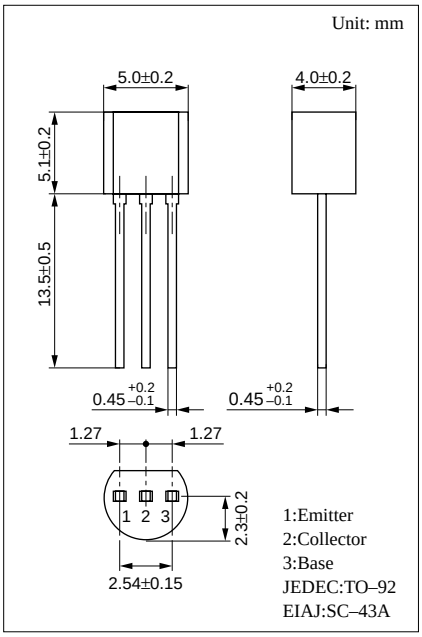
2SC1473, 2SC1473A

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	2SC1473	V_{CBO}	250	V
	2SC1473A		300	
Collector to emitter voltage	2SC1473	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

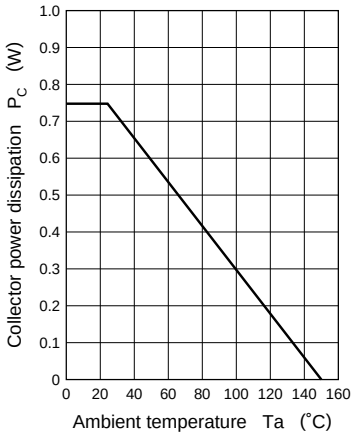
Electrical Characteristics (Ta=25˚C)

Parameter		Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	2SC1473	I_{CEO}	V_{CE} = 120V, I_B = 0			1	μA
	2SC1473A		V_{CE} = 120V, I_B = 0			1	
Collector to emitter voltage	2SC1473	V_{CEO}	I_C = 100μA, I_C = 0	200			V
	2SC1473A			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

