

**SANYO**

No.3665

**2SC4769**

NPN Triple Diffused Planar Silicon Transistor  
 Very High-Definition Color 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
- On-chip damper diode

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

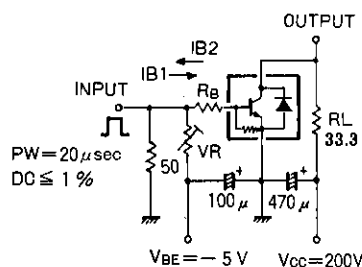
|                              |           |             | unit             |
|------------------------------|-----------|-------------|------------------|
| Collector to Base Voltage    | $V_{CBO}$ | 1500        | V                |
| Collector to Emitter Voltage | $V_{CEO}$ | 800         | V                |
| Emitter to Base Voltage      | $V_{EBO}$ | 6           | V                |
| Collector Current            | $I_C$     | 7           | A                |
| Peak Collector Current       | $i_{cp}$  | 16          | A                |
| Collector Dissipation        | $P_C$     | 3           | 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  $T_a = 25^\circ\text{C}$** 

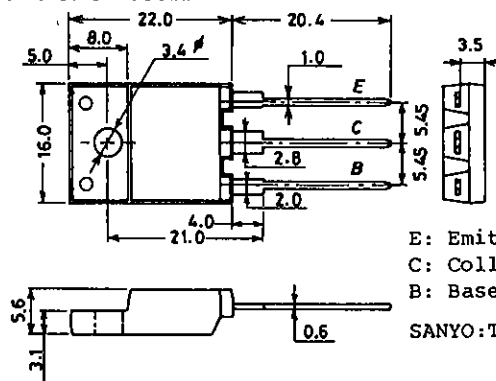
|                           |                |                                         | min  | typ | max  | unit          |
|---------------------------|----------------|-----------------------------------------|------|-----|------|---------------|
| Collector Cutoff Current  | $I_{CBO}$      | $V_{CB} = 800\text{V}, I_E = 0$         |      |     | 10   | $\mu\text{A}$ |
| 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    | $I_{EBO}$      | $V_{EB} = 4\text{V}, I_C = 0$           | 40   |     | 130  | mA            |
| C-E Saturation Voltage    | $V_{CE(sat)}$  | $I_C = 5\text{A}, I_B = 1.7\text{A}$    |      |     | 5    | V             |
| B-E Saturation Voltage    | $V_{BE(sat)}$  | $I_C = 5\text{A}, I_B = 1.7\text{A}$    |      |     | 1.5  | V             |
| DC Current Gain           | $h_{FE(1)}$    | $V_{CE} = 5\text{V}, I_C = 1\text{A}$   | 8    |     |      |               |
|                           | $h_{FE(2)}$    | $V_{CE} = 5\text{V}, I_C = 5\text{A}$   | 3.0* |     | 8.0* |               |
| Diode Forward Voltage     | $V_F$          | $I_{EC} = 7\text{A}$                    |      |     | 2.0  | V             |
| Storage Time              | $t_{stg}$      | $I_C = 4\text{A}, I_{B1} = 0.8\text{A}$ |      |     | 3.0  | $\mu\text{s}$ |
| Fall Time                 | $t_f$          | $I_{B2} = -1.6\text{A}$                 | 0.1  | 0.2 |      | $\mu\text{s}$ |

\* : The 2SC4769 is classified by 5A  $h_{FE}$  as follows :

| $h_{FE}$ | 3 to 5 | 4 to 6 | 5 to 8 |
|----------|--------|--------|--------|
| Rank     | 1      | 2      | 3      |

