

2SC1473, 2SC1473A

Silicon NPN triple diffusion planar type

For general amplification

2SC1473 complementary to 2SA1018

2SC1473A complementary to 2SA1767

■ Features

- High collector-emitter voltage (Base open) V_{CE0}
- High transition frequency f_T

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	2SC1473	V_{CBO}	250	V
	2SC1473A		300	
Collector-emitter voltage (Base open)	2SC1473	V_{CEO}	200	V
	2SC1473A		300	
Emitter-base voltage (Collector open)	V_{EBO}	7	V	
Collector current	I_C	70	mA	
Peak collector current	I_{CP}	100	mA	
Collector power dissipation	P_C	750	mW	
Junction temperature	T_j	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

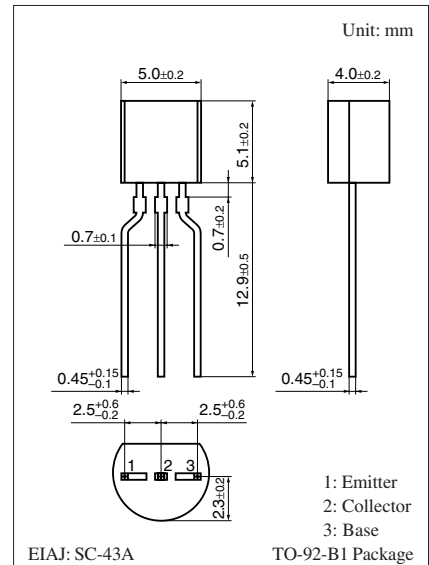
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

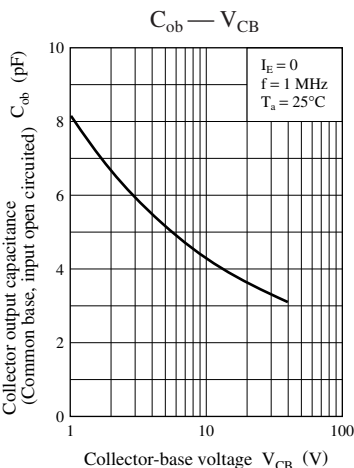
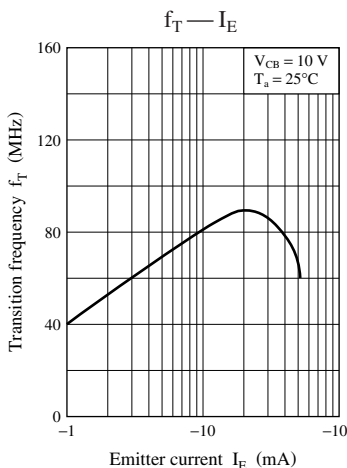
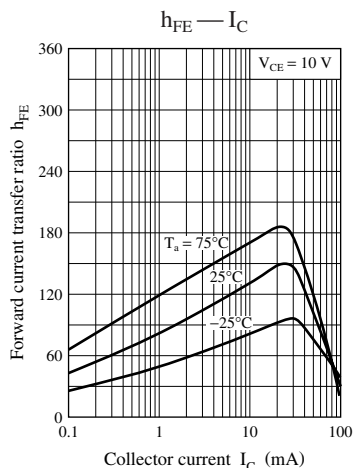
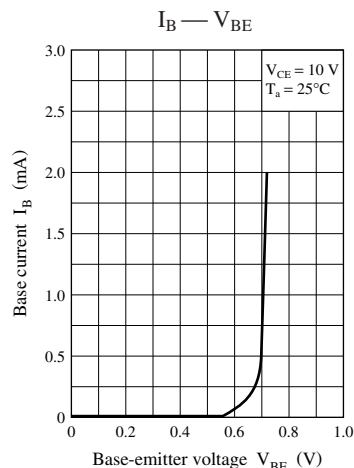
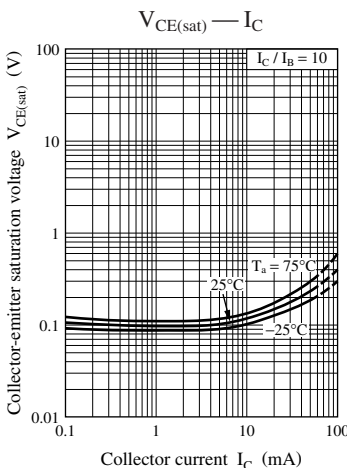
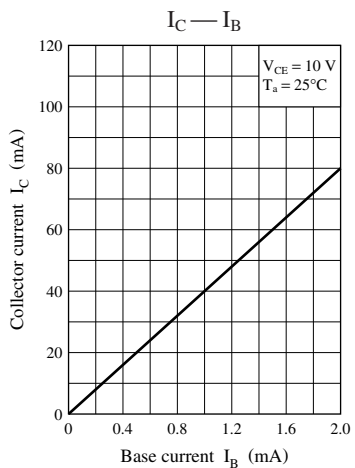
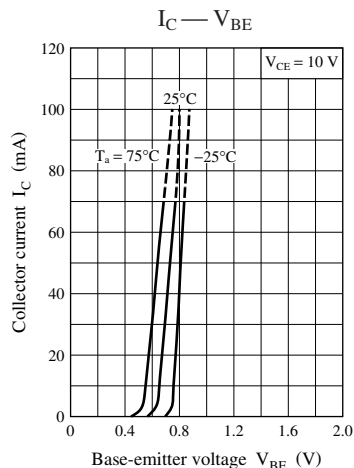
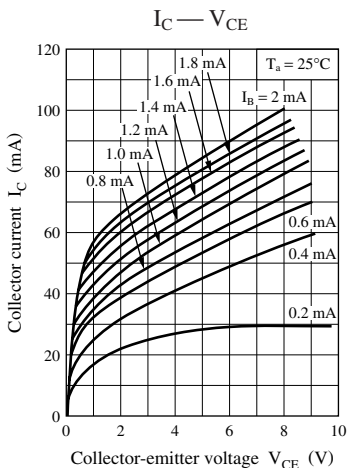
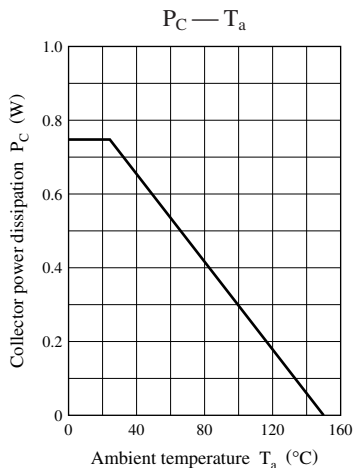
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SA1473	$I_C = 100 \mu\text{A}, I_B = 0$	200			V
	2SA1473A					
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 1 \mu\text{A}, I_C = 0$	7			V
Collector-emitter cutoff current (Base open)	2SA1473	$V_{CE} = 120 \text{ V}, T_a = 60^\circ\text{C}, I_B = 0$			1	μA
	2SA1473A					
Forward current transfer ratio *	h_{FE}	$V_{CE} = 10 \text{ V}, I_C = 5 \text{ mA}$	60		220	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$			1.2	V
Transition frequency	f_T	$V_{CB} = 10 \text{ V}, I_E = -10 \text{ mA}, f = 200 \text{ MHz}$	50	80		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			10	pF

