

# 2SC1360, 2SC1360A

Silicon NPN epitaxial planer type

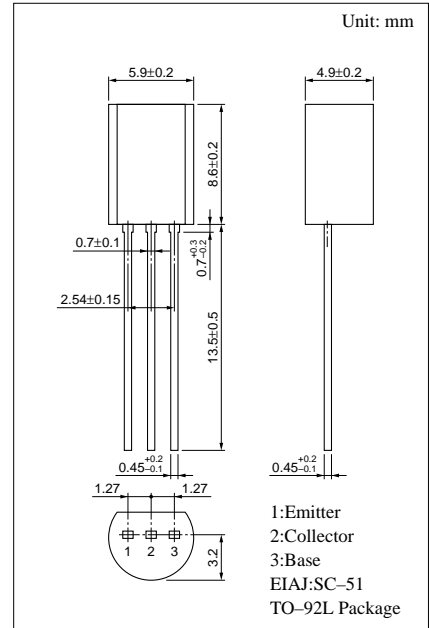
For intermediate frequency amplification of TV image

## Features

- High transition frequency  $f_T$ .
- Large collector power dissipation  $P_C$ .

## Absolute Maximum Ratings (Ta=25°C)

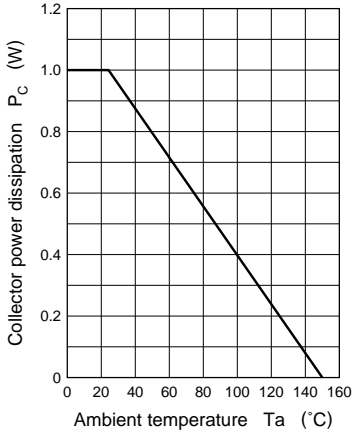
Parameter	Symbol	Rated	Unit
Collector to base voltage	$V_{CBO}$	50	V
2SC1360A		60	
Collector to emitter voltage	$V_{CEO}$	45	V
2SC1360A		60	
Emitter to base voltage	$V_{EBO}$	4	V
Collector current	$I_C$	50	mA
Collector power dissipation	$P_C$	1	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 ~ +150	°C



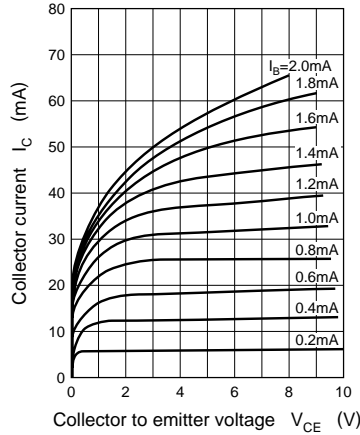
## Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 20V, I_E = 0$			100	nA
Collector to base voltage	$V_{CBO}$	$I_C = 100\mu A, I_E = 0$	50			V
			60			
Collector to emitter voltage	$V_{CEO}$	$I_C = 1mA, I_B = 0$	45			V
			60			
Emitter to base voltage	$V_{EBO}$	$I_E = 100\mu A, I_C = 0$	4			V
Forward current transfer ratio	$h_{FE}$	$V_{CB} = 10V, I_E = -10mA$	20		100	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20mA, I_B = 2mA$			0.4	V
Transition frequency	$f_T$	$V_{CB} = 10V, I_E = -10mA, f = 100MHz$	300			MHz
Common emitter reverse transfer capacitance	$C_{re}$	$V_{CE} = 10V, I_C = 1mA, f = 10.7MHz$			1.5	pF
Power gain	PG	$V_{CB} = 10V, I_E = -10mA, f = 58MHz$	22		30	dB

