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| SANYO | No.2966B | 2SC3895 |
| | | NPN Triple Diffused Planar Silicon Transistor Ultrahigh-Definition Display Horizontal Deflection Output Applications |

Features

- High speed ($t_f = 100\text{ns}$ typ).
- High breakdown voltage ($V_{CBO} = 1500\text{V}$).
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

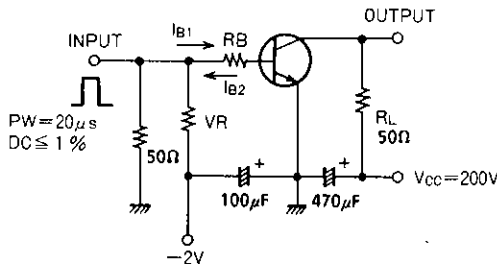
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| | | | |
|------------------------------|--------------------------|-------------|------------------|
| | | | unit |
| Collector-to-Base Voltage | V_{CBO} | 1500 | V |
| Collector-to-Emitter Voltage | V_{CEO} | 800 | V |
| Emitter-to-Base Voltage | V_{EBO} | 6 | V |
| Collector Current | I_C | 7 | A |
| Collector Current (Pulse) | I_{CP} | 16 | A |
| Collector Dissipation | P_C | 3.0 | W |
| | $T_c = 25^\circ\text{C}$ | 60 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

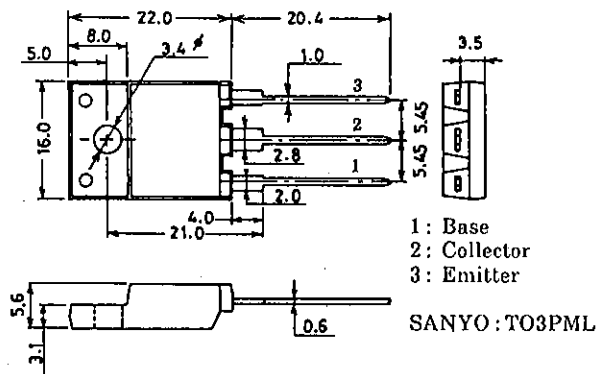
Electrical Characteristics at $T_a = 25^\circ\text{C}$