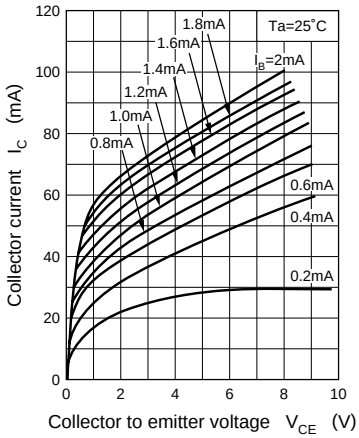
*h_{FE} Rank classification

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

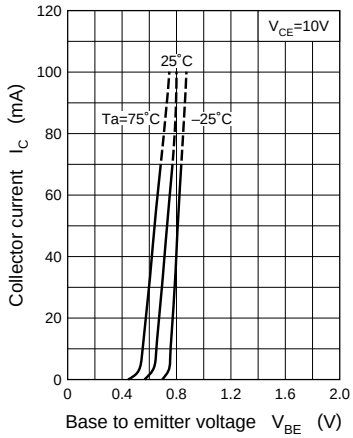
P_C — Ta



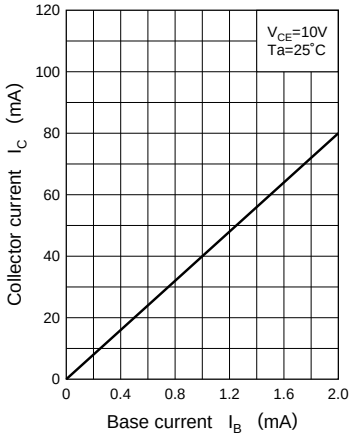
I_C — V_{CE}



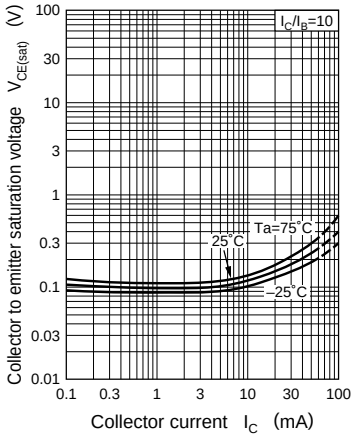
I_C — V_{BE}



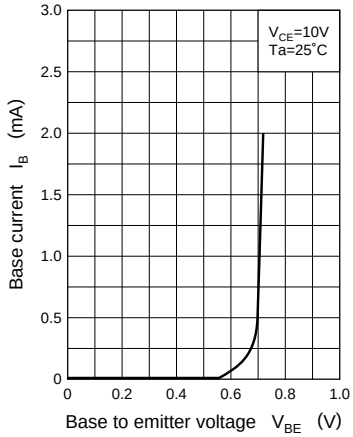
I_C — I_B



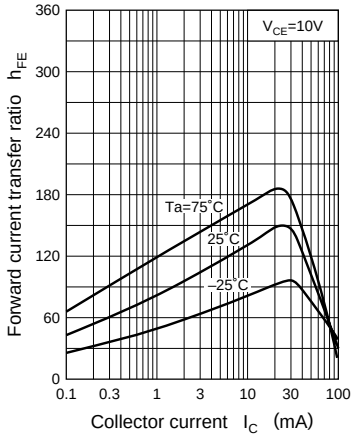
$V_{CE(sat)}$ — I_C



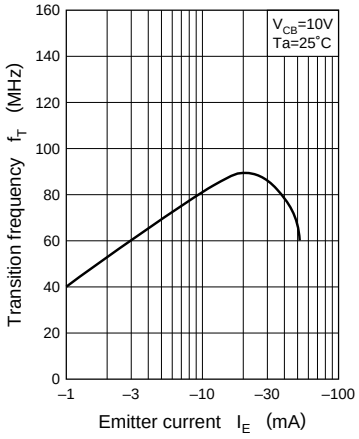
I_B — V_{BE}



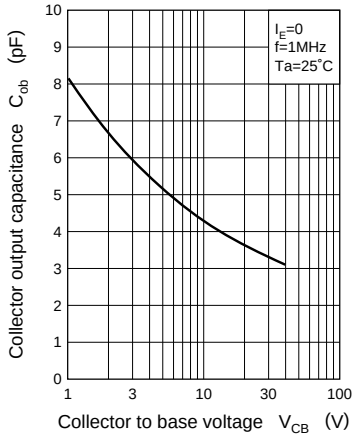
h_{FE} — I_C



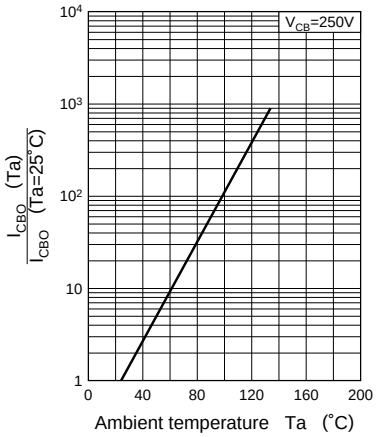
f_T — I_E



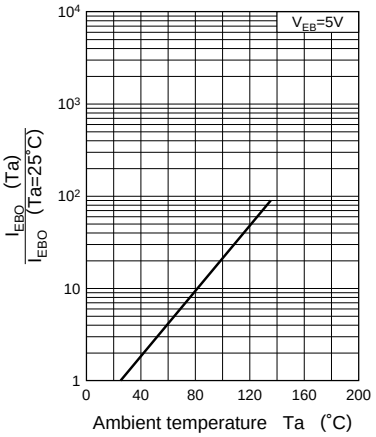
C_{ob} — V_{CB}



I_{CBO} — Ta



I_{EBO} — Ta



Area of safe operation (ASO)