

# 2SC1473, 2SC1473A

Silicon NPN triple diffusion planer type

For general amplification

2SC1473 complementary to 2SA1018

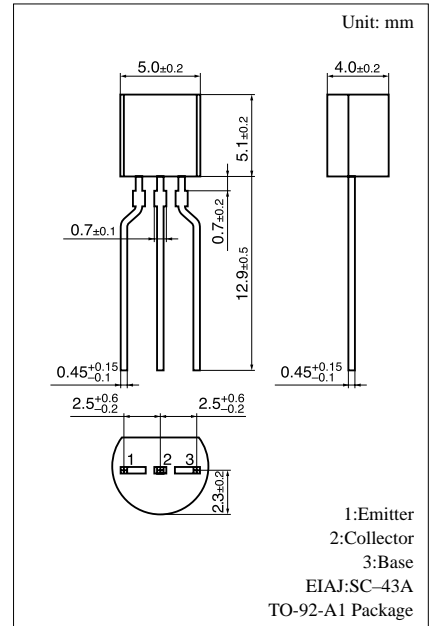
2SC1473A complementary to 2SA1767

## Features

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

## Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rated	Unit
Collector to base voltage	2SC1473	250	V
	2SC1473A	300	
Collector to emitter voltage	2SC1473	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



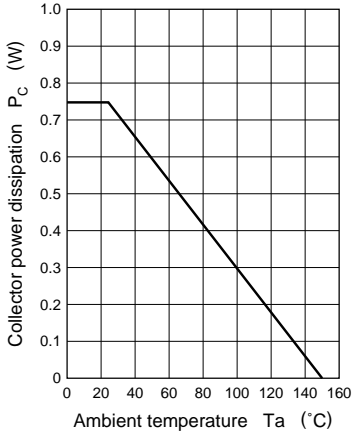
## Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	2SC1473	$V_{CE} = 120V, I_B = 0$			1	$\mu A$
	2SC1473A	$V_{CE} = 120V, I_B = 0$			1	
Collector to emitter voltage	2SC1473	$I_C = 100\mu A, I_E = 0$	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