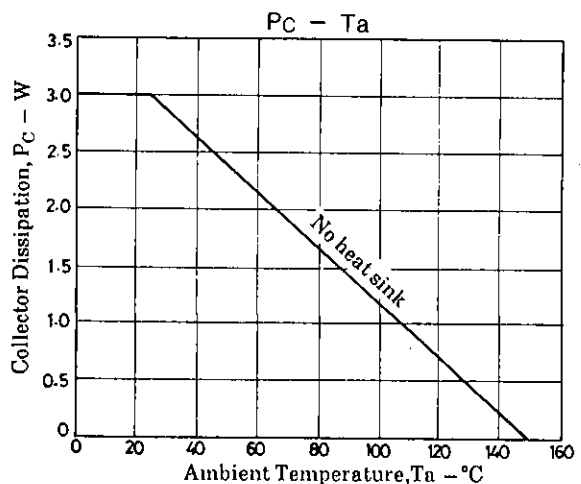
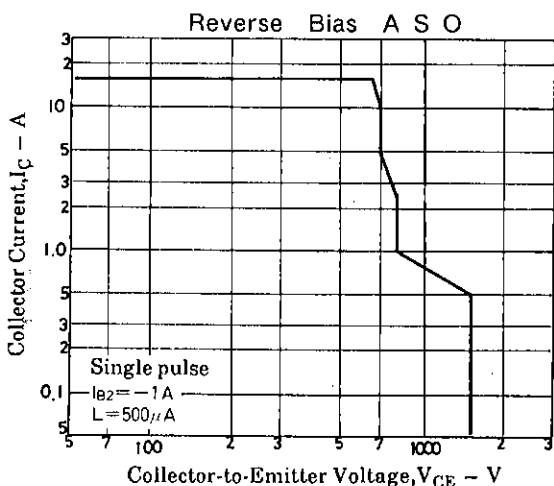
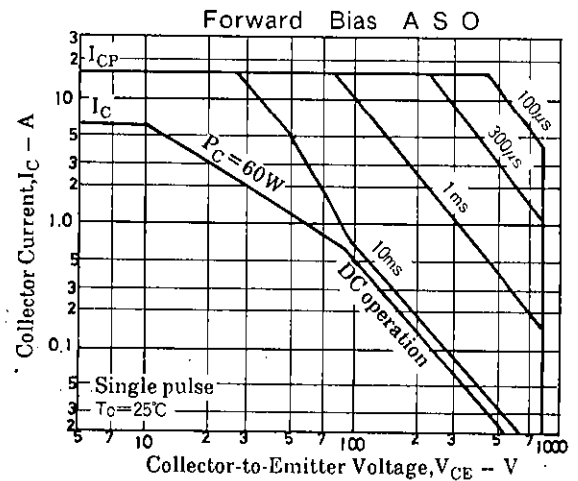
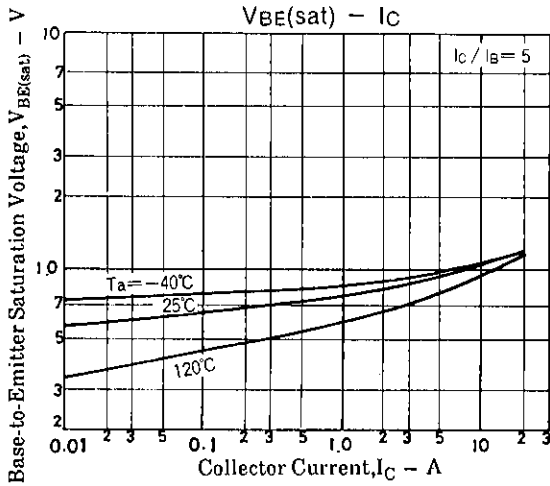
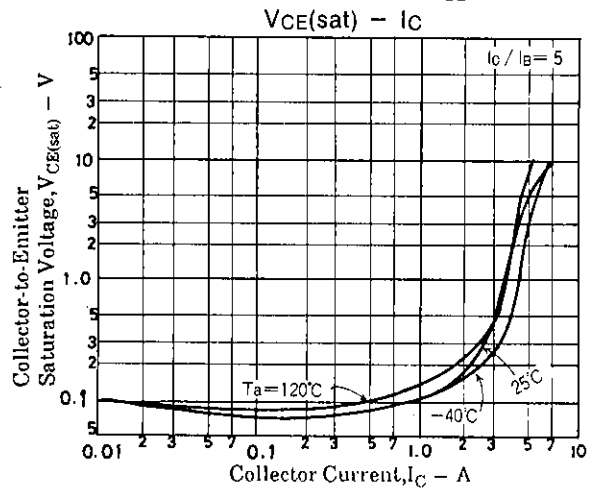
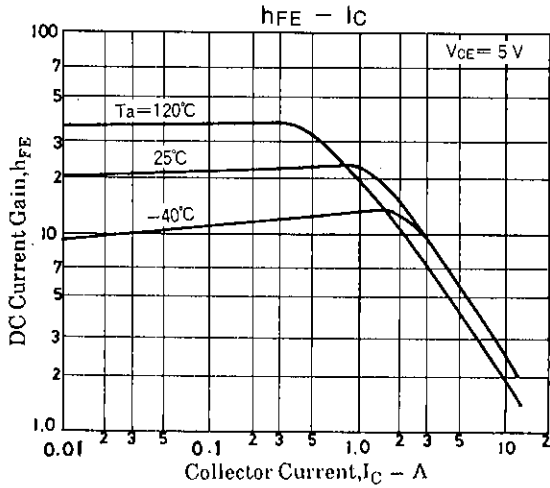
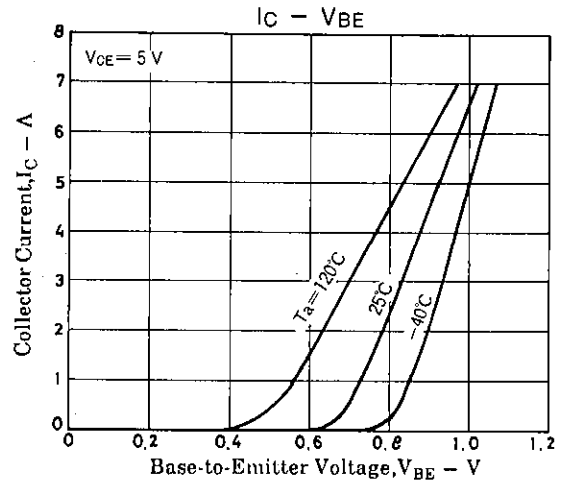
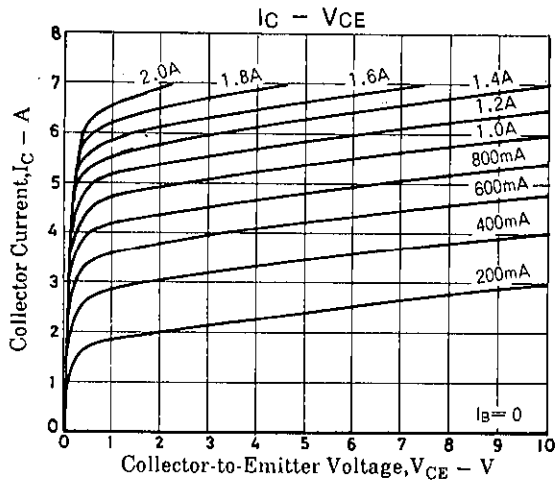
| | | min | typ | max | unit |
|---------------------------|-----------------------------------------------------|-----|-----|-----|---------------|
| Collector Cutoff Current | I_{CBO} $V_{CB} = 800\text{V}, I_E = 0$ | | | 10 | μA |
| Collector Cutoff Current | I_{CES} $V_{CE} = 1500\text{V}, R_{BE} = 0$ | | | 1.0 | mA |
| Collector Sustain Voltage | $V_{CEO(sus)}$ $I_C = 100\text{mA}, I_B = 0$ | 800 | | | V |
