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| SANYO | No.4138 | 2SC4891 |
| | NPN Triple Diffused Planar Silicon Transistor Very High-Definition CRT Display Horizontal Deflection Output Applications | |

Features

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

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

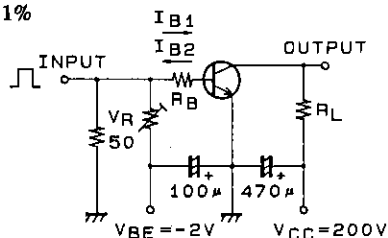
| | | | |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage | V_{CBO} | 1500 | V |
| Collector-to-Emitter Voltage | V_{CEO} | 800 | V |
| Emitter-to-Base Voltage | V_{EBO} | 6 | V |
| Collector Current | I_C | 15 | A |
| Peak Collector Current | i_{cp} | 35 | A |
| Collector Dissipation | P_C | 3.0 | W |
| $T_c = 25^\circ\text{C}$ | | | |
| 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 | $V_{CE(sat)}$ | $I_C=12\text{A}, I_B=3.0\text{A}$ | | | 5 | V |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C=12\text{A}, I_B=3.0\text{A}$ | | | 1.5 | V |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}=5\text{V}, I_C=1.0\text{A}$ | 8 | | 30 | |
| | $h_{FE(2)}$ | $V_{CE}=5\text{V}, I_C=12\text{A}$ | 4 | | 8 | |
| Storage Time | t_{stg} | $I_C=8\text{A}, I_{B1}=1.6\text{A}, I_{B2}=-3.2\text{A}$ | | | 3.0 | μs |
| Fall Time | t_f | $I_C=8\text{A}, I_{B1}=1.6\text{A}, I_{B2}=-3.2\text{A}$ | | | 0.2 | μs |

