

# 2SC1573, 2SC1573A, 2SC1573B

Silicon NPN triple diffusion planar type

For high breakdown voltage general amplification

For small TV video output

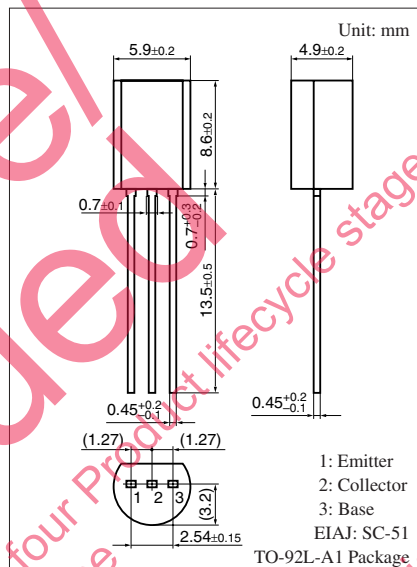
Complementary to 2SC1573 and 2SA0879

■ 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)	2SC1573	$V_{CBO}$ 250	V
	2SC1573A	300	
	2SC1573B	400	
Collector-emitter voltage (Base open)	2SC1573	$V_{CEO}$ 200	V
	2SC1573A	300	
	2SC1573B	400	
Emitter-base voltage (Collector open)	2SC1573	$V_{EBO}$ 5	V
	2SC1573A	7	
	2SC1573B		
Collector current	$I_C$	70	mA
Peak collector current	$I_{CP}$	100	mA
Collector power dissipation	$P_C$	1	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



Unit: mm  
 1: Emitter  
 2: Collector  
 3: Base  
 EIAJ: SC-51  
 TO-92L-A1 Package

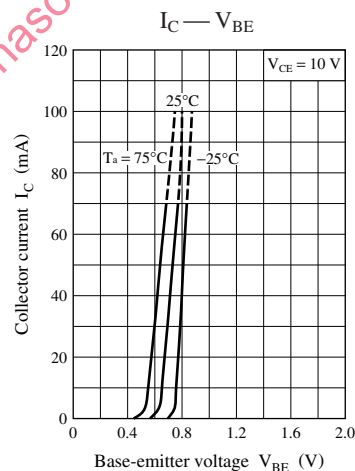
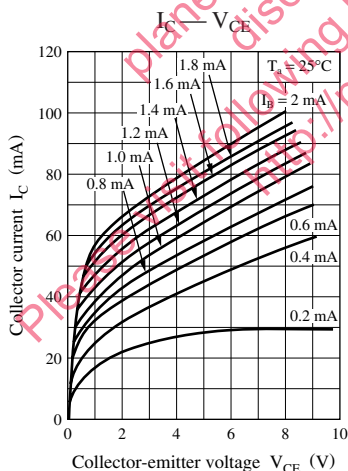
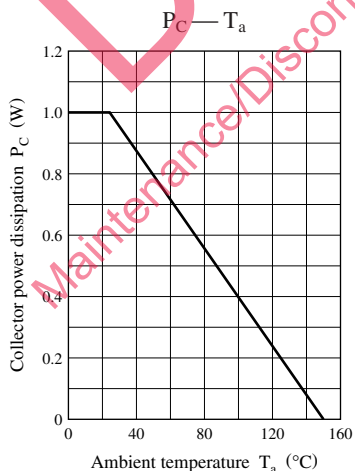
■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

