

2SB1435

Silicon PNP epitaxial planar type

For low-frequency output amplification

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Large collector current I_C
- Allowing automatic insertion with radial tapering

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-50	V
Collector-emitter voltage (Base open)	V_{CEO}	-50	V
Emitter-base voltage (Collector open)	V_{EBO}	-5	V
Collector current	I_C	-2	A
Peak collector current	I_{CP}	-3	A
Collector power dissipation	P_C	1.5	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

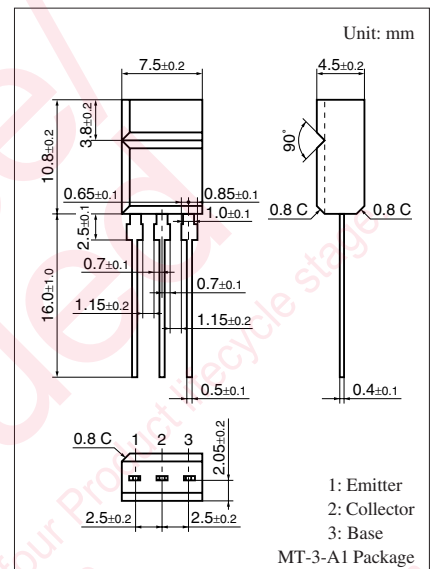
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

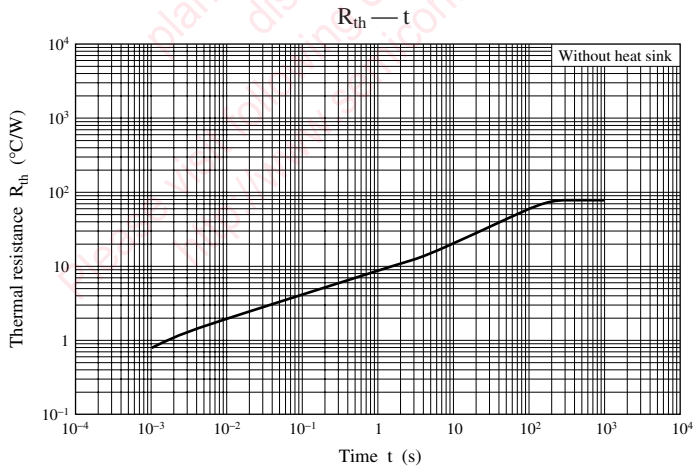
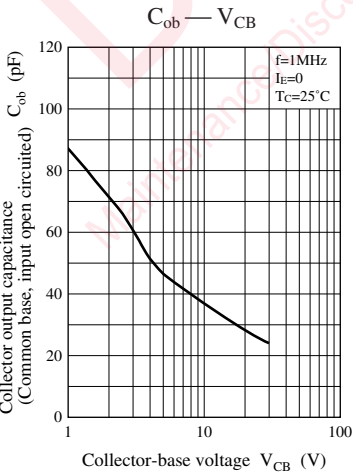
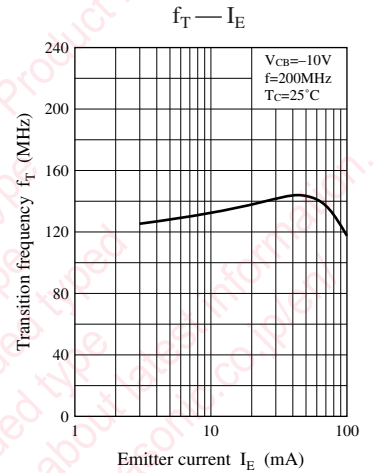
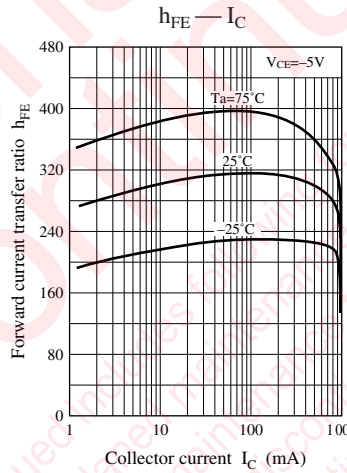
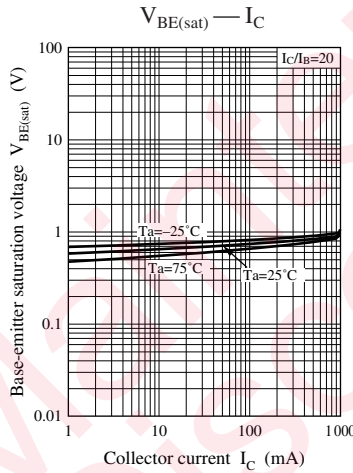
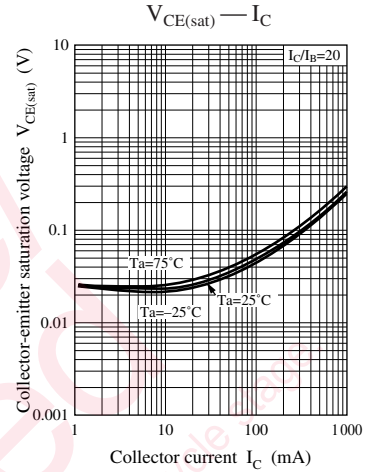
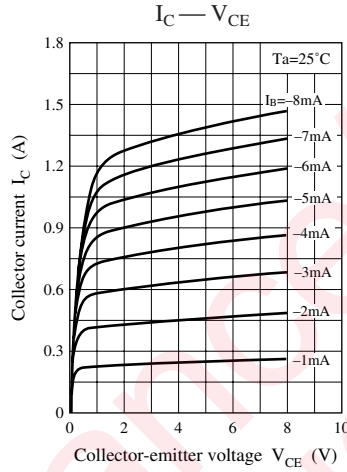
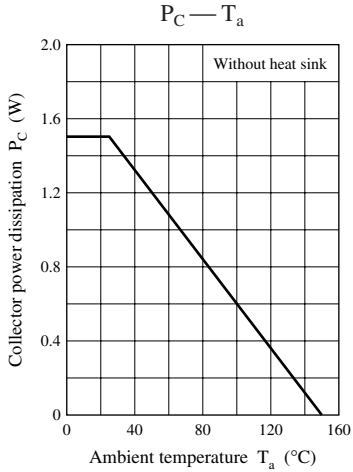
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10 \mu\text{A}$, $I_E = 0$	-50			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -1 \text{ mA}$, $I_B = 0$	-50			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \mu\text{A}$, $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -20 \text{ V}$, $I_E = 0$			-0.1	μA
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -2 \text{ V}$, $I_C = -200 \text{ mA}$	120		340	—
	h_{FE2}	$V_{CE} = -2 \text{ V}$, $I_C = -1 \text{ A}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 \text{ A}$, $I_B = -50 \text{ mA}$		-0.2	-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1 \text{ A}$, $I_B = -50 \text{ mA}$		-0.85	-1.20	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}$, $I_E = 50 \text{ mA}$, $f = 200 \text{ MHz}$		80		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		45	60	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}	120 to 240	170 to 340





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