

SANYO

No.1627B

2SC3643

NPN Triple Diffused Planar Silicon Transistor
 VERY HIGH-DEFINITION DISPLAY
 HORIZONTAL DEFLECTION OUTPUT APPLICATIONS

Features

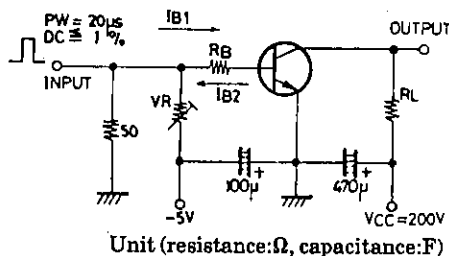
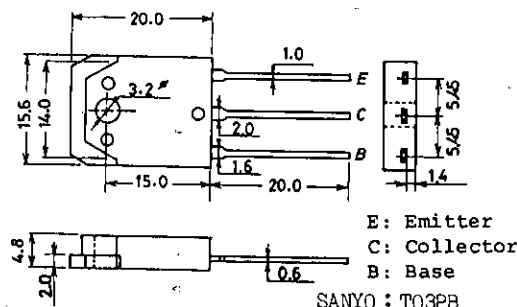
- . High reliability (Adoption of HVP process)
- . Fast speed.
- . High breakdown voltage.
- . Adoption of MBIT process.

