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2SC2258

Silicon NPN triple diffusion planar type

For high breakdown voltage general amplification

■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- High transition frequency f_T
- 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)	V_{CBO}	250	V
Collector-emitter voltage (Base open)	V_{CEO}	250	V
Emitter-base voltage (Collector open)	V_{EBO}	7	V
Collector current	I_C	100	mA
Peak collector current	I_{CP}	150	mA
Collector power dissipation	P_C	1.2 *1 4 *2	W
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

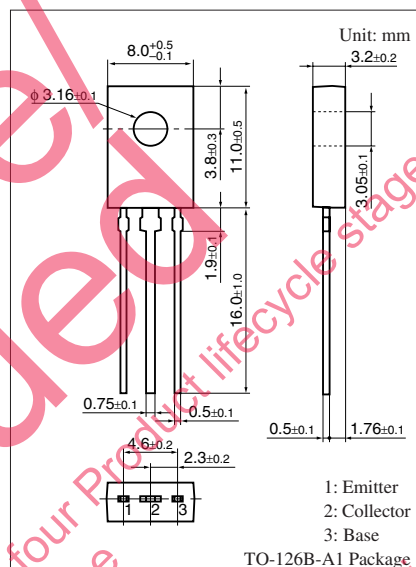
Note) *1: Without heat sink

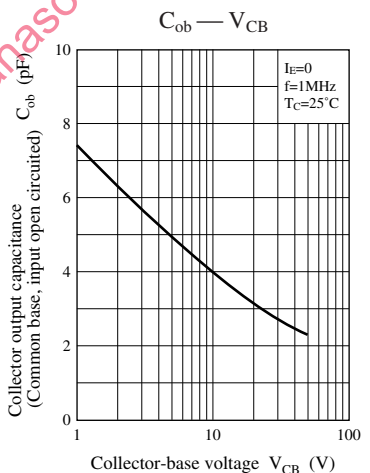
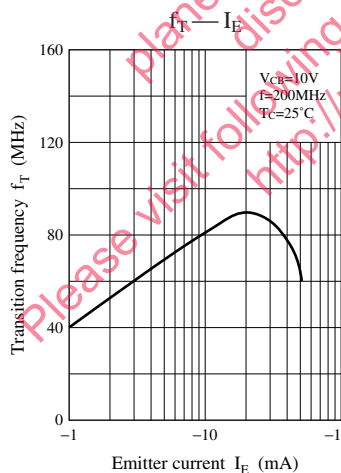
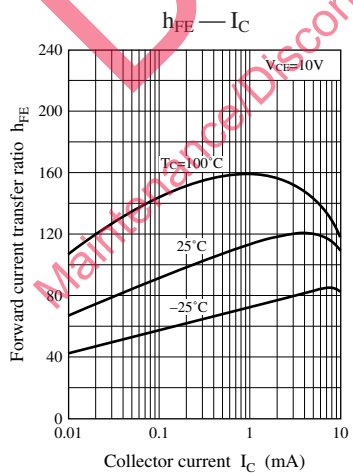
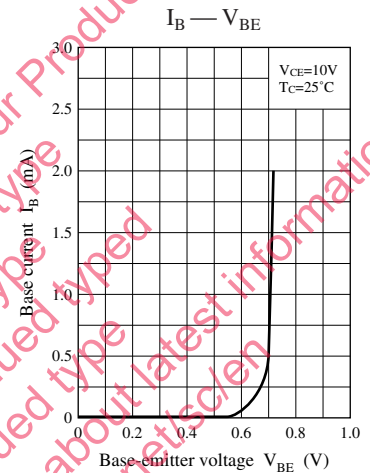
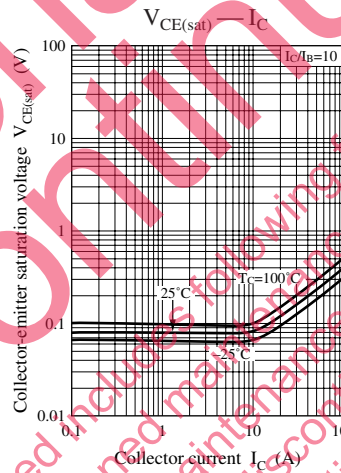
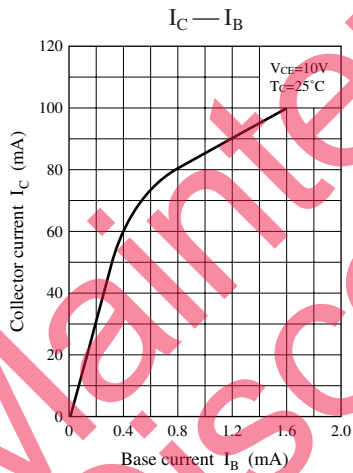
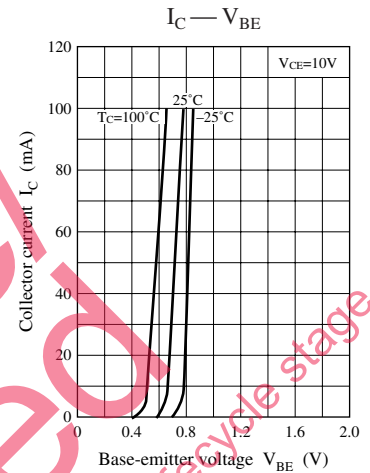
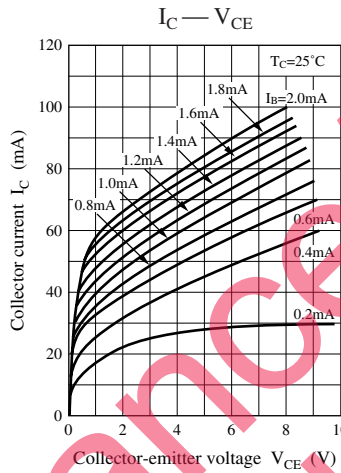
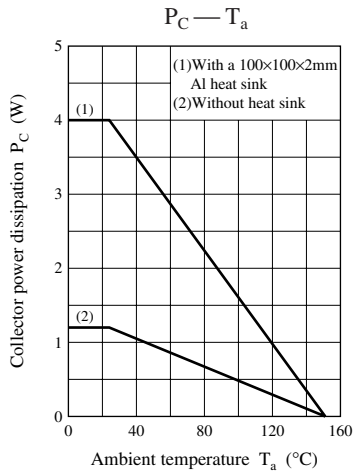
*2: With a 100 × 100 × 2 mm Al heat sink

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 0.1 \text{ mA}, I_C = 0$	7			V
Base-emitter voltage	V_{BE}	$V_{CE} = 20 \text{ V}, I_C = 40 \text{ mA}$			1.2	V
Collector-emitter cutoff current (Resistor between B and E)	I_{CER}	$V_{CE} = 250 \text{ V}, R_{BE} = 100 \text{ k}\Omega$			100	μA
Forward current transfer ratio	h_{FE1}	$V_{CE} = 20 \text{ V}, I_C = 40 \text{ mA}$	40			—
	h_{FE2}	$V_{CE} = 50 \text{ V}, I_C = 5 \text{ mA}$	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$			1.2	V
Transition frequency	f_T	$V_{CB} = 10 \text{ V}, I_E = -10 \text{ mA}, f = 200 \text{ MHz}$		100		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 50 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		3.0	4.5	pF

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





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