

# 2SC1573, 2SC1573A, 2SC1573B

## Silicon NPN triple diffusion planar type

For high breakdown voltage general amplification

For small TV video output

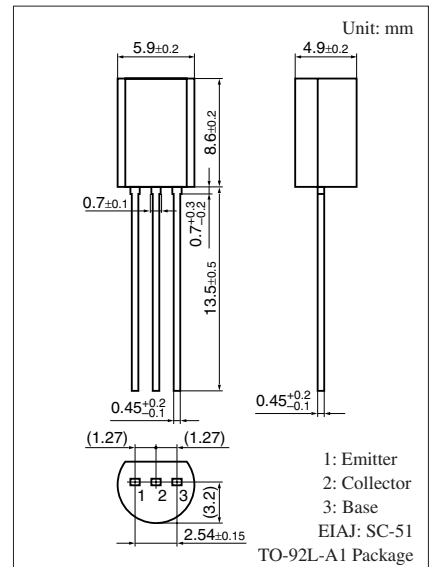
Complementary to 2SC1573 and 2SA0879

### ■ 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			
	2SC1573B			
Collector-emitter voltage (Base open)	2SC1573	$V_{CEO}$	200	V
	2SC1573A			
	2SC1573B			
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	$^\circ\text{C}$	



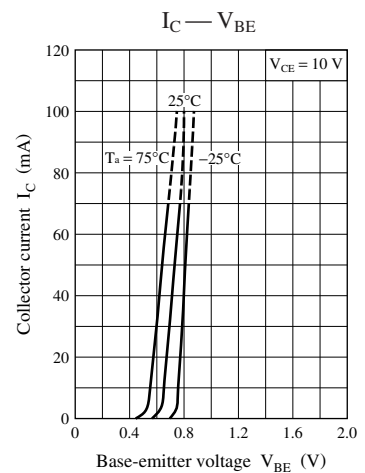
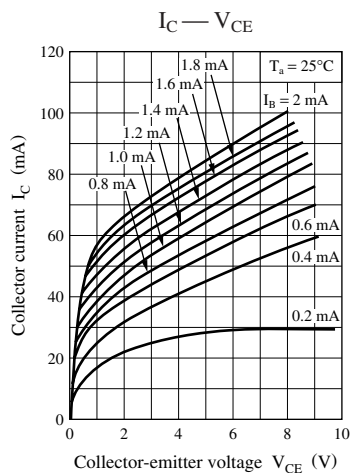
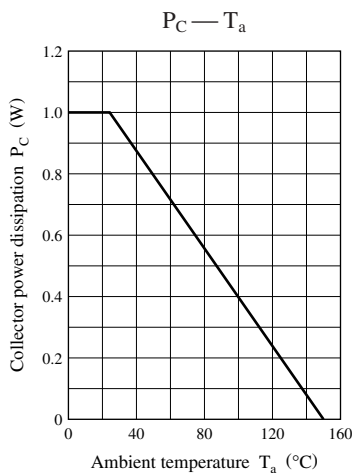
■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