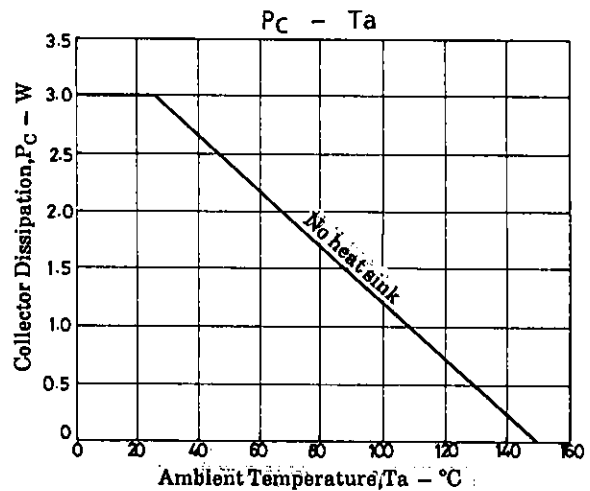
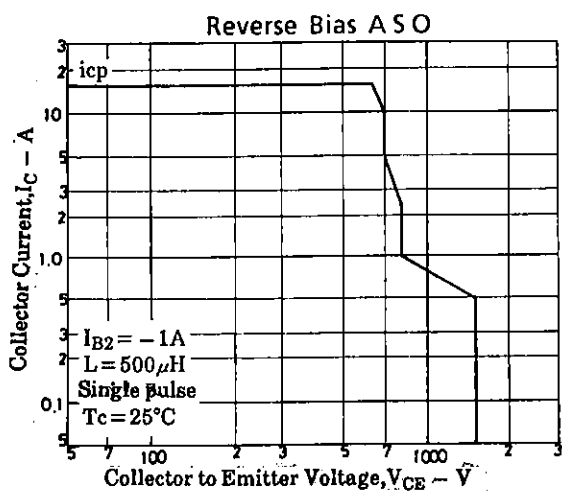
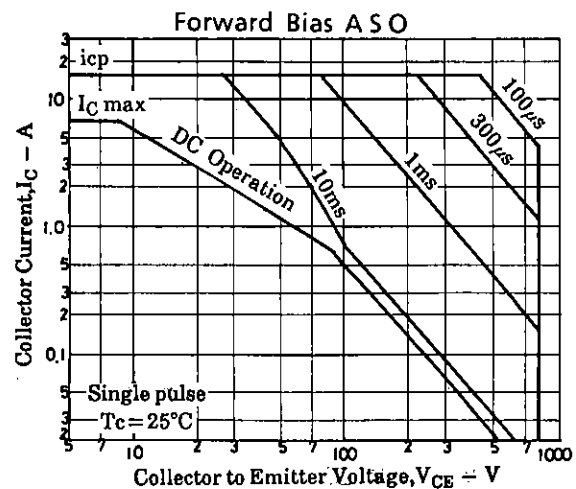
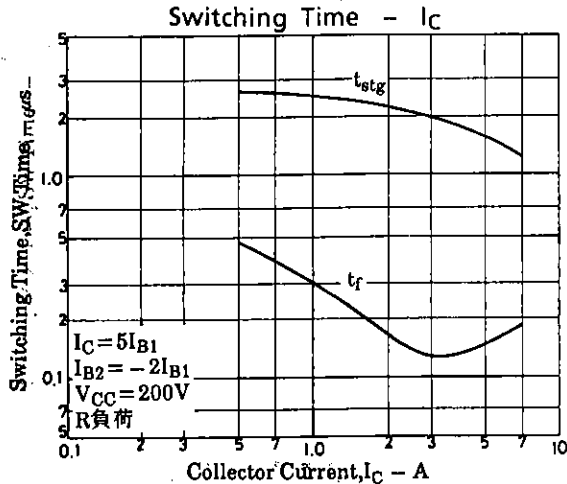
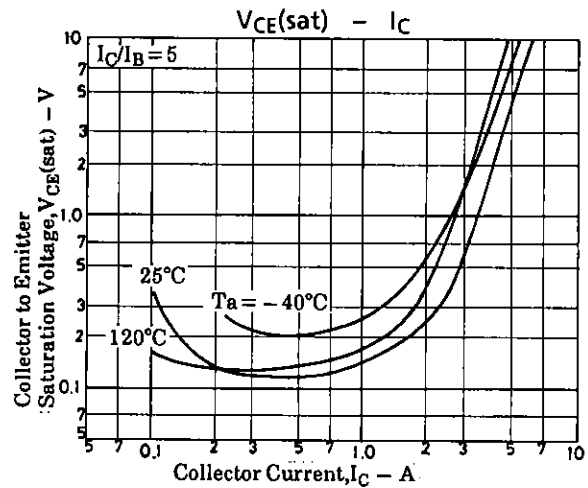
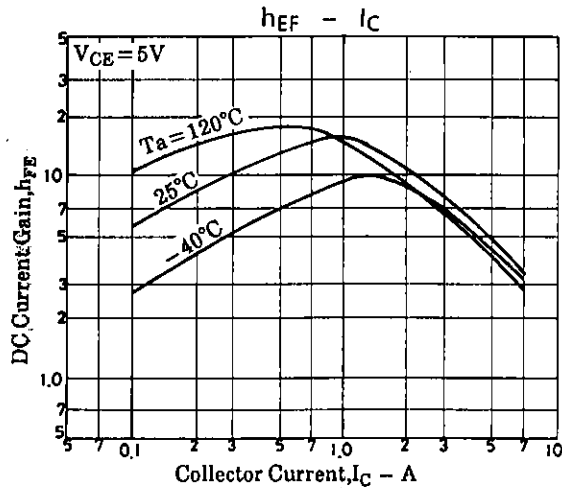
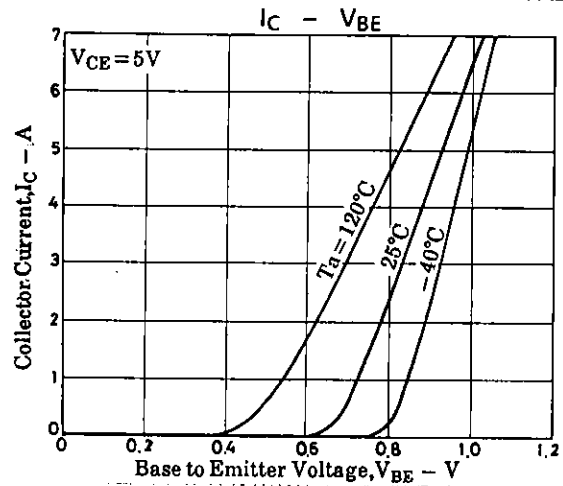
