

2SC1573, 2SC1573A, 2SC1573B

Silicon NPN triple diffusion planar type

For high breakdown voltage general amplification

For small TV video output

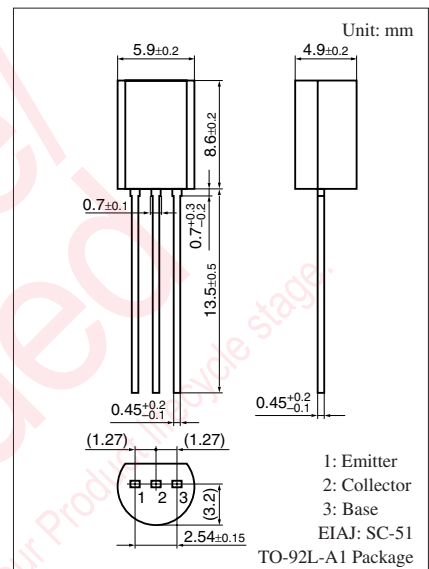
Complementary to 2SC1573 and 2SA0879

■ 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 | $^\circ\text{C}$ | |



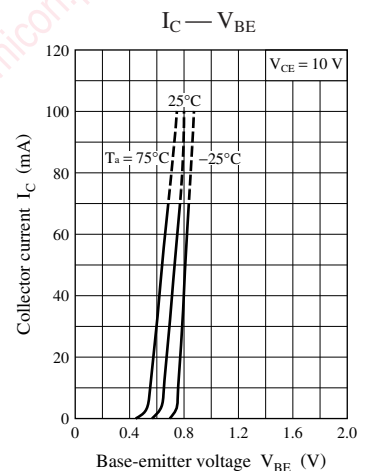
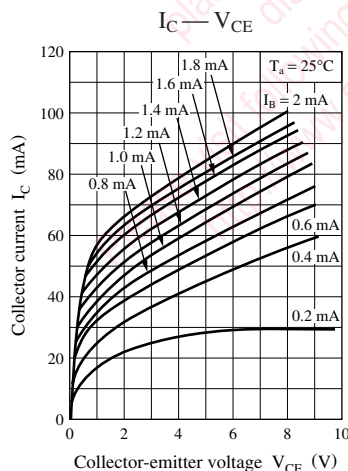
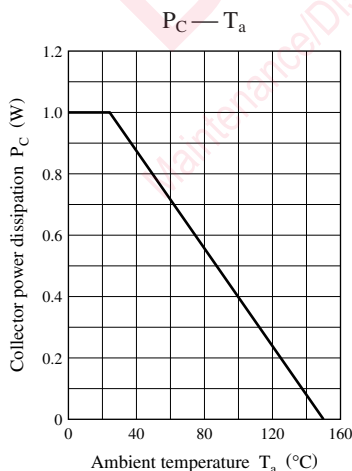
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

