

SANYO

No.1628C

2SC3644

NPN Triple Diffused Planar Silicon Transistor

Ultrahigh-Definition Display
Horizontal Deflection Output Applications

Features

- High reliability (Adoption of HVP process).
- High speed.
- High breakdown voltage.
- Adoption of MBIT process.

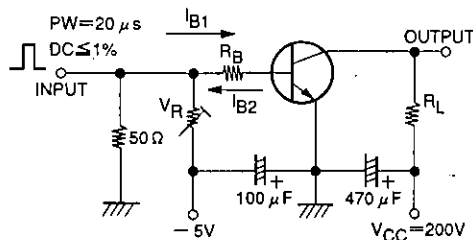
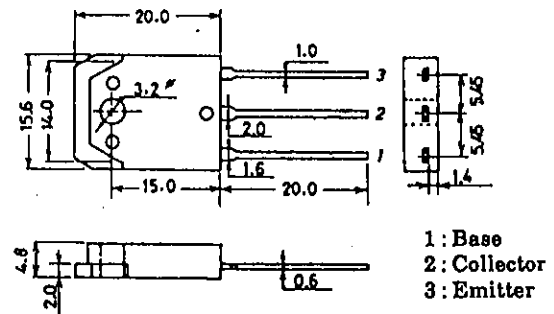
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| | | | unit |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage | V_{CB0} | 1200 | V |
| Collector-to-Emitter Voltage | V_{CEO} | 800 | V |
| Emitter-to-Base Voltage | V_{EBO} | 7 | V |
| Collector Current | I_C | 12 | A |
| Collector Current (Pulse) | I_{CP} | 25 | A |
| Collector Dissipation | P_C | 150 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

