

2SC1573, 2SC1573A, 2SC1573B

Silicon NPN triple diffusion planer type

For high breakdown voltage general amplification

For small TV video output

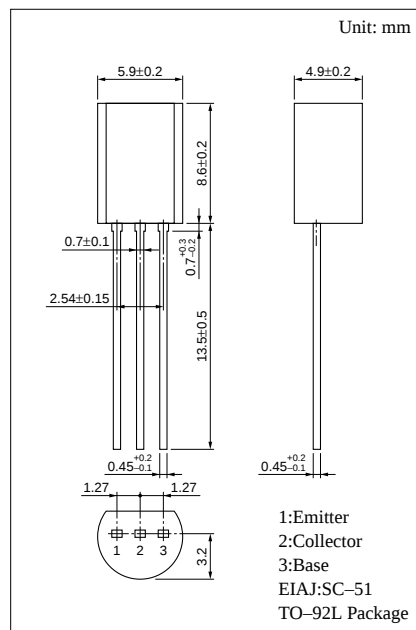
Complementary to 2SC1573 and 2SA879

Features

- High collector to emitter voltage V_{CEO} .
- High transition frequency f_T .

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	250	V
		300	
		400	
Collector to emitter voltage	V_{CEO}	200	V
		300	
		400	
Emitter to base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	100	mA
Collector current	I_C	70	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)

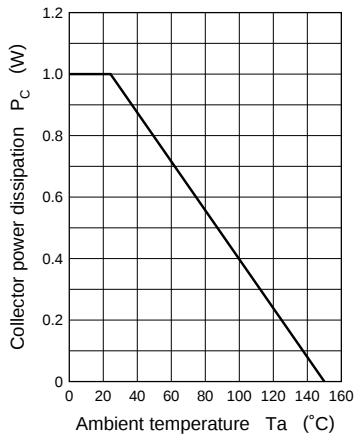
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 12V, I_E = 0$			2	μA
Collector to emitter voltage	V_{CEO}	$I_C = 100\mu A, I_B = 0$	200			V
			300			
			400			
Emitter to base voltage	V_{EBO}	$I_E = 1\mu A, I_C = 0$	5			V
			7			
Forward current transfer ratio	h_{FE}^*	$V_{CE} = 10V, I_C = 5mA$	30		220	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50mA, I_B = 5mA$			1.2	V
Transition frequency	f_T	$V_{CB} = 10V, I_E = -10mA, f = 200MHz$	50	80		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		5	10	pF
				4	8	

* h_{FE} Rank classification

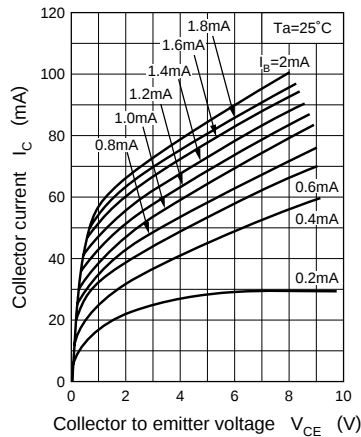
Rank	P	Q	R
h_{FE}	30 ~ 100	60 ~ 150	100 ~ 220

*2SC1573 for Ranks Q and R only

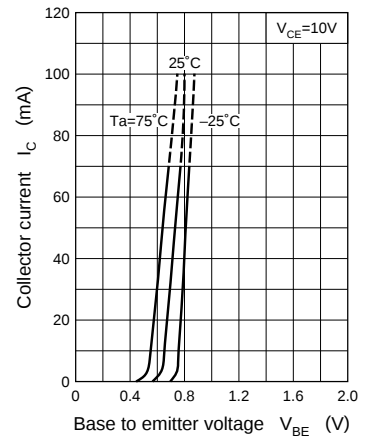
$P_C - T_a$



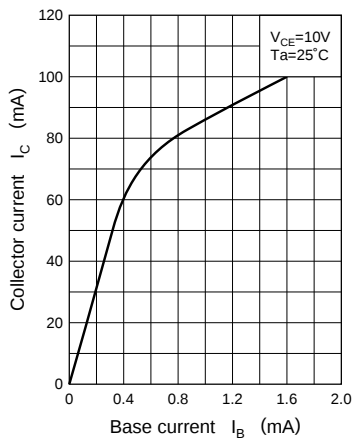
$I_C - V_{CE}$



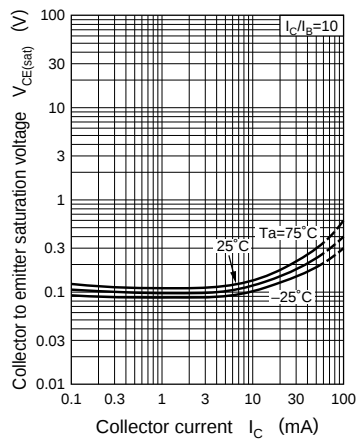
$I_C - V_{BE}$



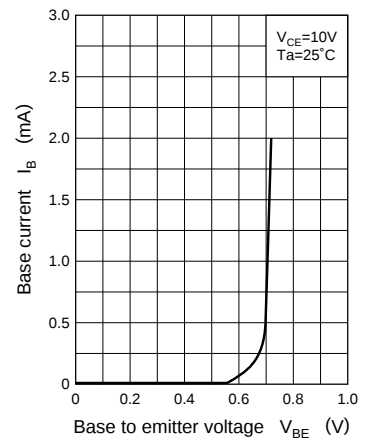
$I_C - I_B$



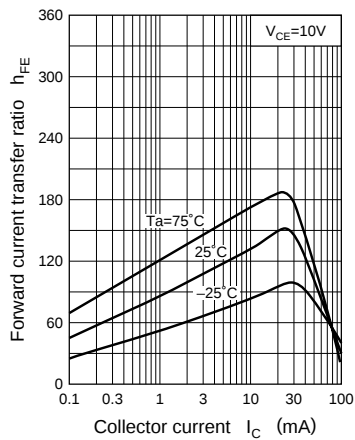
$V_{CE(sat)} - I_C$



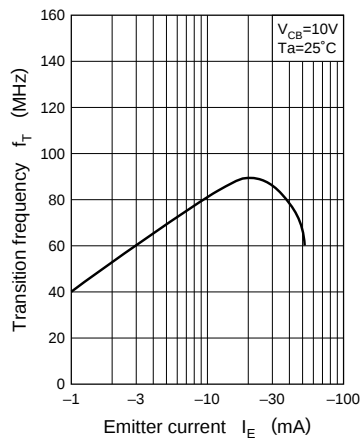
$I_B - V_{BE}$



$h_{FE} - I_C$



$f_T - I_E$



$C_{ob} - V_{CB}$

