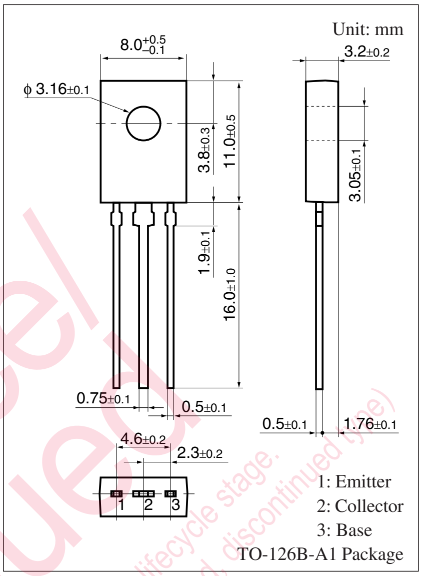
2SC3063

Silicon NPN triple diffusion planar type

For TV video output amplification



■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- Small collector output capacitance (Common base, input open circuited) C_{ob}
- TO-126B package which requires no insulation plate for installation to the heat sink

■ Absolute Maximum Ratings $T_a = 25°C$

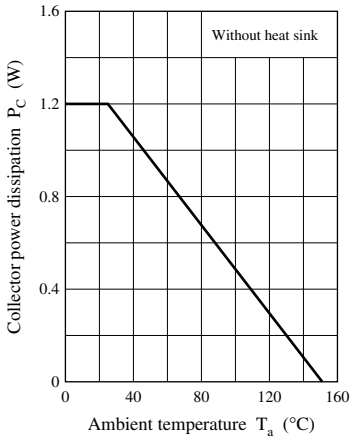
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	300	V
Collector-emitter voltage (Base open)	V_{CEO}	300	V
Emitter-base voltage (Collector open)	V_{EBO}	7	V
Collector current	I_C	100	mA
Peak collector current	I_{CP}	200	mA
Collector power dissipation	P_C	1.2	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

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

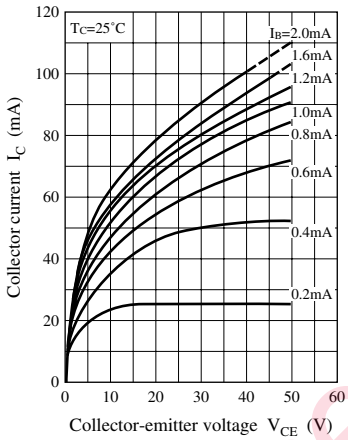
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 10\ \mu A$, $I_E = 0$	300			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 0.1$ mA, $I_B = 0$	300			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10\ \mu A$, $I_C = 0$	7			V
Base-emitter voltage	V_{BE}	$V_{CE} = 10$ V, $I_C = 30$ mA			1.2	V
Forward current transfer ratio	h_{FE}	$V_{CE} = 50$ V, $I_C = 5$ mA	50		250	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 30$ mA, $I_B = 3$ mA			1.5	V
Transition frequency	f_T	$V_{CB} = 30$ V, $I_E = -20$ mA, f = 200 MHz	70	140		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 30$ V, $I_E = 0$, f = 1 MHz		2.4		pF

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

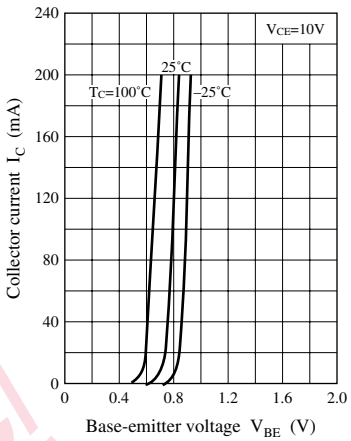
P_C — T_a



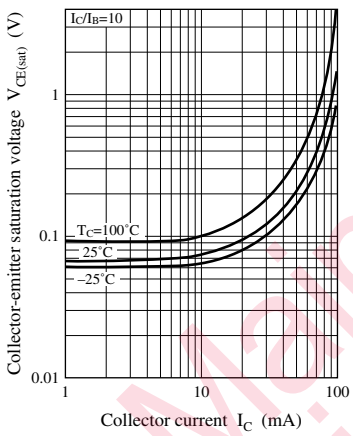
I_C — V_{CE}



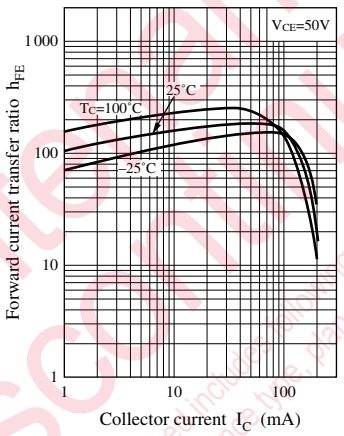
I_C — V_{BE}



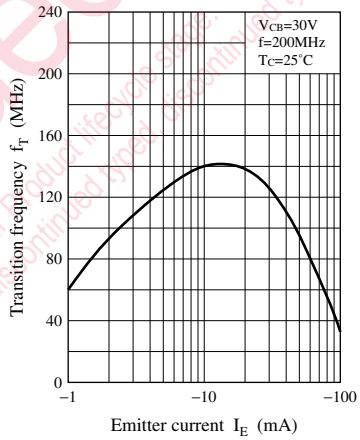
$V_{CE(sat)}$ — I_C



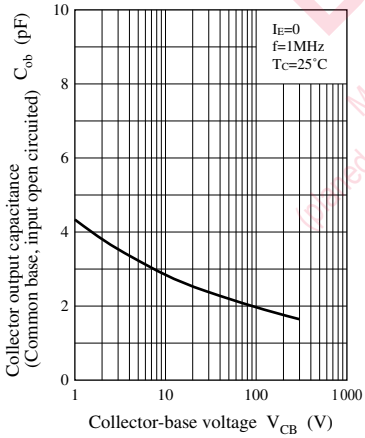
h_{FE} — I_C



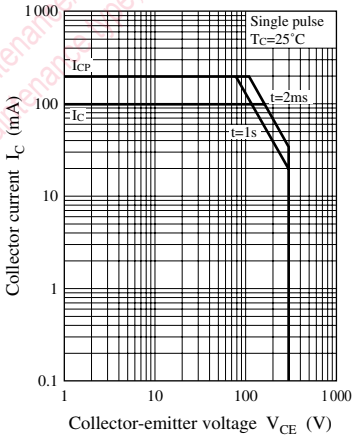
f_T — I_E



C_{ob} — V_{CB}



Safe operation area



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