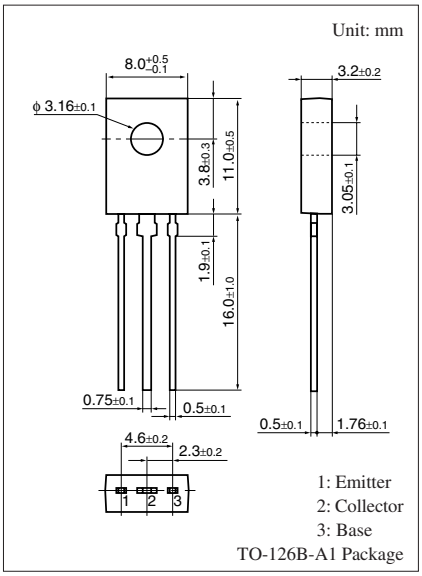
2SC4212

Silicon NPN triple diffusion planar type

For color TV horizontal deflection driver



■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- TO-126B package which requires no insulation plate for installation to the heat sink

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	350	V
Collector-emitter voltage (Base open)	V_{CEO}	300	V
Emitter-base voltage (Collector open)	V_{EBO}	7.5	V
Collector current	I_C	200	mA
Peak collector current	I_{CP}	400	mA
Collector power dissipation	P_C	1.2	W
		5.0 *	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

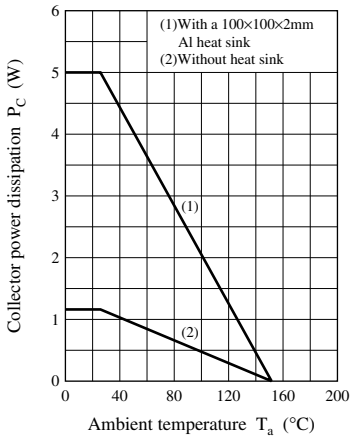
Note) *: With a 100 × 100 × 2 mm Al heat sink

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

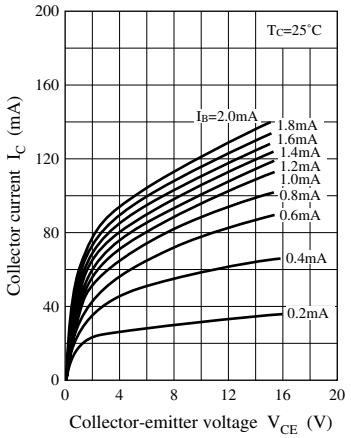
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	I_C = 100 µA, I_E = 0	350			V
Collector-emitter voltage (Base open)	V_{CEO}	I_C = 5 mA, I_B = 0	300			V
Emitter-base voltage (Collector open)	V_{EBO}	I_E = 100 µA, I_C = 0	7.5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	V_{CB} = 200 V, I_E = 0			2	µA
Emitter-base cutoff current (Collector open)	I_{EBO}	V_{EB} = 5 V, I_C = 0			2	µA
Forward current transfer ratio	h_{FE}	V_{CE} = 10 V, I_C = 10 mA	40		250	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 50 mA, I_B = 5 mA			1	V
Transition frequency	f_T	V_{CB} = 30 V, I_E = −10 mA, f = 200 MHz	50	80		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	V_{CB} = 50 V, I_E = 0, f = 1 MHz			4.5	pF

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

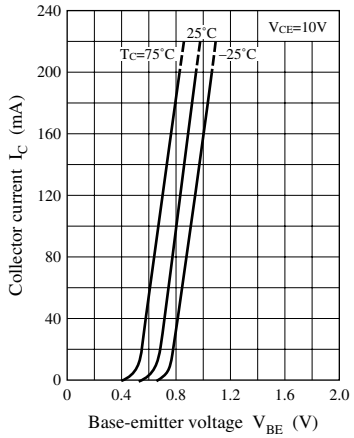
P_C — T_a



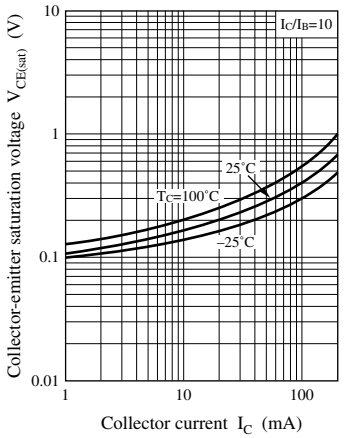
I_C — V_{CE}



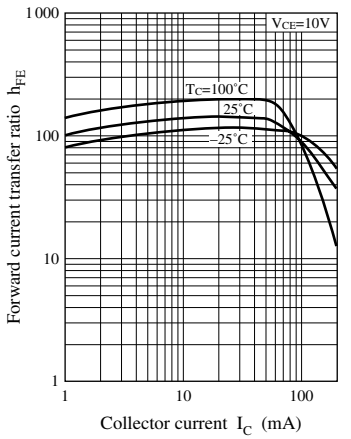
I_C — V_{BE}



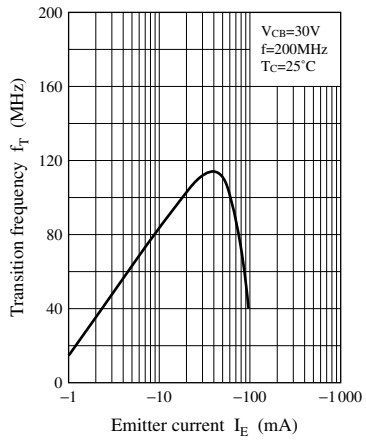
$V_{CE(sat)}$ — I_C



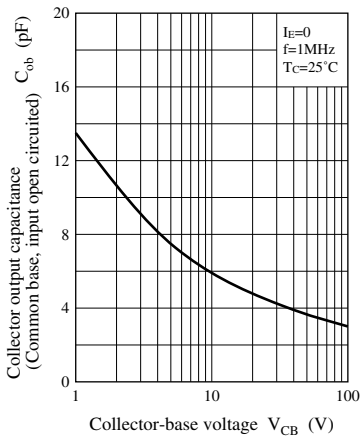
h_{FE} — I_C



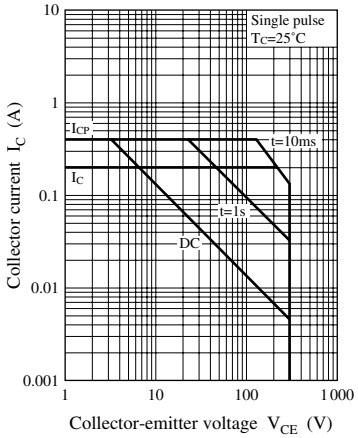
f_T — I_E



C_{ob} — V_{CB}



Safe operation area



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