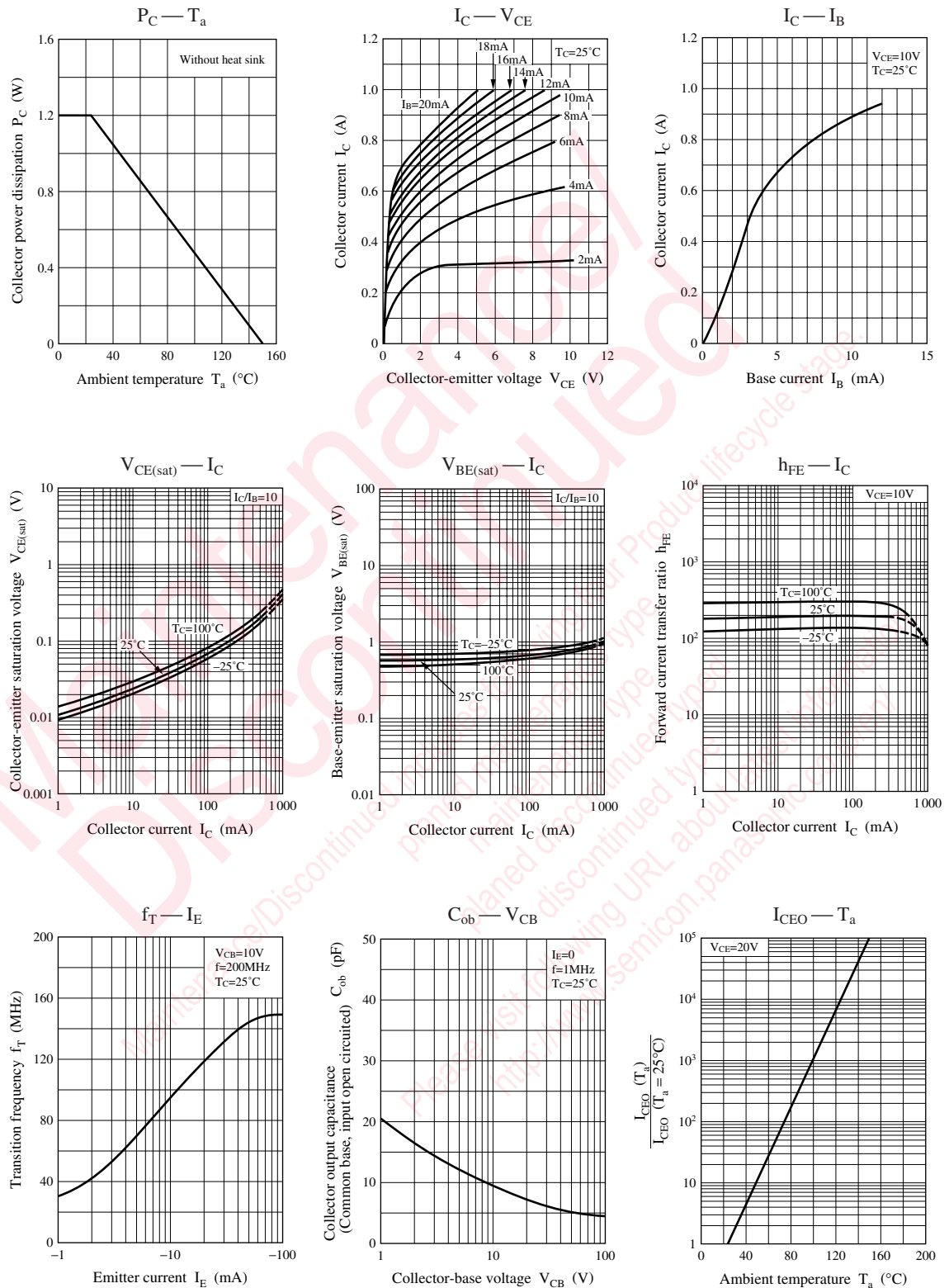
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 100\ \mu\text{A}, I_B = 0$	100			V
			120			
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 1\ \mu\text{A}, I_C = 0$	5			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = 10\ \text{V}, I_C = 150\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

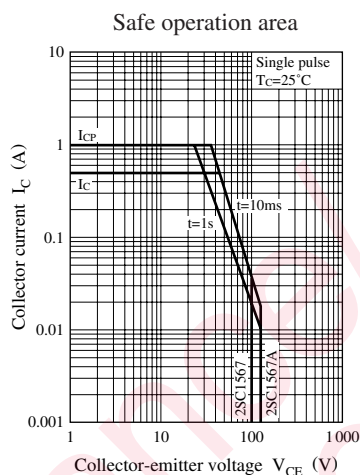
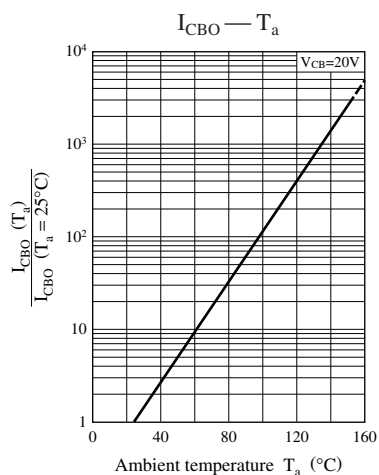
(Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

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







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