| Emitter Cutoff Current | I_{EBO} $V_{EB} = 4\text{V}, I_C = 0$ | | | 1.0 | mA |
| C-E Saturation Voltage | $V_{CE(sat)}$ $I_C = 5\text{A}, I_B = 1.2\text{A}$ | | | 5 | V |
| B-E Saturation Voltage | $V_{BE(sat)}$ $I_C = 5\text{A}, I_B = 1.2\text{A}$ | | | 1.5 | V |
| DC Current Gain | $h_{FE(1)}$ $V_{CE} = 5\text{V}, I_C = 1.0\text{A}$ | 8 | | | |
| | $h_{FE(2)}$ $V_{CE} = 5\text{V}, I_C = 5\text{A}$ | 4 | | 8 | |
| Storage Time | t_{stg} $I_C = 4\text{A}, I_{B1} = 0.8\text{A}$ | | | 3.0 | μs |
| Fall Time | t_f $I_{B2} = -1.6\text{A}$ | 0.1 | 0.2 | | μs |

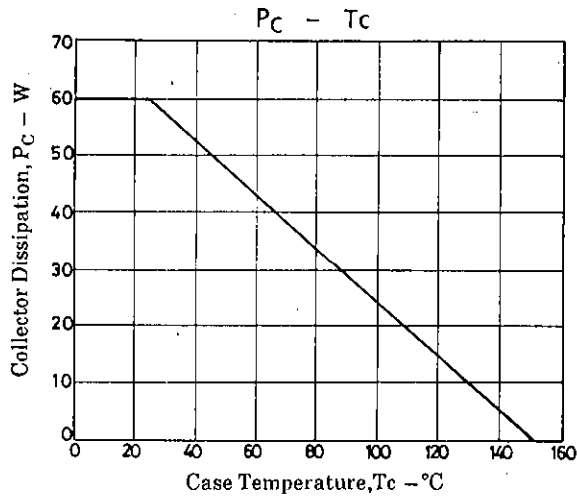
Switching Time Test Circuit



Package Dimensions 2039B (unit: mm)







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