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| SANYO | No. 3320 | 2SD2252 |
| | 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 : $t_f = 100\text{nsec}$
- High breakdown voltage : $V_{CBO} = 1500\text{V}$
- High reliability : Adoption of HVP process

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

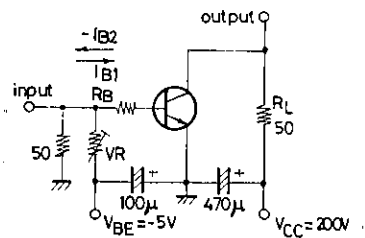
| | | | unit |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage | V_{CBO} | 1500 | V |
| Collector-to-Emitter Voltage | V_{CEO} | 800 | V |
| Emitter-to-Base Voltage | V_{EBO} | 6 | V |
| Collector Current | I_C | 7 | A |
| Peak Collector Current | i_{cp} | 20 | A |
| Collector Dissipation | P_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 | $V_{CE(sat)}$ | $I_C = 5\text{A}, I_B = 1\text{A}$ | | | 5 | V |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C = 5\text{A}, I_B = 1\text{A}$ | | | 1.5 | V |
| DC Current Gain | h_{FE1} | $V_{CE} = 5\text{V}, I_C = 1\text{A}$ | 8 | | | |
| | h_{FE2} | $V_{CE} = 5\text{V}, I_C = 5\text{A}$ | 5 | | 8 | |
| 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 | μs |

Switching Time Test Circuit

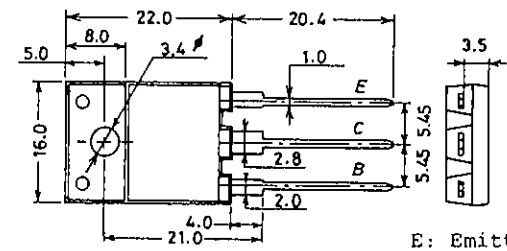
$PW = 20\mu\text{s}$, duty $\leq 1\%$



Unit (resistance: Ω , capacitance: F)

