

# 2SC3187

## Silicon NPN triple diffusion planer type

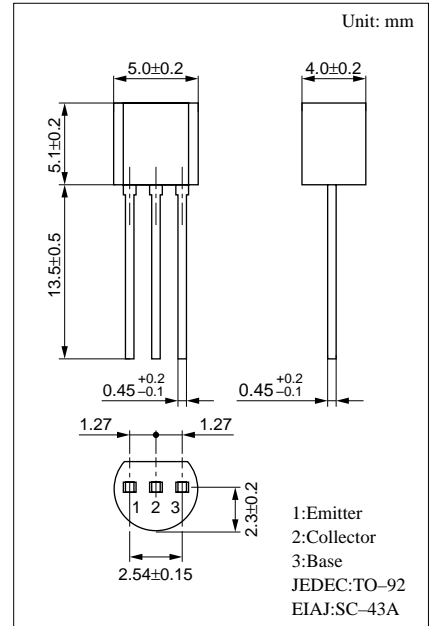
For small TV video output

### Features

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

### Absolute Maximum Ratings (Ta=25°C)

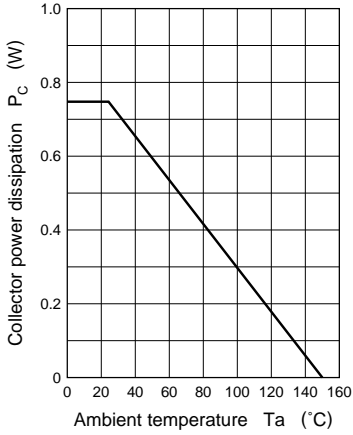
Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	300	V
Collector to emitter voltage	$V_{CEO}$	300	V
Emitter to base voltage	$V_{EBO}$	7	V
Peak collector current	$I_{CP}$	200	mA
Collector current	$I_C$	100	mA
Collector power dissipation	$P_C$	750	mW
Junction temperature	$T_j$	150	°C
Storage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



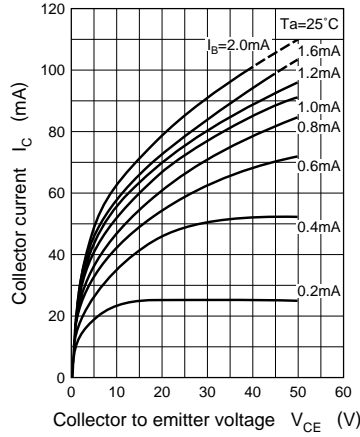
### Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	$V_{CBO}$	$I_C = 10\mu A, I_E = 0$	300			V
Collector to emitter voltage	$V_{CEO}$	$I_C = 100\mu A, I_B = 0$	300			V
Emitter to base voltage	$V_{EBO}$	$I_E = 10\mu A, I_C = 0$	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

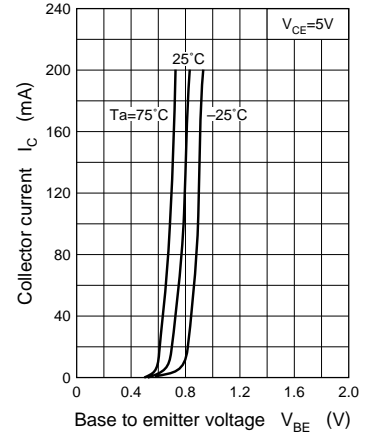
$P_C - T_a$



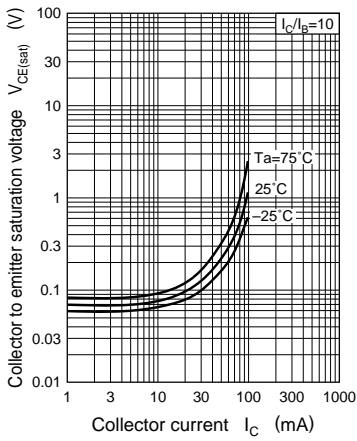
$I_C - V_{CE}$



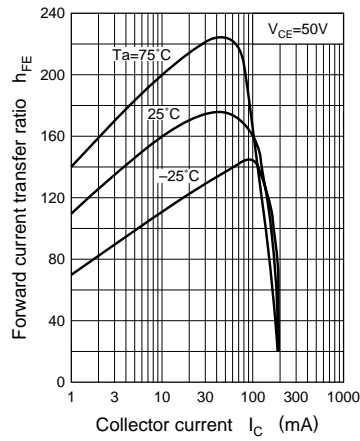
$I_C - V_{BE}$



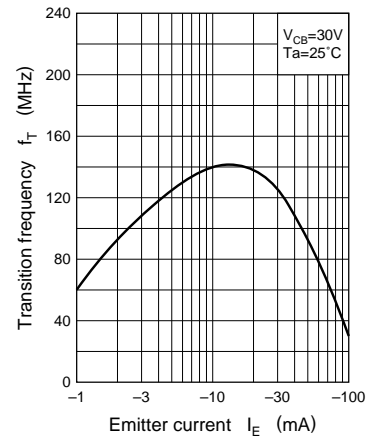
$V_{CE(sat)} - I_C$



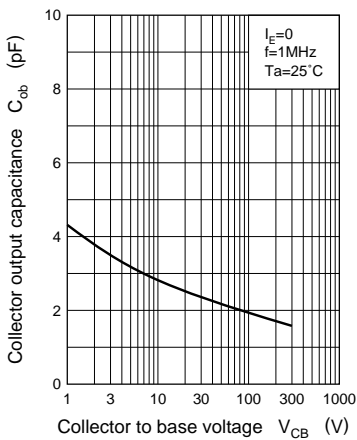
$h_{FE} - I_C$



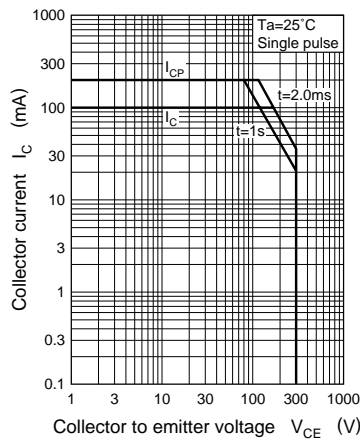
$f_T - I_E$



$C_{ob} - V_{CB}$



Area of safe operation (ASO)



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