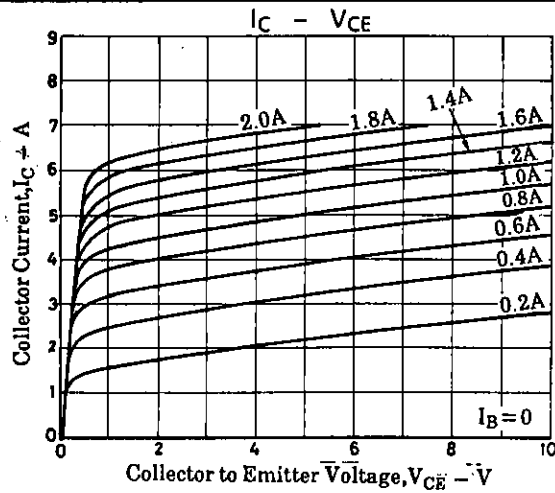
**Switching Time Test Circuit**Unit (resistance:  $\Omega$ , capacitance: F)**Package Dimensions 2039A**

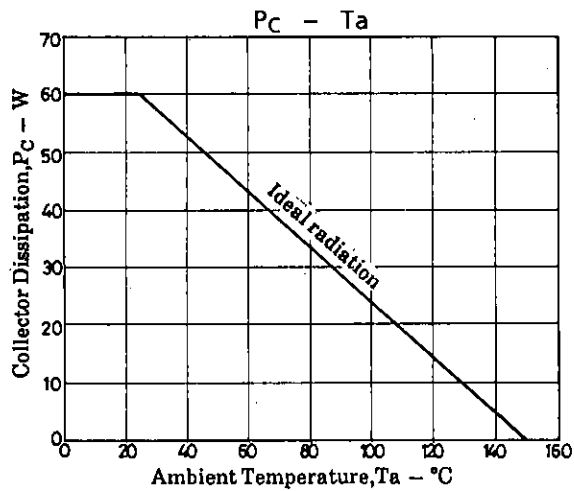
(unit: mm)

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