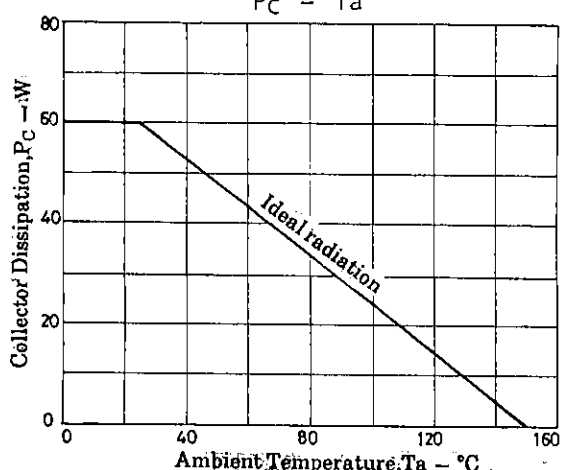
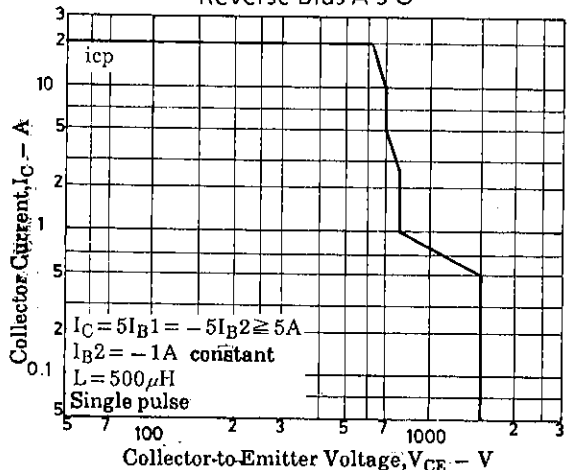
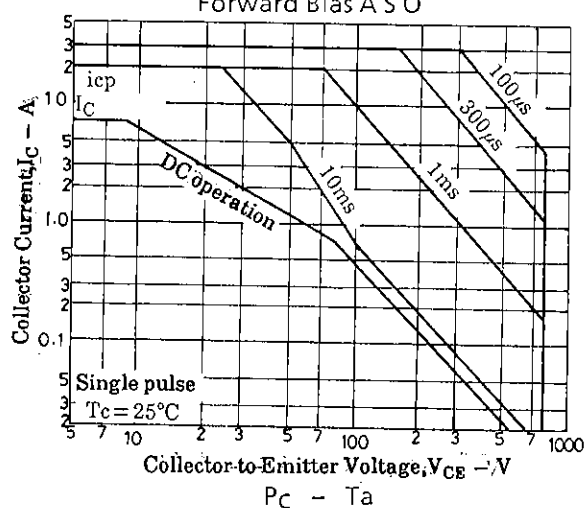
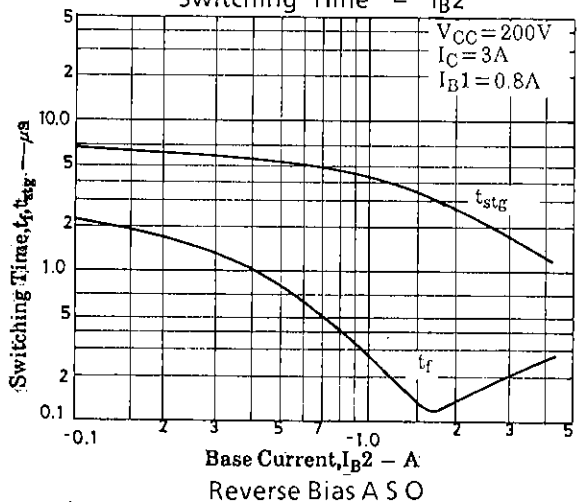
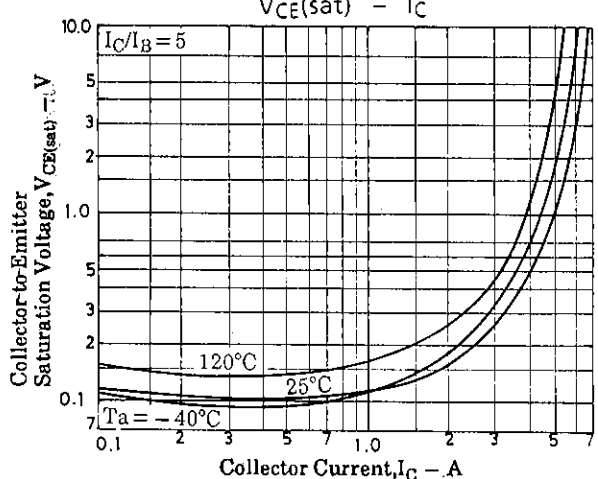
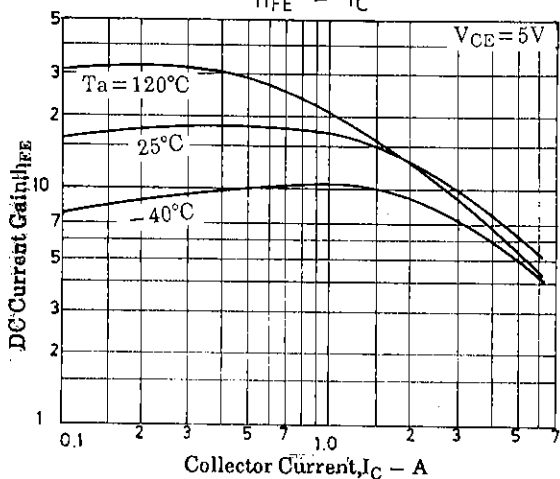
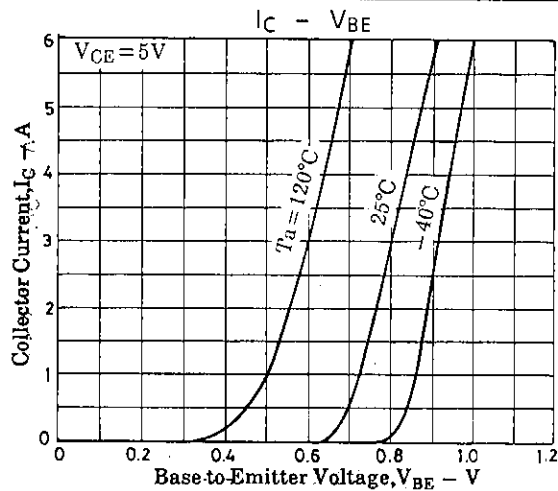
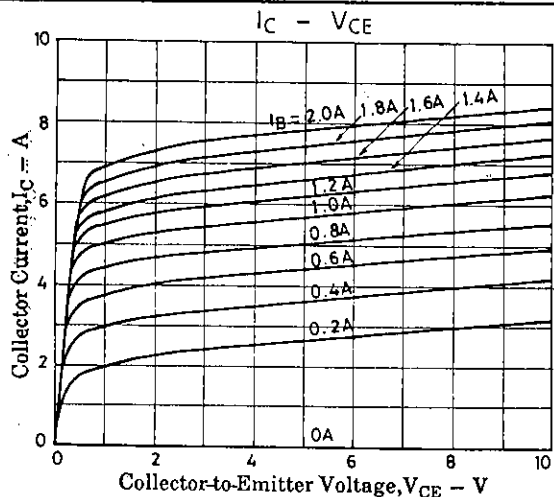
Package Dimensions 2039A

(unit: mm)



E: Emitter
C: Collector
B: Base

SANYO: TO3PML



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