

2SC1473, 2SC1473A

Silicon NPN triple diffusion planer type

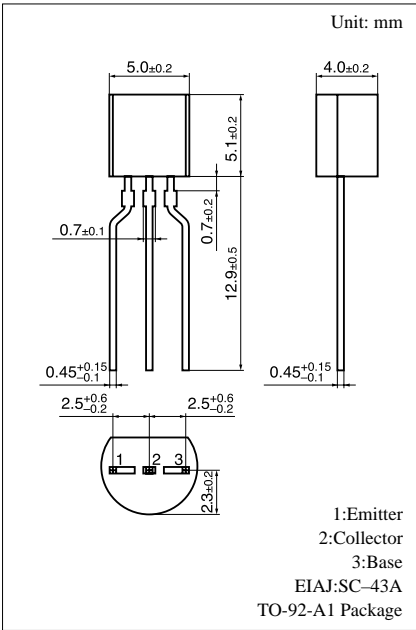
For general amplification
 2SC1473 complementary to 2SA1018
 2SC1473A complementary to 2SA1767

■ 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
2SC1473A		300	
Collector to emitter voltage	V_{CEO}	200	V
2SC1473A		300	
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	750	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C



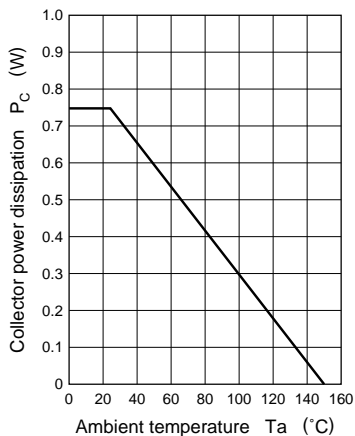
■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CEO}	$V_{CE} = 120V, I_B = 0$			1	μA
2SC1473A		$V_{CE} = 120V, I_B = 0$			1	
Collector to emitter voltage	V_{CEO}	$I_C = 100\mu A, I_B = 0$	200			V
2SC1473A			300			
Emitter to base voltage	V_{EBO}	$I_E = 1\mu A, I_C = 0$	7			V
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}	$V_{CB} = 10V, I_E = 0, f = 1MHz$			10	pF

