

2SC1473, 2SC1473A

Silicon NPN triple diffusion planer type

For general amplification

2SC1473 complementary to 2SA1018

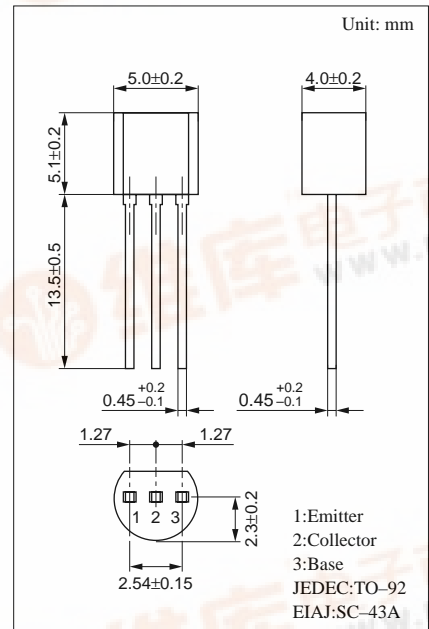
2SC1473A complementary to 2SA1767

Features

- High collector to emitter voltage V_{CE0} .
- 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)

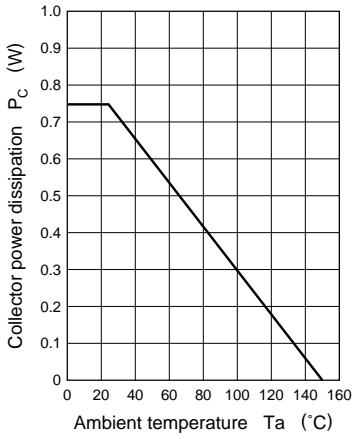
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CEO}	V _{CE} = 120V, I _B = 0			1	μA
		V _{CE} = 120V, I _B = 0			1	
Collector to emitter voltage	V _{CEO}	I _C = 100μA, I _B = 0	200			V
			300			
Emitter to base voltage	V _{EBO}	I _E = 1μA, I _C = 0	7			V
Forward current transfer 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

