2SC2258

Silicon NPN triple diffusion planar type

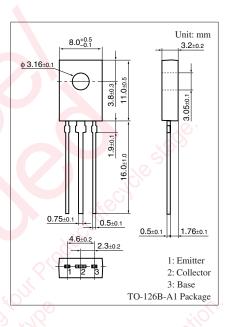
For high breakdown voltage general amplification

Features

- High collector-emitter voltage (Base open) V_{CEO}
- \bullet High transition frequency $f_{\rm T}$
- TO-126B package which requires no insulation plate for installation to the heat sink

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

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	W
		4 *2	
Junction temperature	Tj	150	°Ç
Storage temperature	T _{stg}	-55 to +150	<°C



Note) *1: Without heat sink

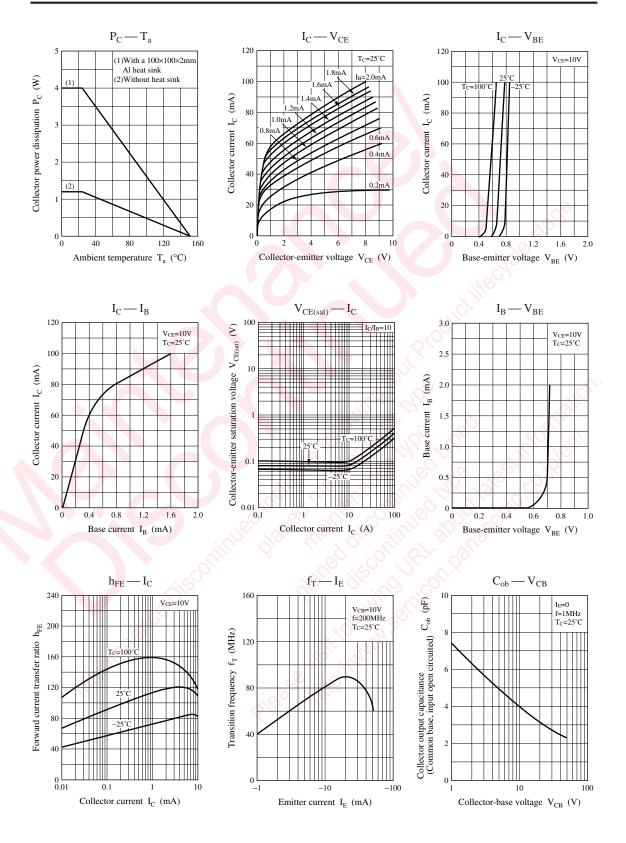
*2 :With a $100 \times 100 \times 2$ mm Al heat sink

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Emitter-base voltage (Collector open)	V _{EBO}	$I_{\rm E} = 0.1 {\rm mA}, I_{\rm C} = 0$	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}	$V_{CE} = 250 \text{ V}, R_{BE} = 100 \text{ k}\Omega$			100	μΑ
Forward current transfer ratio	h _{FE1}	$V_{CE} = 20 \text{ V}, \text{ I}_{C} = 40 \text{ mA}$	40			_
	h _{FE2}	$V_{CE} = 50 \text{ V}, \text{ I}_{C} = 5 \text{ mA}$	30			
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = 50 \text{ mA}, I_{\rm B} = 5 \text{ mA}$			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	C _{ob}	$V_{CB} = 50 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		3.0	4.5	pF
(Common base, input open circuited)						

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

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