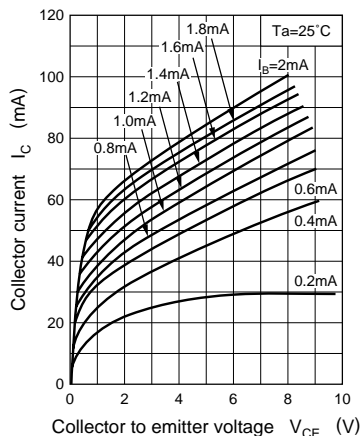
* h_{FE} Rank classification

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

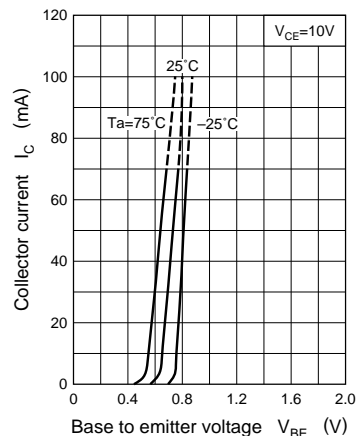
$P_C - T_a$



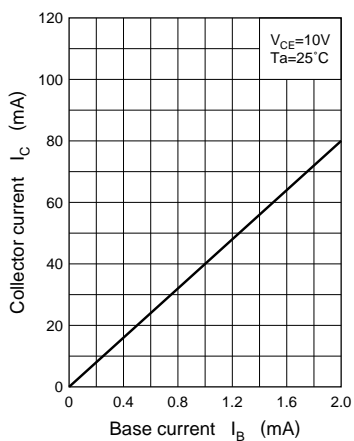
$I_C - V_{CE}$



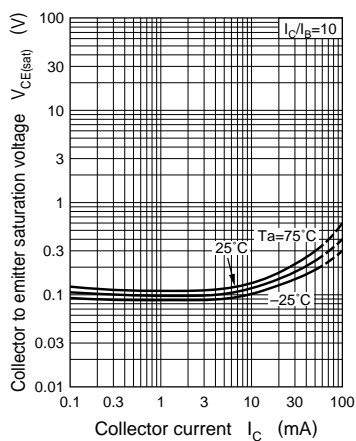
$I_C - V_{BE}$



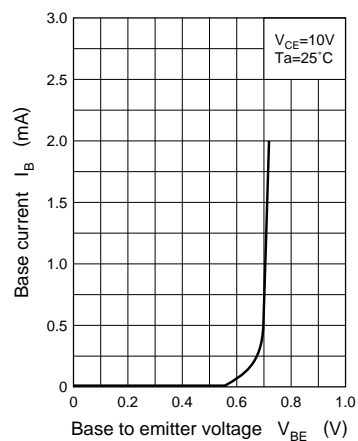
$I_C - I_B$



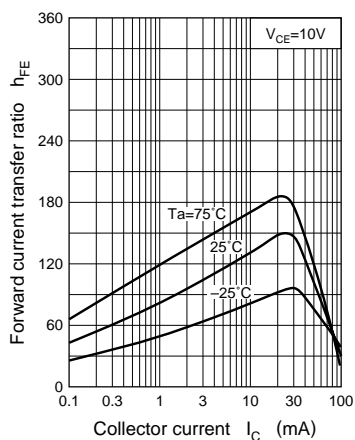
$V_{CE(sat)} - I_C$



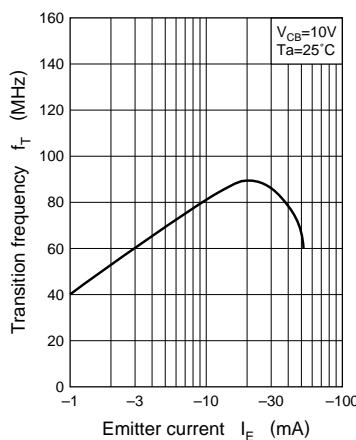
$I_B - V_{BE}$



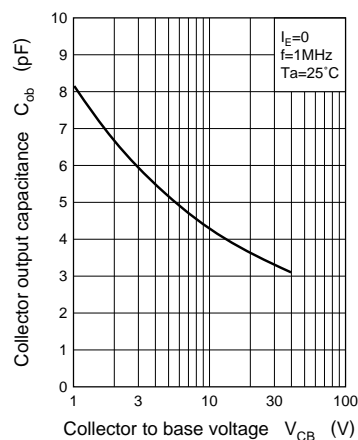
$h_{FE} - I_C$

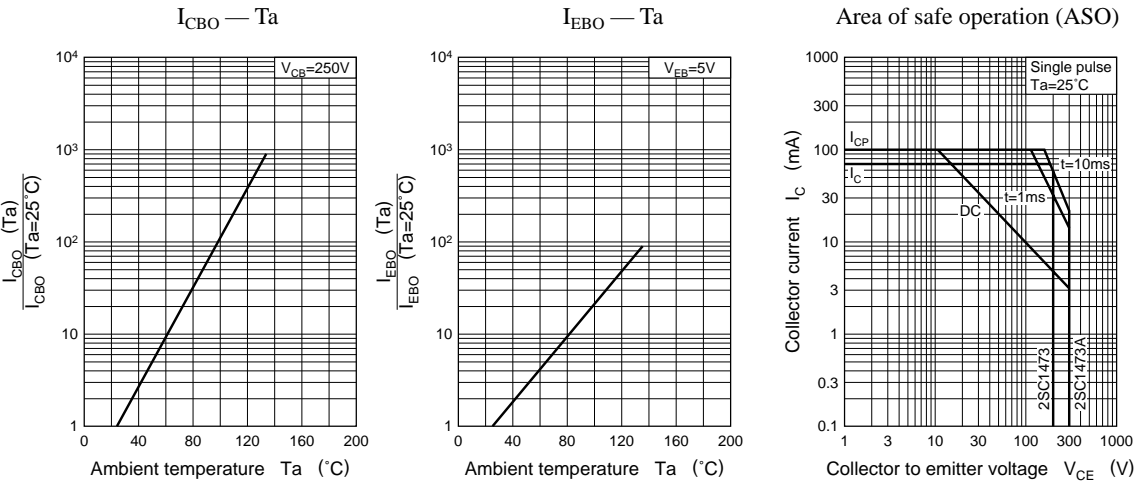


$f_T - I_E$



$C_{ob} - V_{CB}$





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