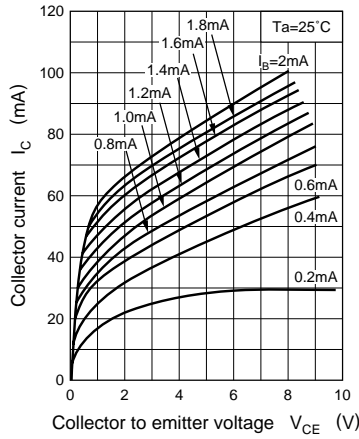
Rank	P	Q	R
	30 ~ 100	60 ~ 150	100 ~ 220



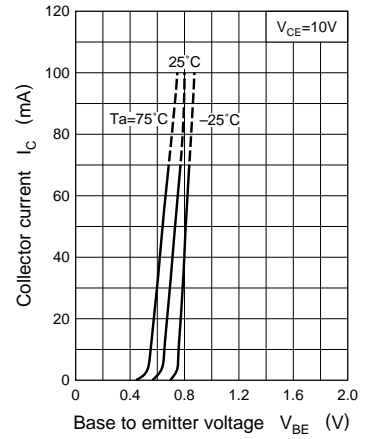
$P_C - T_a$



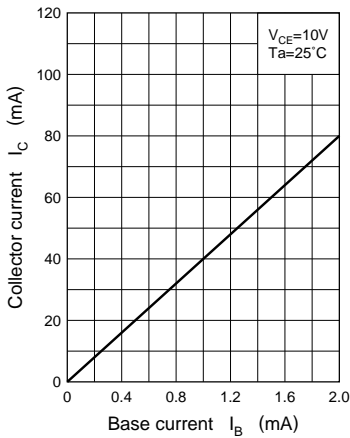
$I_C - V_{CE}$



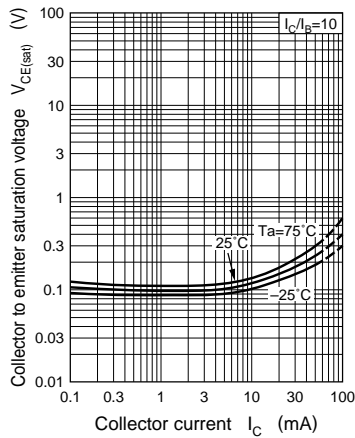
$I_C - V_{BE}$



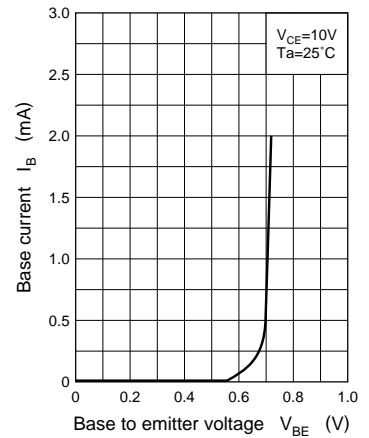
$I_C - I_B$



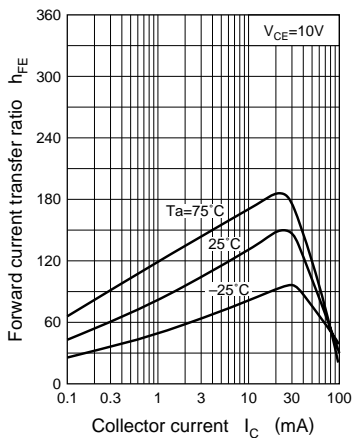
$V_{CE(sat)} - I_C$



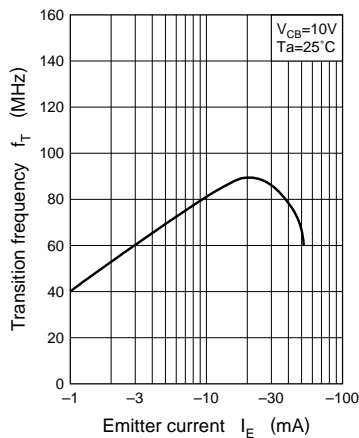
$I_B - V_{BE}$



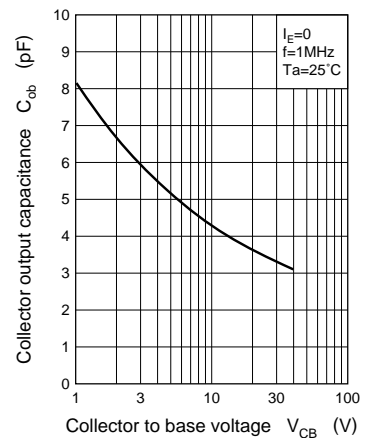
$h_{FE} - I_C$



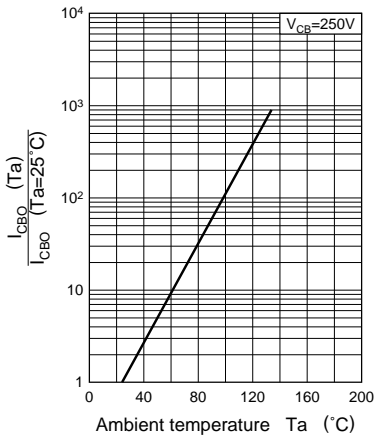
$f_T - I_E$



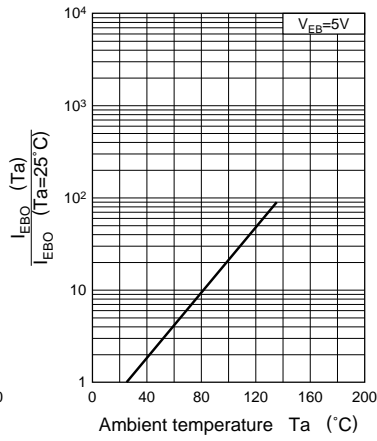
$C_{ob} - V_{CB}$



$I_{CBO} - T_a$



$I_{EBO} - T_a$



Area of safe operation (ASO)