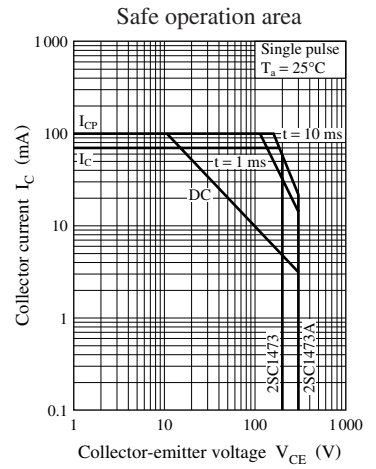
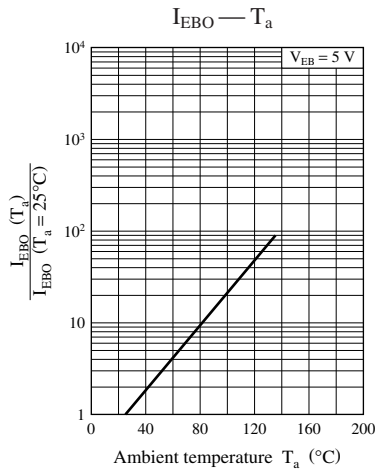
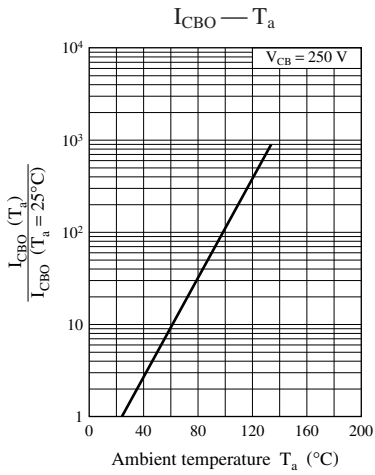
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

Rank	Q	R
h_{FE}	60 to 150	100 to 220







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