$T_c = 25^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

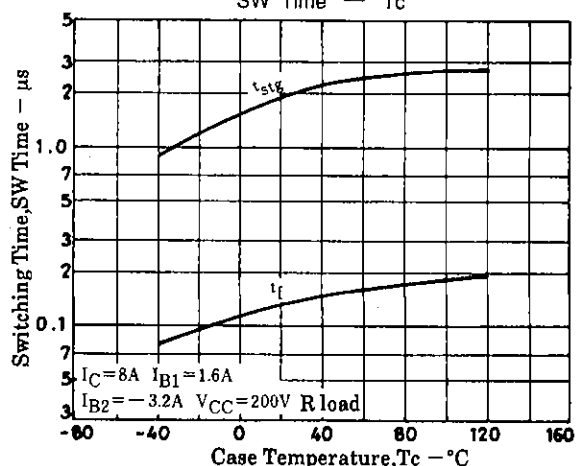
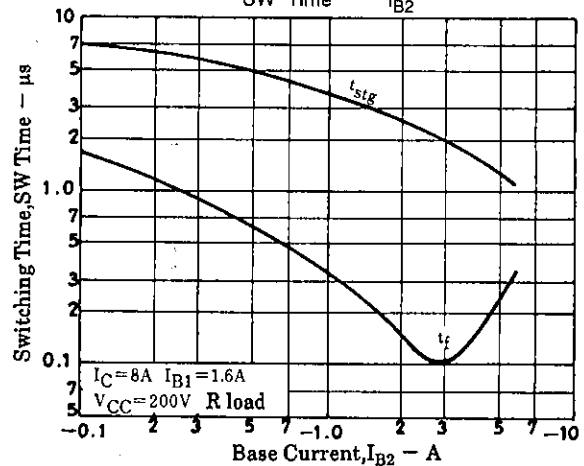
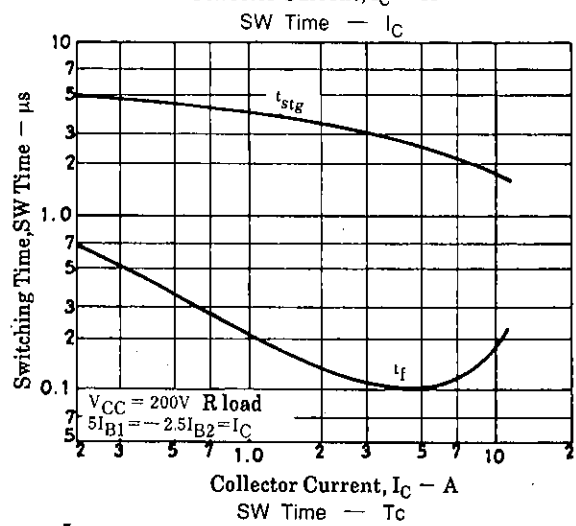
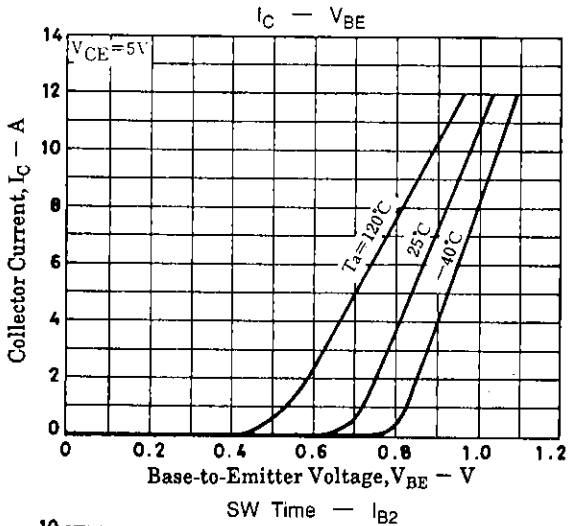
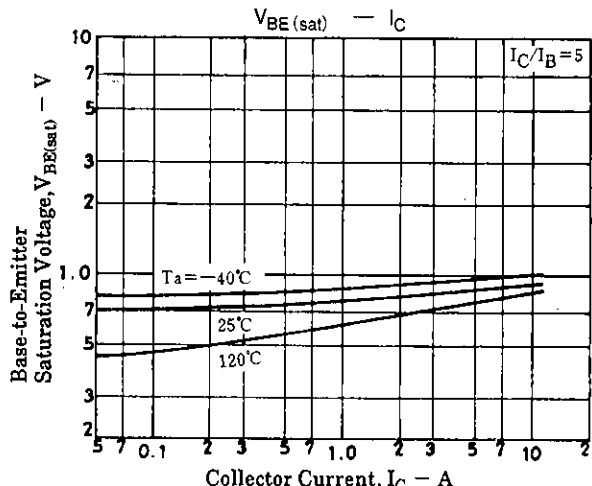
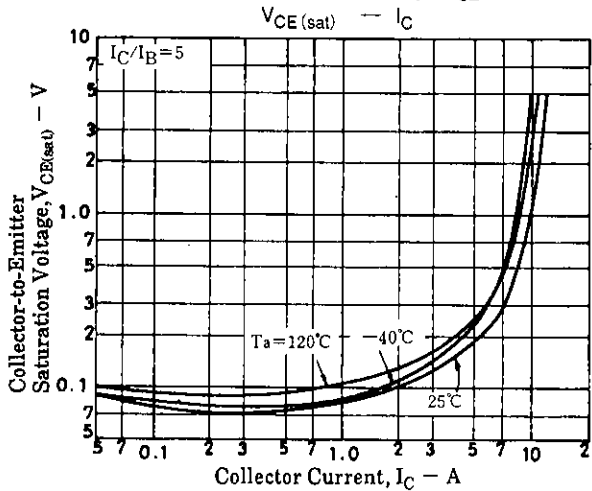
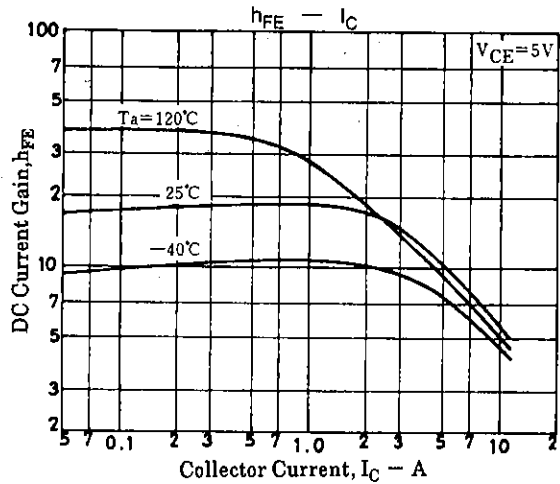
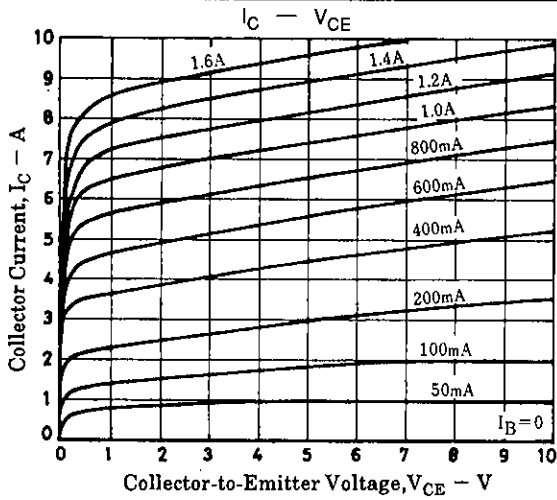
| | | | min | typ | max | unit |
|--------------------------|----------------|--|-----|-----|-----|---------------|
| Collector Cutoff Current | I_{CBO} | $V_{CB} = 800\text{V}, I_E = 0$ | | | 10 | μA |
| | I_{CES} | $V_{CE} = 1200\text{V}, R_{BE} = 0$ | | | 0.5 | mA |
| C-E Sustaining Voltage | $V_{CEO(sus)}$ | $I_C = 100\text{mA}, I_B = 0$ | 800 | | | V |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = 5\text{V}, I_C = 0$ | | | 1 | mA |
| C-E Saturation Voltage | $V_{CE(sat)}$ | $I_C = 8\text{A}, I_B = 1.6\text{A}$ | | | 5 | V |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C = 8\text{A}, I_B = 1.6\text{A}$ | | | 1.5 | V |
| DC Current Gain | h_{FE} | $V_{CE} = 5\text{V}, I_C = 1.6\text{A}$ | 8 | | | |
| Storage Time | t_{stg} | $I_C = 8\text{A}, I_{B1} = 1.6\text{A}, I_{B2} = -3.2\text{A}$ | | | 3.0 | μs |
| Fall Time | t_f | $I_C = 8\text{A}, I_{B1} = 1.6\text{A}, I_{B2} = -3.2\text{A}$ | | 0.1 | 0.2 | μs |