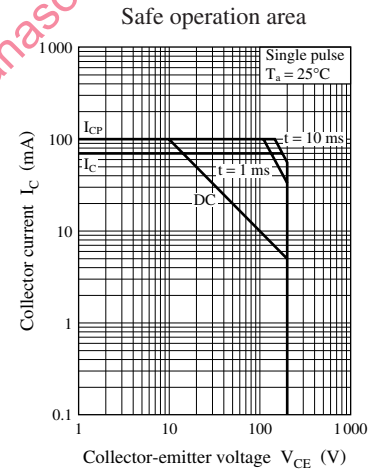
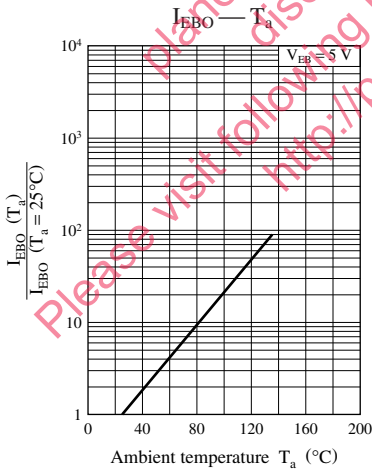
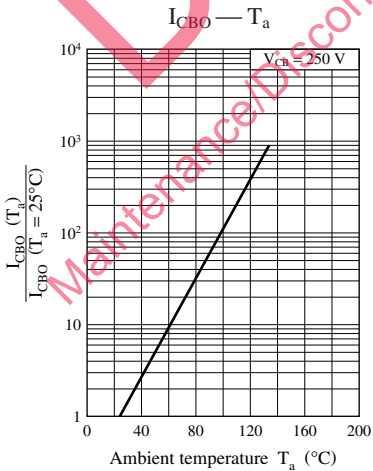
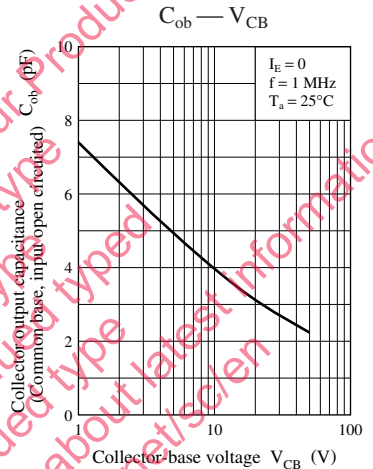
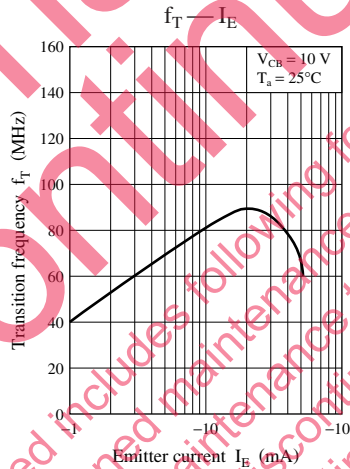
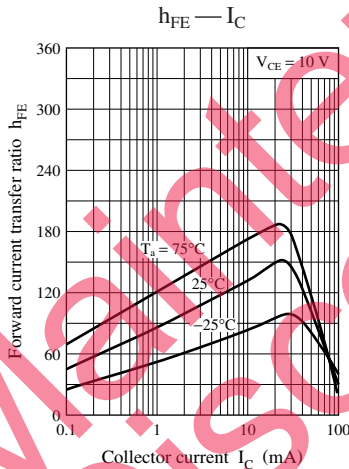
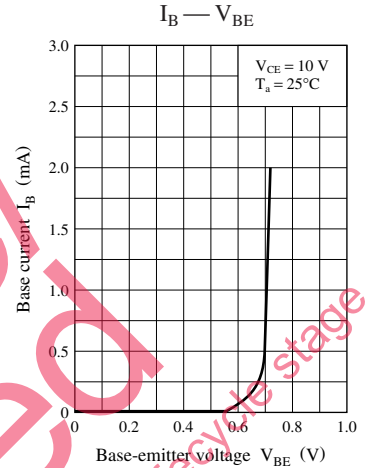
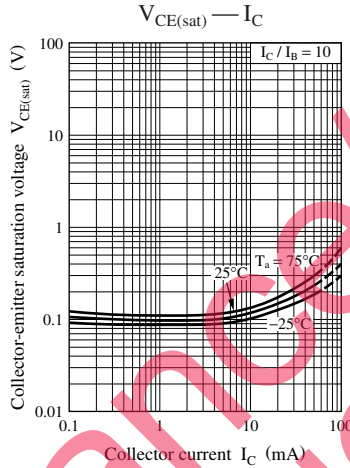
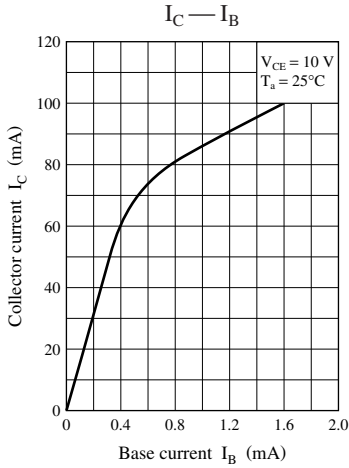
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SC1573	$V_{CEO}$	$I_C = 100 \mu\text{A}, I_B = 0$	200			V
	2SC1573A			300			
	2SC1573B			400			
Emitter-base voltage (Collector open)	2SC1573	$V_{EBO}$	$I_E = 1 \mu\text{A}, I_C = 0$	5			V
	2SC1573A			7			
	2SC1573B			7			
Collector-base cut-off current (Emitter open)	2SC1573	$I_{CBO}$	$V_{CB} = 12 \text{ V}, I_E = 0$			2	$\mu\text{A}$
	2SC1573A						
	2SC1573B		$V_{CB} = 200 \text{ V}, I_E = 0$			10	
Forward current transfer ratio	2SC1573	$h_{FE}^*$	$V_{CE} = 10 \text{ V}, I_C = 5 \text{ mA}$	60		220	—
	2SC1573A			30		220	
	2SC1573B						
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)	2SC1573	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		5	10	pF
	2SC1573A				4	8	
	2SC1573B				4	8	

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

2. \*: Rank classification (2SC1573 for ranks Q and R only)

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





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