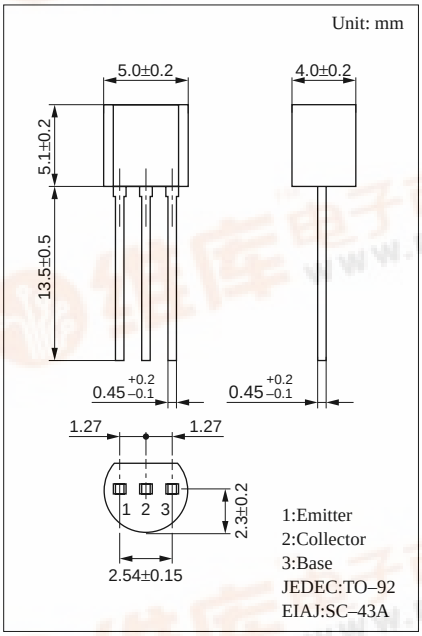
2SC3187

Silicon NPN triple diffusion planer type

For small TV video output



Features

- High collector to emitter voltage V_{CEO}.
- Small collector output capacitance C_{ob}.

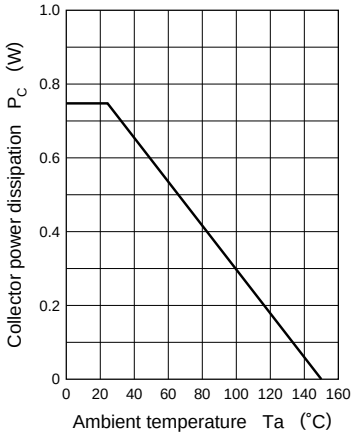
Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	300	V
Collector to emitter voltage	V_{CEO}	300	V
Emitter to base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	200	mA
Collector current	I_C	100	mA
Collector power dissipation	P_C	750	mW
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	–55 ~ +150	˚C

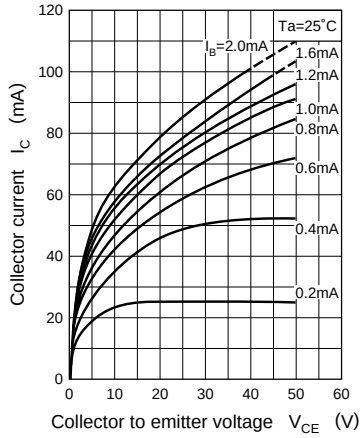
Electrical Characteristics (Ta=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V_{CBO}	I_C = 10μA, I_E = 0	300			V
Collector to emitter voltage	V_{CEO}	I_C = 100μA, I_B = 0	300			V
Emitter to base voltage	V_{EBO}	I_E = 10μA, I_C = 0	7			V
Forward current transfer ratio	h_{FE}	V_{CE} = 50V, I_C = 5mA	50		250	
Base to emitter voltage	V_{BE}	V_{CE} = 10V, I_C = 30mA			1.2	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 30mA, I_B = 3mA			1.5	V
Transition frequency	f_T	V_{CB} = 30V, I_E = –20mA, f = 200MHz	70	140		MHz
Collector output capacitance	C_{ob}	V_{CB} = 30V, I_E = 0, f = 1MHz		1.9		pF

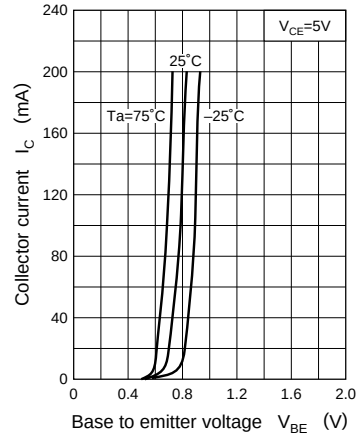
P_C — Ta



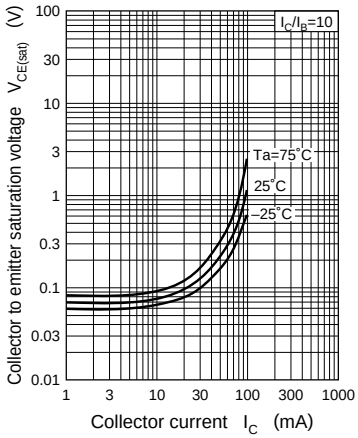
I_C — V_{CE}



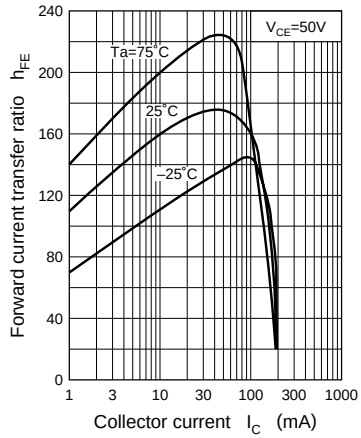
I_C — V_{BE}



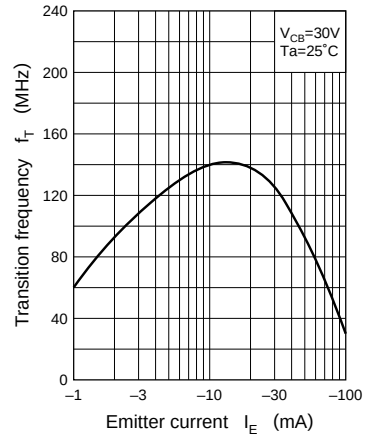
$V_{CE(sat)}$ — I_C



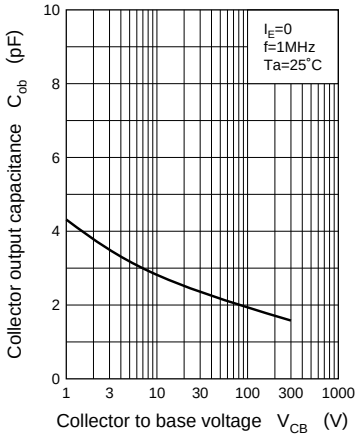
h_{FE} — I_C



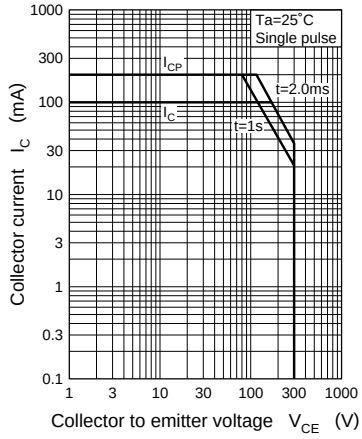
f_T — I_E



C_{ob} — V_{CB}



Area of safe operation (ASO)



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