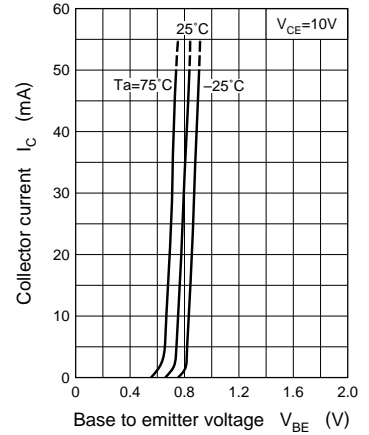
$P_C - T_a$



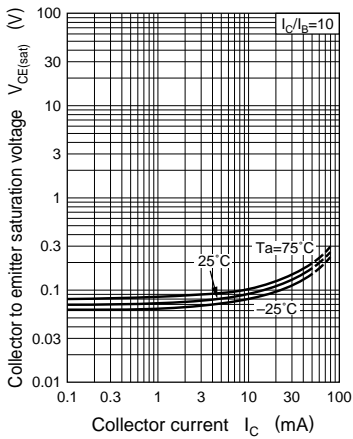
$I_C - V_{CE}$



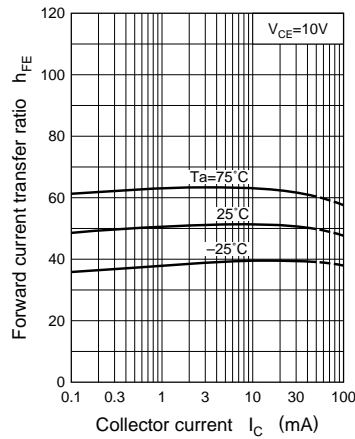
$I_C - V_{BE}$



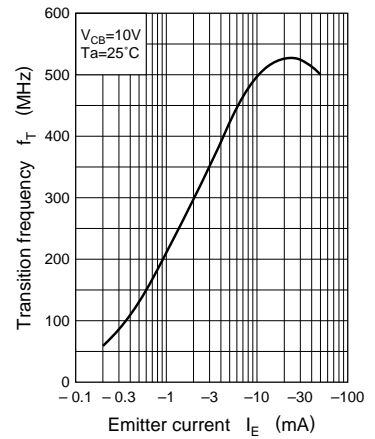
$V_{CE(sat)} - I_C$



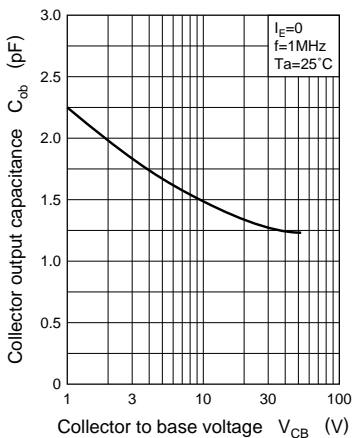
$h_{FE} - I_C$



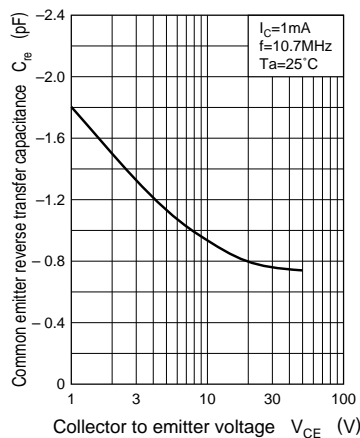
$f_T - I_E$



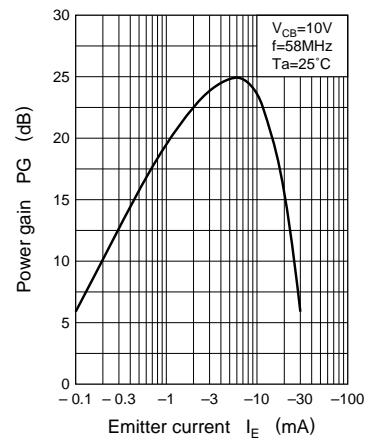
$C_{ob} - V_{CB}$



$C_{re} - V_{CE}$



$PG - I_E$



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