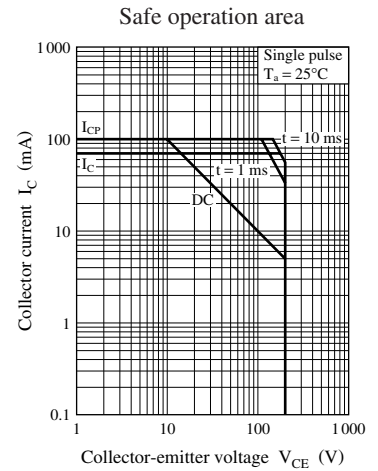
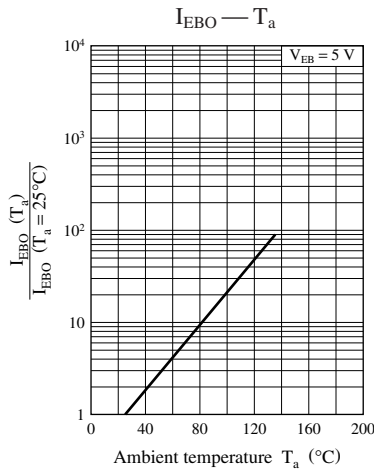
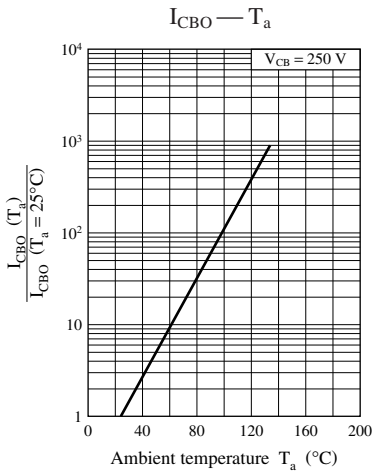
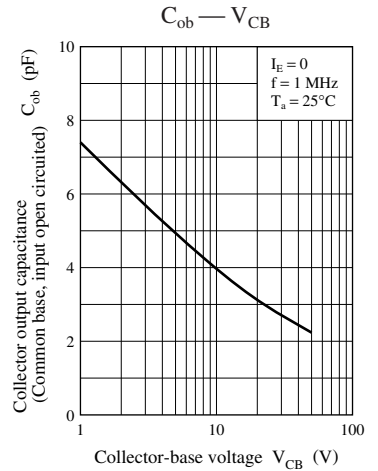
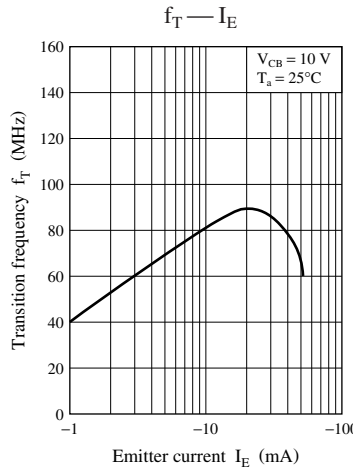
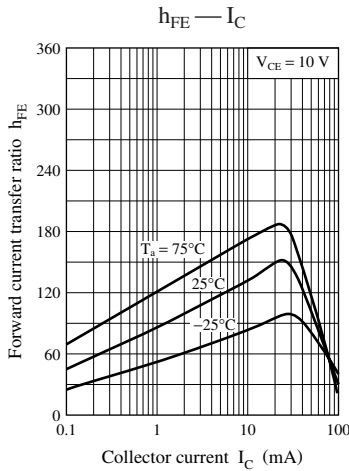
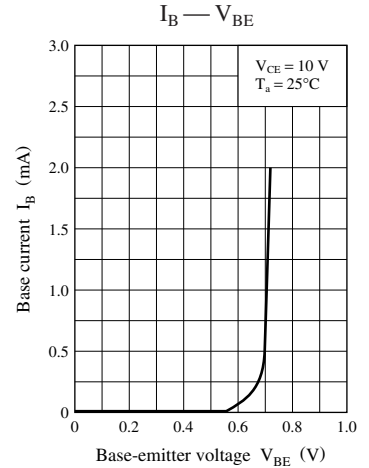
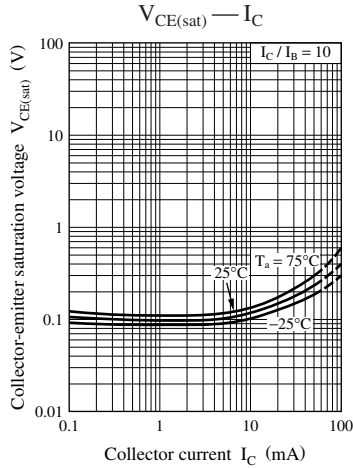
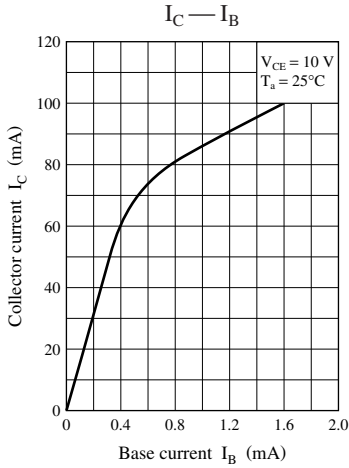
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SC1573	$V_{\text{CEO}}$	$I_{\text{C}} = 100 \mu\text{A}, I_{\text{B}} = 0$	200			V
	2SC1573A			300			
	2SC1573B			400			
Emitter-base voltage (Collector open)	2SC1573	$V_{\text{EBO}}$	$I_{\text{E}} = 1 \mu\text{A}, I_{\text{C}} = 0$	5			V
	2SC1573A			7			
	2SC1573B			7			
Collector-base cut-off current (Emitter open)	2SC1573	$I_{\text{CBO}}$	$V_{\text{CB}} = 12 \text{ V}, I_{\text{E}} = 0$			2	$\mu\text{A}$
	2SC1573A						
	2SC1573B		$V_{\text{CB}} = 200 \text{ V}, I_{\text{E}} = 0$			10	
Forward current transfer ratio	2SC1573	$h_{\text{FE}}^*$	$V_{\text{CE}} = 10 \text{ V}, I_{\text{C}} = 5 \text{ mA}$	60		220	—
	2SC1573A			30		220	
	2SC1573B						
Collector-emitter saturation voltage		$V_{\text{CE(sat)}}$	$I_{\text{C}} = 50 \text{ mA}, I_{\text{B}} = 5 \text{ mA}$			1.2	V
Transition frequency		$f_{\text{T}}$	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = -10 \text{ mA}, f = 200 \text{ MHz}$	50	80		MHz
Collector output capacitance (Common base, input open circuited)	2SC1573	$C_{\text{ob}}$	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = 0, f = 1 \text{ MHz}$		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
$h_{\text{FE}}$	30 to 100	60 to 150	100 to 220





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