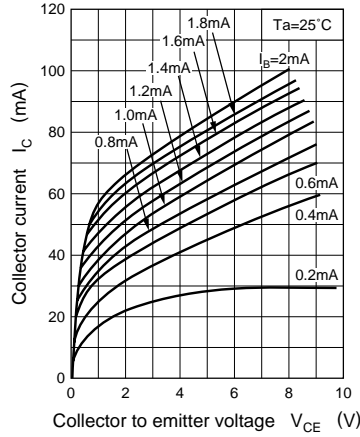
\* $h_{FE}$  Rank classification

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

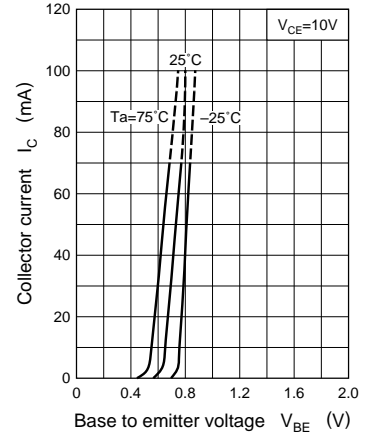
$P_C - T_a$



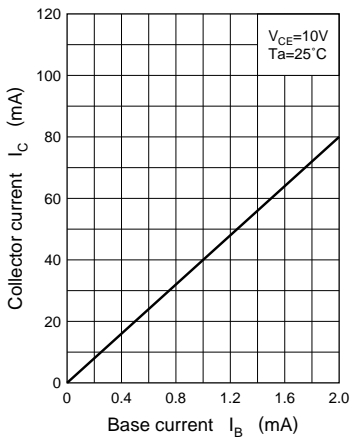
$I_C - V_{CE}$



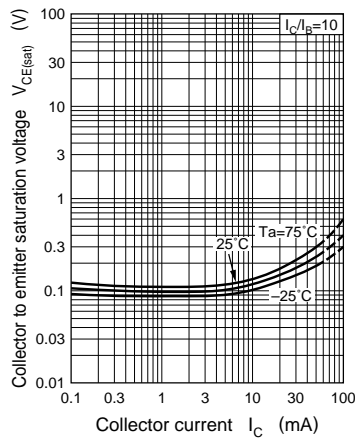
$I_C - V_{BE}$



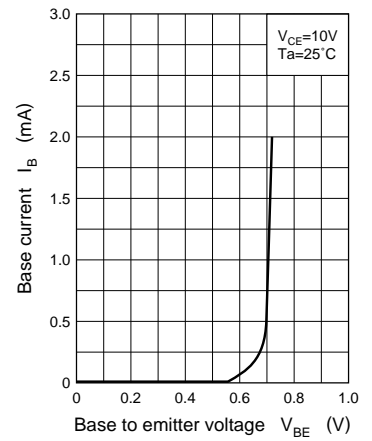
$I_C - I_B$



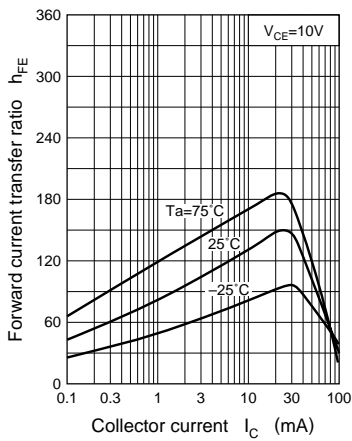
$V_{CE(sat)} - I_C$



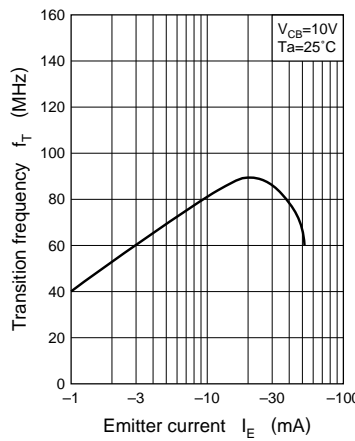
$I_B - V_{BE}$



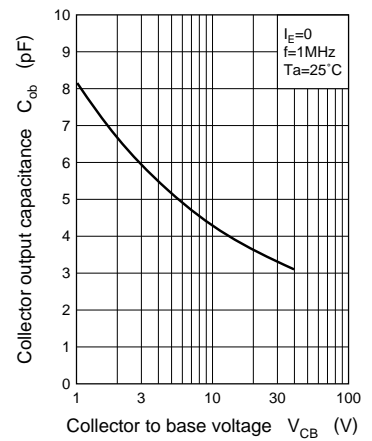
$h_{FE} - I_C$



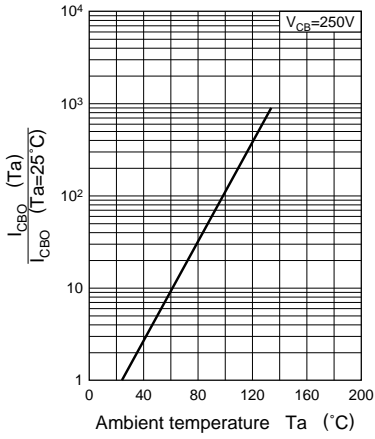
$f_T - I_E$



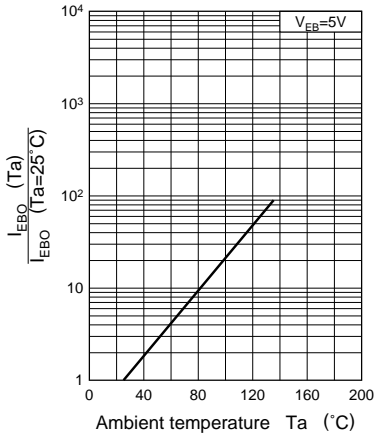
$C_{ob} - V_{CB}$



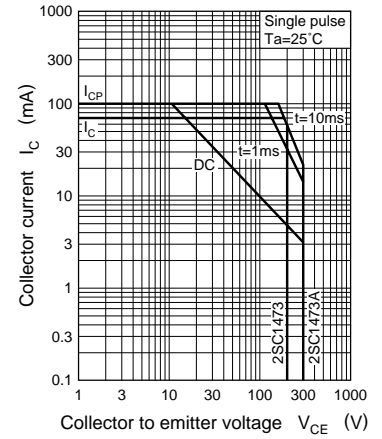
$I_{CBO} - T_a$



$I_{EBO} - T_a$



Area of safe operation (ASO)



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