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

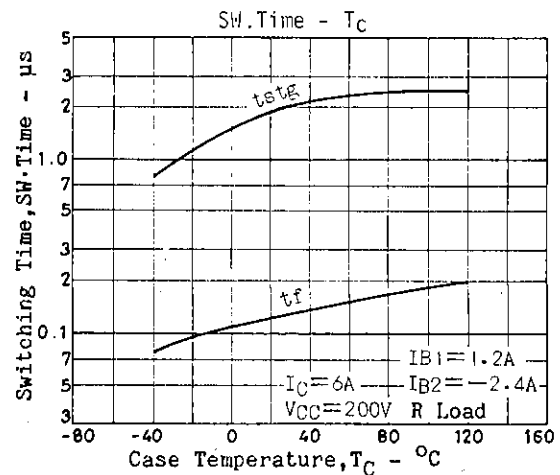
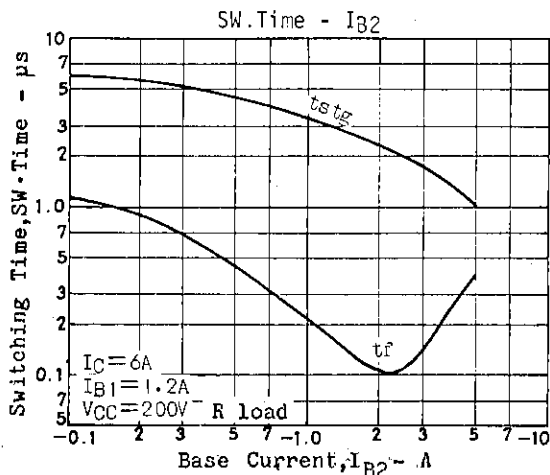
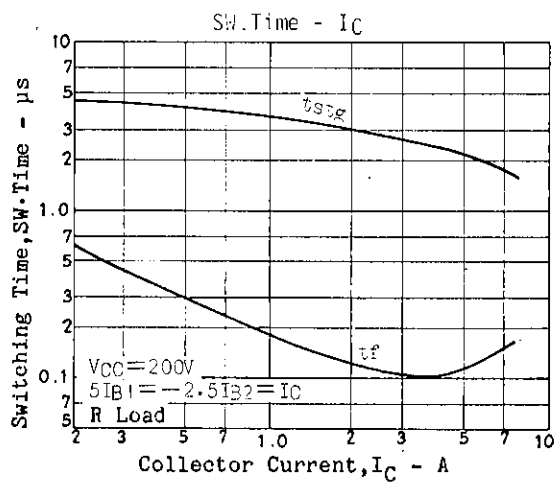
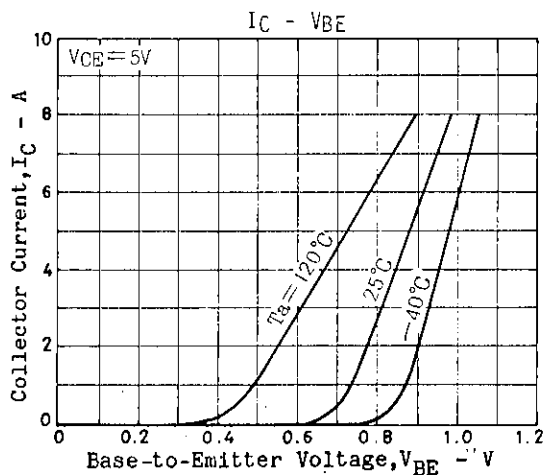
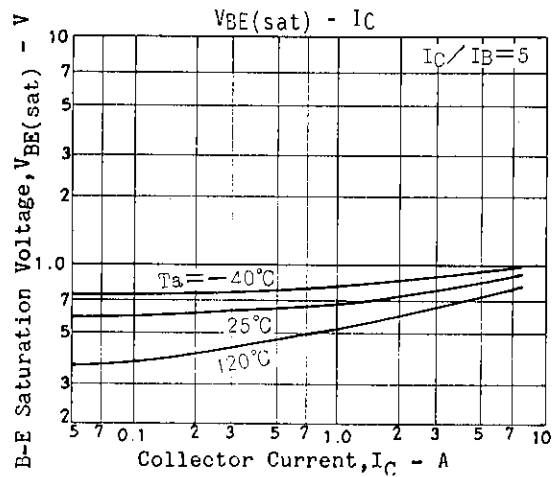
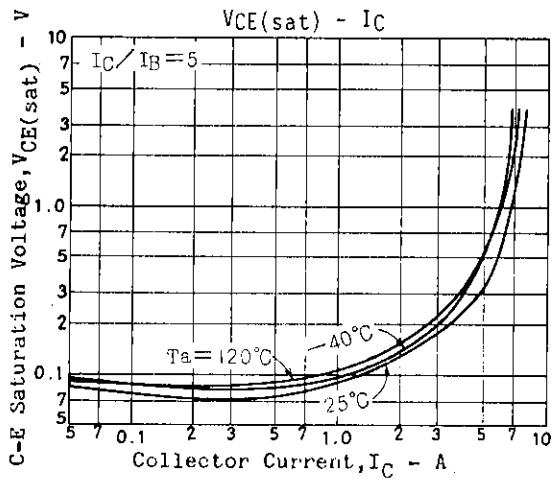
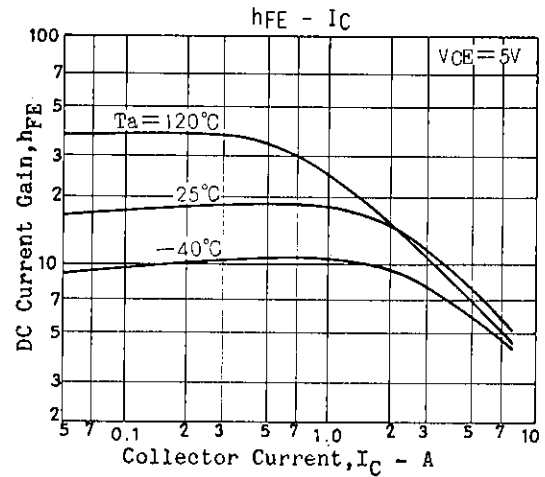
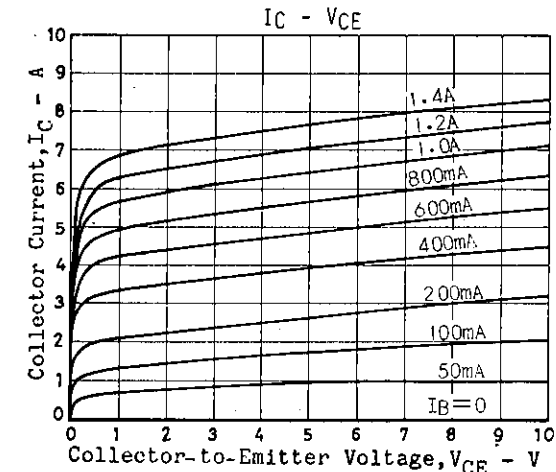
| | | | unit |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage | V_{CB0} | 1200 | V |
| Collector-to-Emitter Voltage | V_{CE0} | 800 | V |
| Emitter-to-Base Voltage | V_{EB0} | 7 | V |
| Collector Current | I_C | 8 | A |
| Peak Collector Current | i_{cp} | 16 | A |
| Collector Dissipation | P_C | 140 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