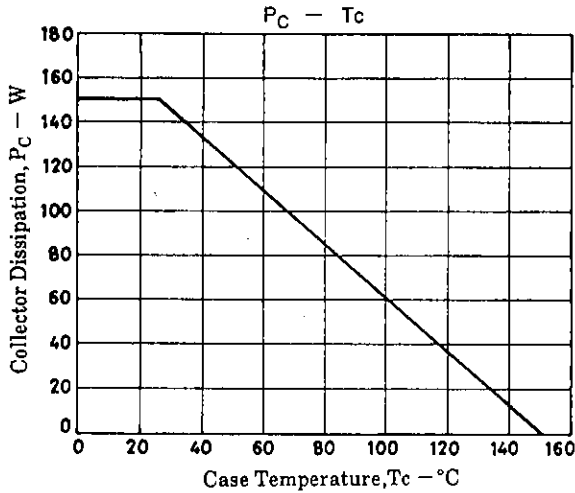
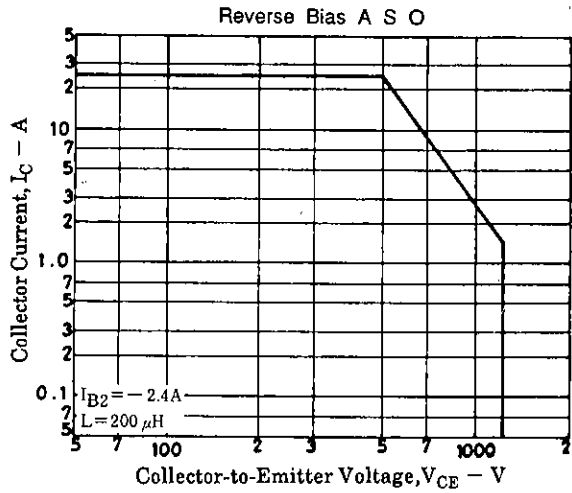
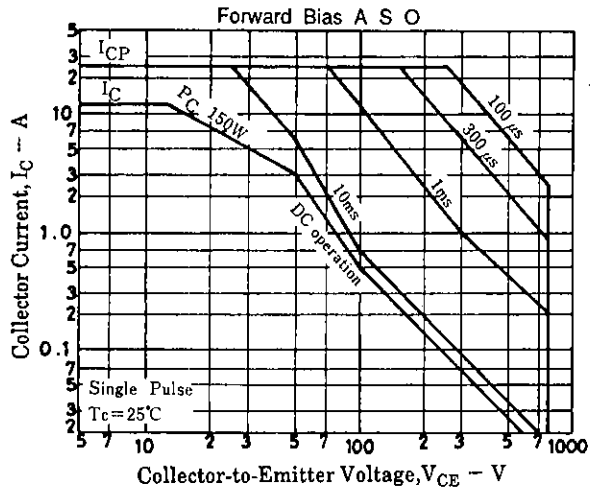
Switching Time Test Circuit**Package Dimensions 2022A**
(unit : mm)

SANYO : TO3PB

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