

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	$^\circ\text{C}$

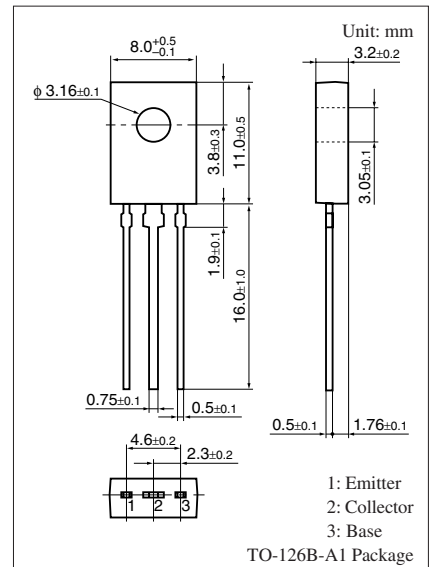
Note) *1: Without heat sink

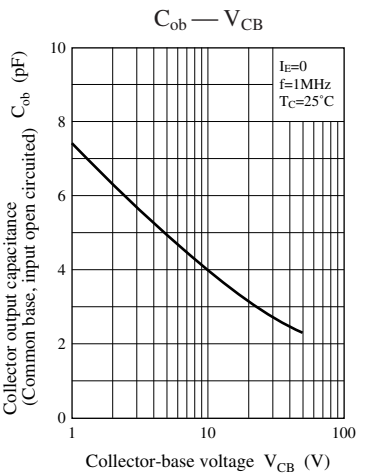
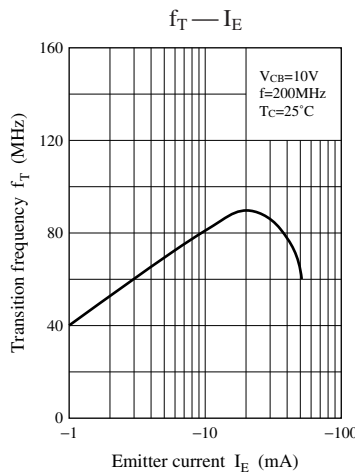
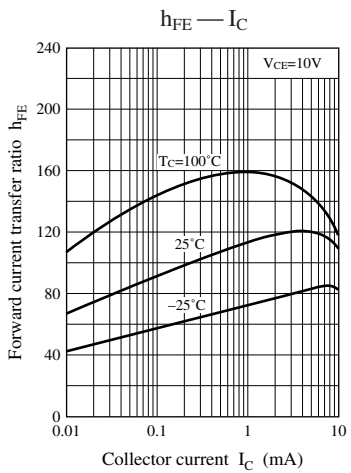
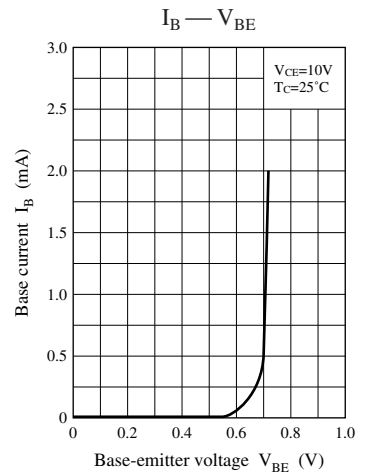
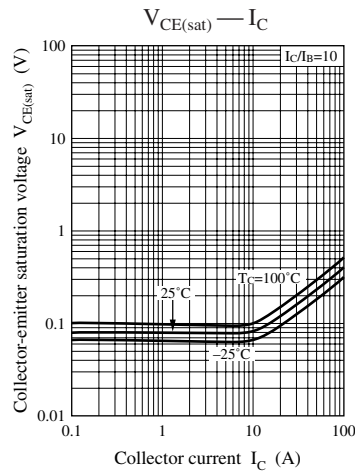
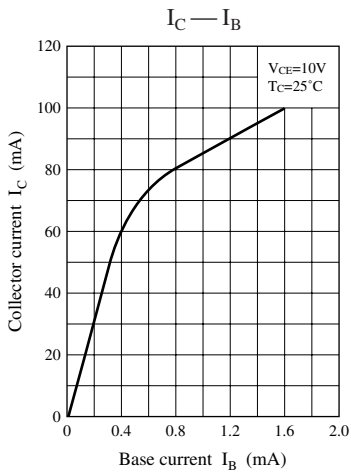
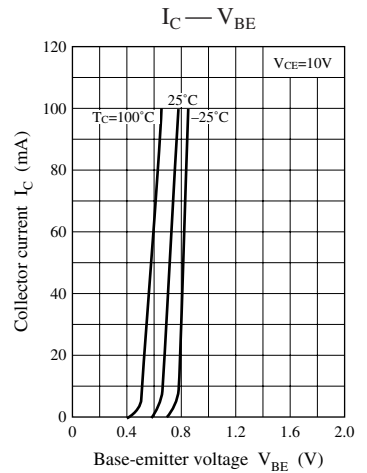
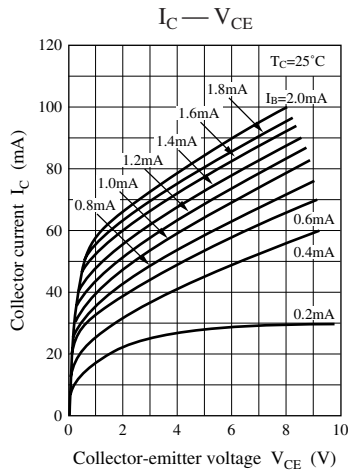
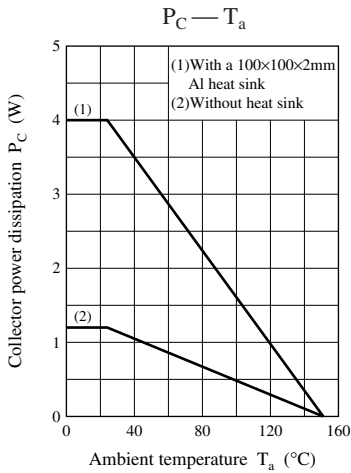
*2: With a $100 \times 100 \times 2$ mm Al heat sink

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