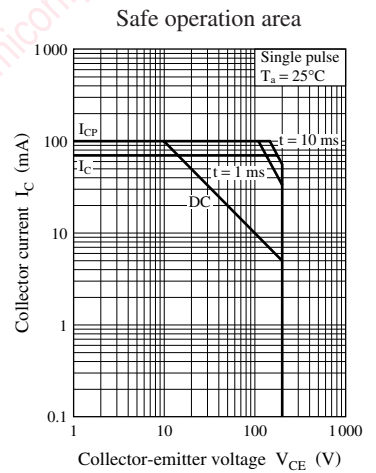
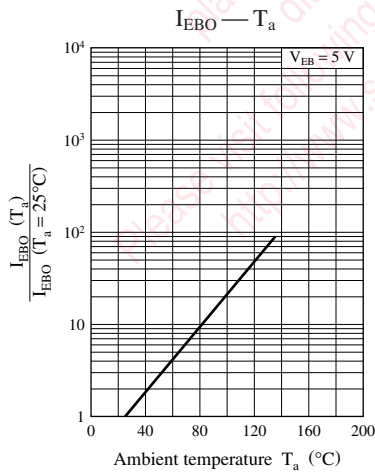
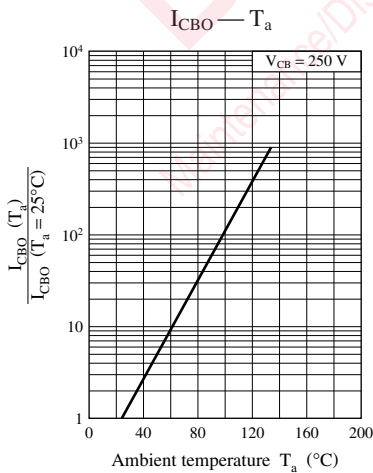
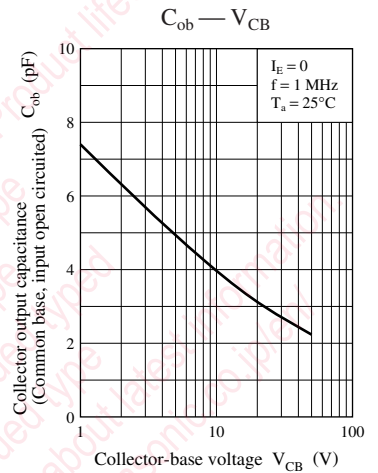
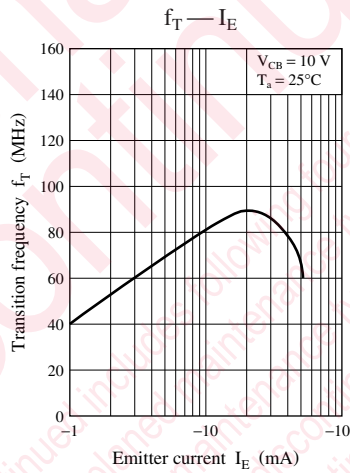
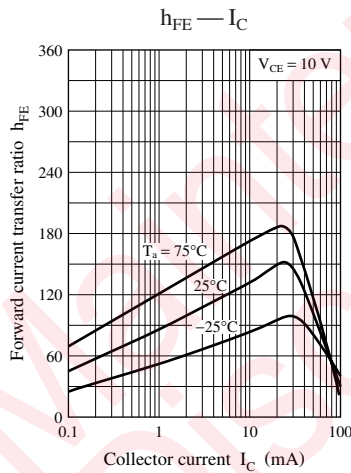
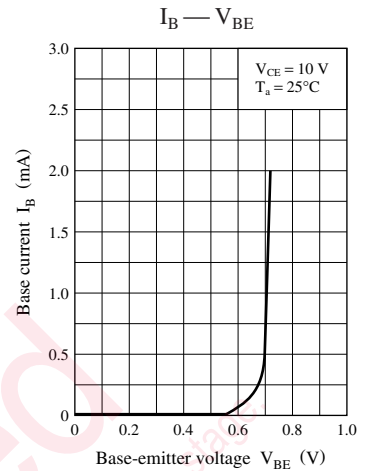
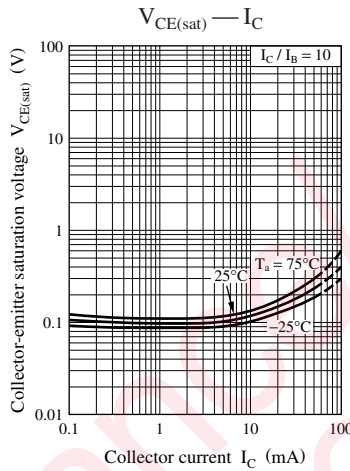
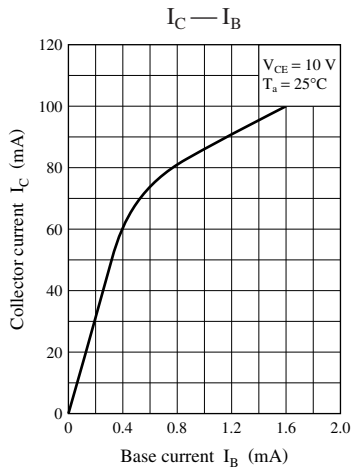
| Parameter | | Symbol | Conditions | Min | Typ | Max | Unit |
|--|----------|----------------------|---|-----|-----|-----|---------------|
| Collector-emitter voltage (Base open) | 2SC1573 | V_{CEO} | $I_C = 100 \mu\text{A}, I_B = 0$ | 200 | | | V |
| | 2SC1573A | | | 300 | | | |
| | 2SC1573B | | | 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} | $V_{\text{CB}} = 12 \text{ V}, I_E = 0$ | | | 2 | μA |
| | 2SC1573A | | | | | | |
| | 2SC1573B | | $V_{\text{CB}} = 200 \text{ V}, I_E = 0$ | | | 10 | |
| Forward current transfer ratio | 2SC1573 | h_{FE}^* | $V_{\text{CE}} = 10 \text{ V}, I_C = 5 \text{ mA}$ | 60 | | 220 | — |
| | 2SC1573A | | | 30 | | 220 | |
| | 2SC1573B | | | | | | |
| Collector-emitter saturation voltage | | $V_{\text{CE(sat)}}$ | $I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$ | | | 1.2 | V |
| Transition frequency | | f_T | $V_{\text{CB}} = 10 \text{ V}, I_E = -10 \text{ mA}, f = 200 \text{ MHz}$ | 50 | 80 | | MHz |
| Collector output capacitance (Common base, input open circuited) | 2SC1573 | C_{ob} | $V_{\text{CB}} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ | | 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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