

**SANYO**

No.2432A

**2SD1885**

NPN Triple Diffused Planar Silicon Transistor

Color TV Horizontal Deflection  
Output Applications**Applications**

- Color TV horizontal deflection output.
- Color display horizontal deflection output.

**Features**

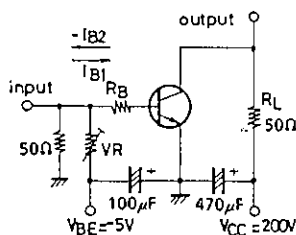
- High speed ( $t_f = 100\text{ns}$ ).
- High breakdown voltage ( $V_{CBO} = 1500\text{V}$ ).
- High reliability (Adoption of HVP process).

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

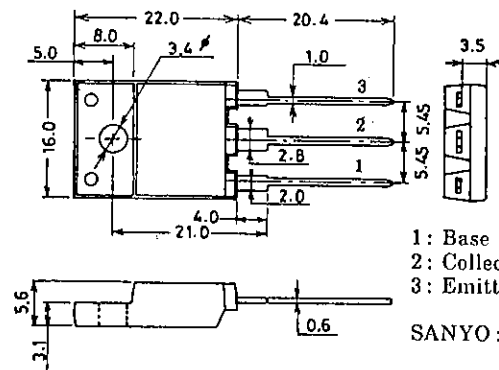
|                              |           |             | unit             |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage    | $V_{CBO}$ | 1500        | V                |
| Collector-to-Emitter Voltage | $V_{CEO}$ | 800         | V                |
| Emitter-to-Base Voltage      | $V_{EBO}$ | 6           | V                |
| Collector Current            | $I_C$     | 6           | A                |
| Collector Current (Pulse)    | $I_{CP}$  | 20          | A                |
| Collector Dissipation        | $P_C$     | 3.0         | W                |
|                              |           | 60          | 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  | $I_{CES}$      | $V_{CE} = 1500\text{V}$                                        |     |     | 1.0 | mA            |
|                           | $I_{CBO}$      | $V_{CB} = 800\text{V}, I_E = 0$                                |     |     | 10  | $\mu\text{A}$ |
| 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    | $V_{CE(sat)}$  | $I_C = 5\text{A}, I_B = 1.0\text{A}$                           |     |     | 5   | V             |
| B-E Saturation Voltage    | $V_{BE(sat)}$  | $I_C = 5\text{A}, I_B = 1.0\text{A}$                           |     |     | 1.5 | V             |
| DC Current Gain           | $h_{FE(1)}$    | $V_{CE} = 5\text{V}, I_C = 1\text{A}$                          | 8   |     |     |               |
|                           | $h_{FE(2)}$    | $V_{CE} = 5\text{V}, I_C = 5\text{A}$                          | 5   |     | 10  |               |
| Fall Time                 | $t_f$          | $I_C = 4\text{A}, I_{B1} = 0.8\text{A}, I_{B2} = -1.6\text{A}$ |     | 0.1 | 0.3 | $\mu\text{s}$ |