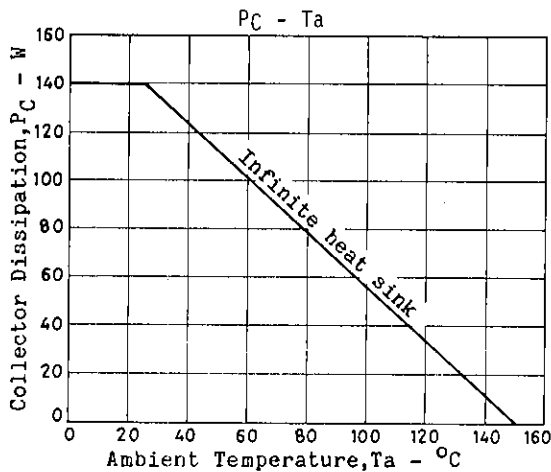
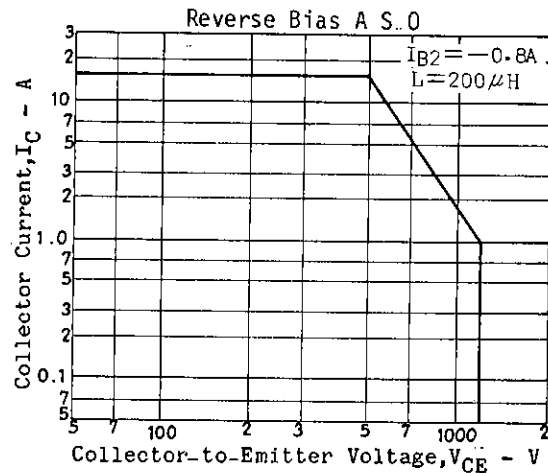
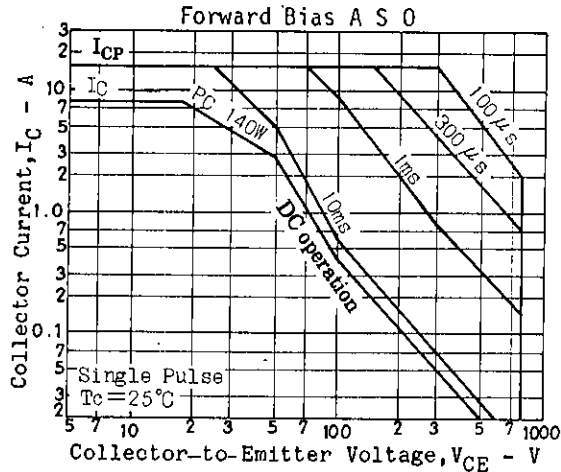
Electrical Characteristics at $T_a=25^\circ\text{C}$

| | | | min | typ | max | unit |
|---|----------------|--|-----|-----|-----|---------------|
| Collector Cutoff Current | I_{CB0} | $V_{CB}=800\text{V}, I_E=0$ | | | 10 | μA |
| | I_{CES} | $V_{CE}=1200\text{V}, R_{BE}=0$ | | | 0.5 | mA |
| Collector-to-Emitter Sustain 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 |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=6\text{A}, I_B=1.2\text{A}$ | | | 5 | V |
| Base-to-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=6\text{A}, I_B=1.2\text{A}$ | | | 1.5 | V |
| DC Current Gain | h_{FE} | $V_{CE}=5\text{V}, I_C=1.2\text{A}$ | 8 | | | |
| Storage Time | t_{stg} | $I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$ | | | 3.0 | μs |
| Fall Time | t_f | $I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$ | | 0.1 | 0.2 | μs |

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

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