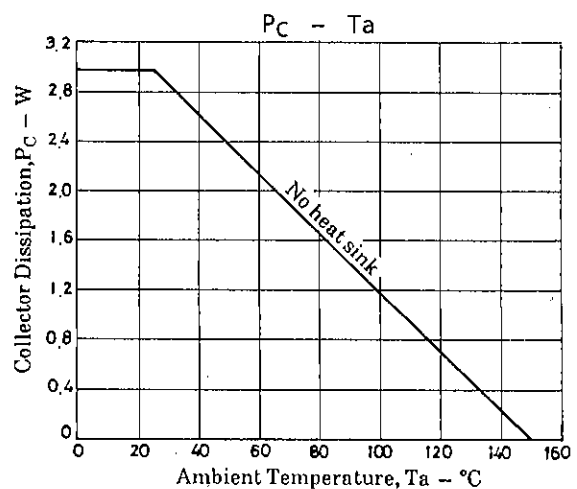
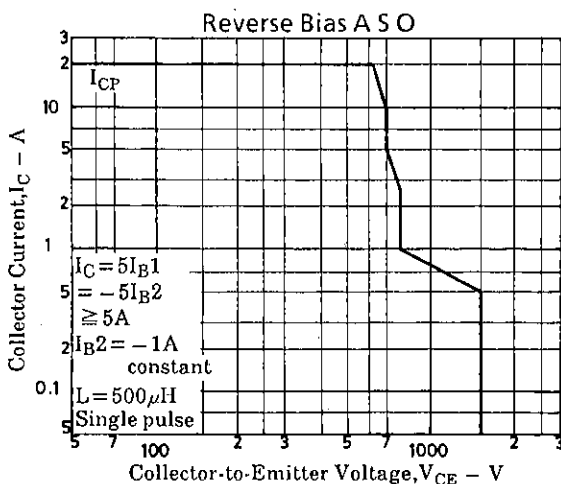
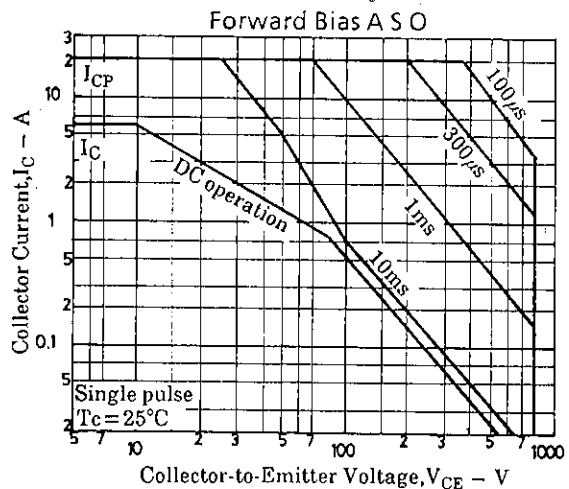
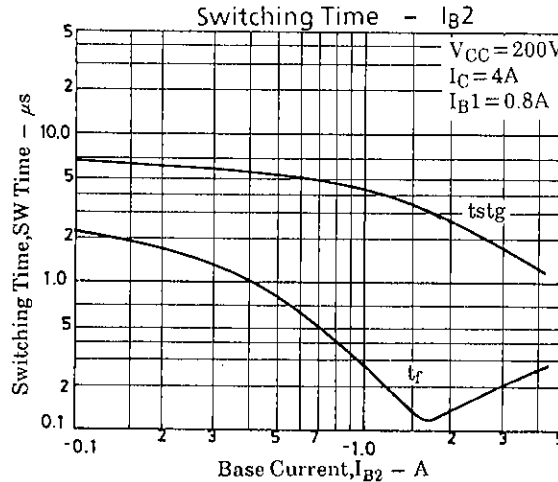
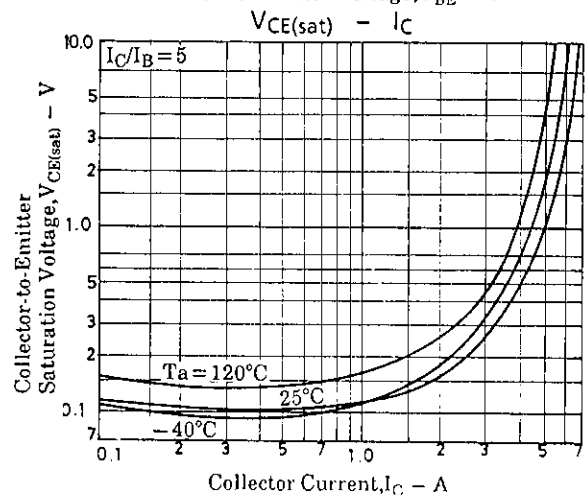
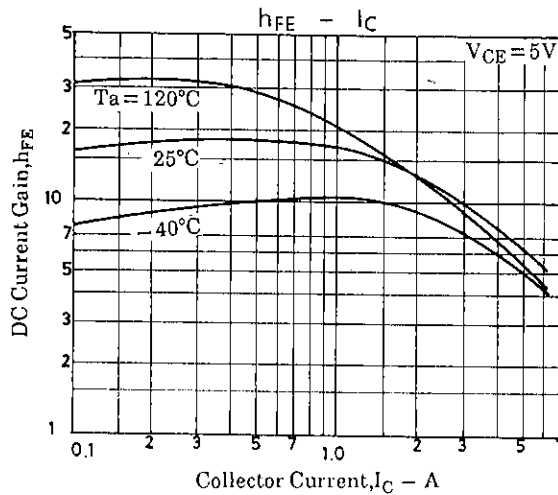
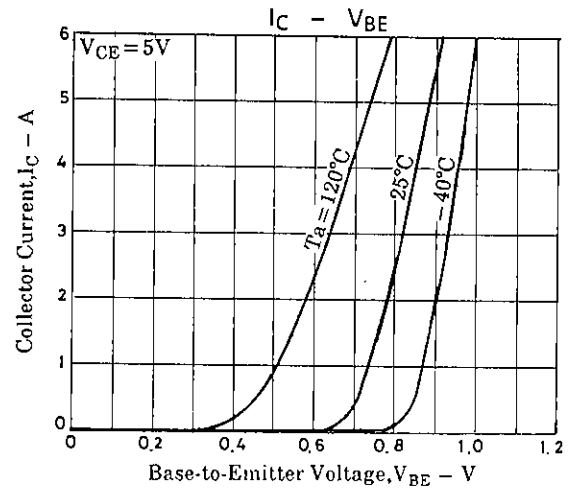
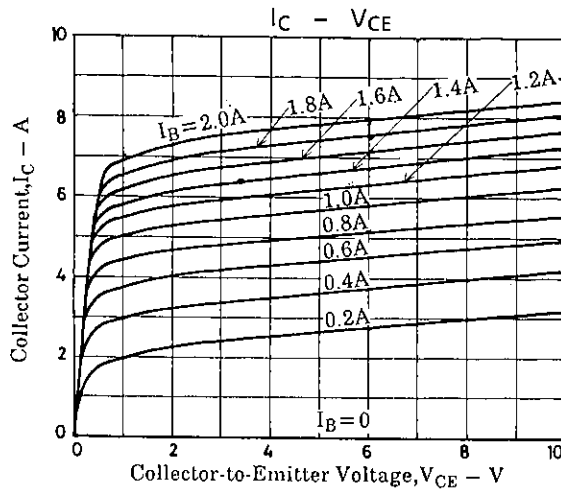
**Switching Time Test Circuit**PW = 20  $\mu\text{s}$ , duty  $\leq 1\%$ **Package Dimensions 2039B**

(unit : mm)

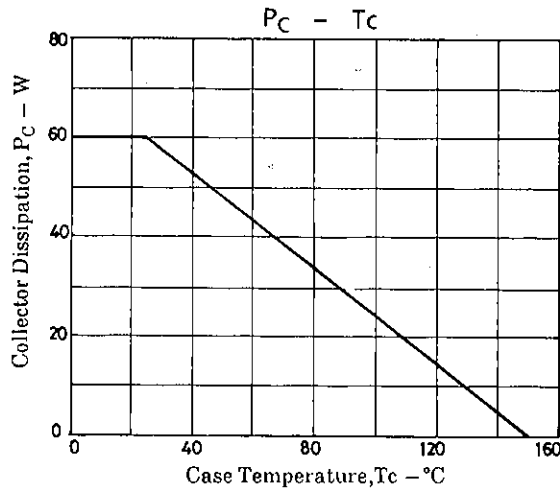
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