Switching Time Test Circuit

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

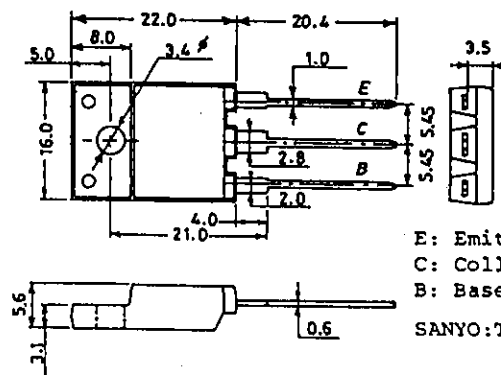


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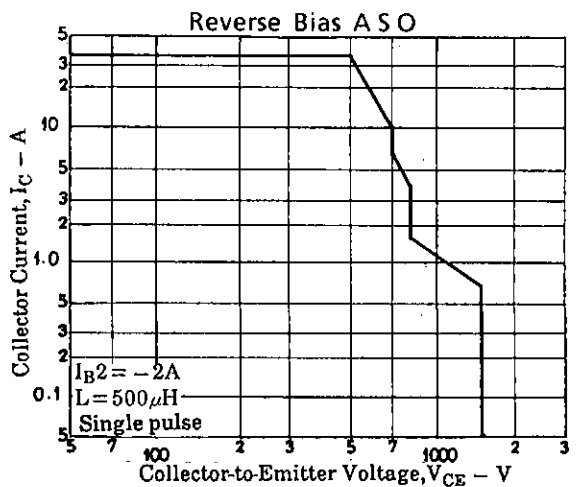
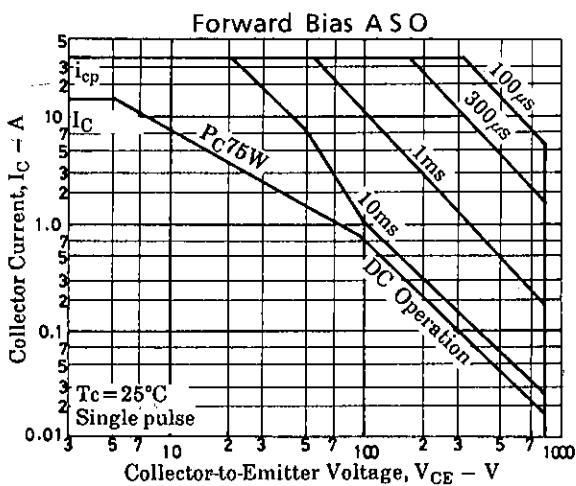
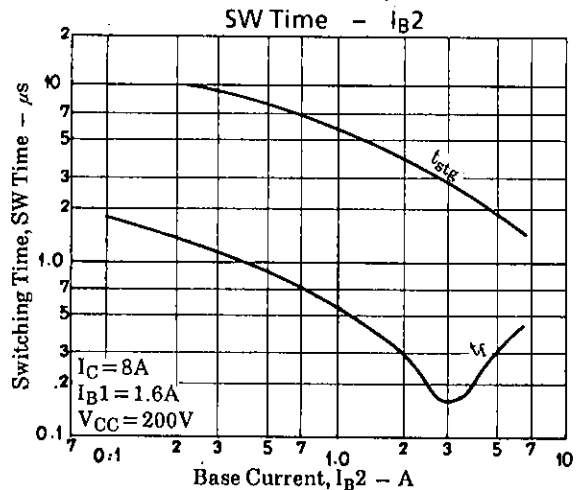
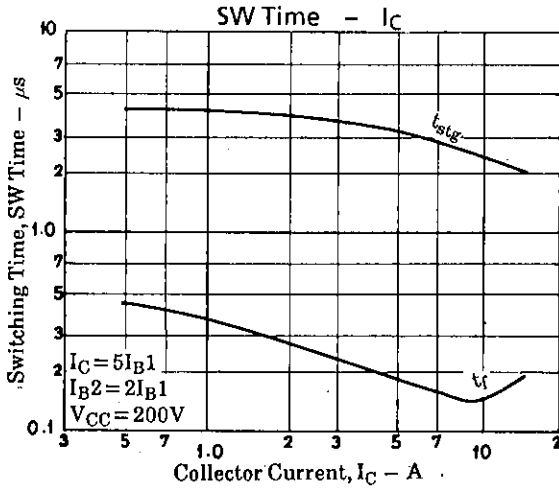
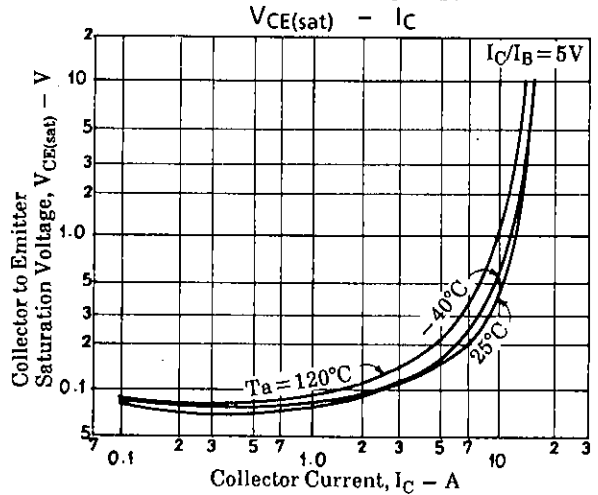
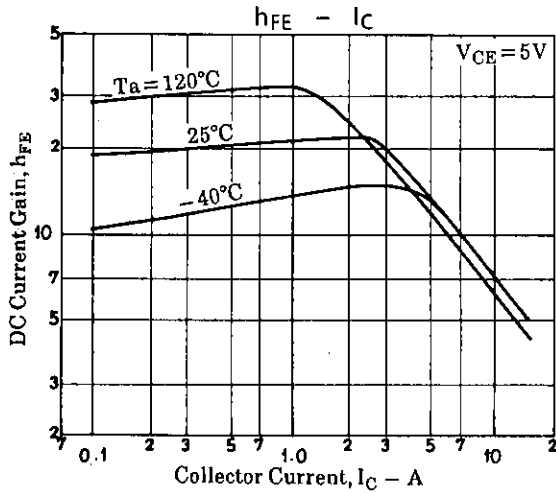
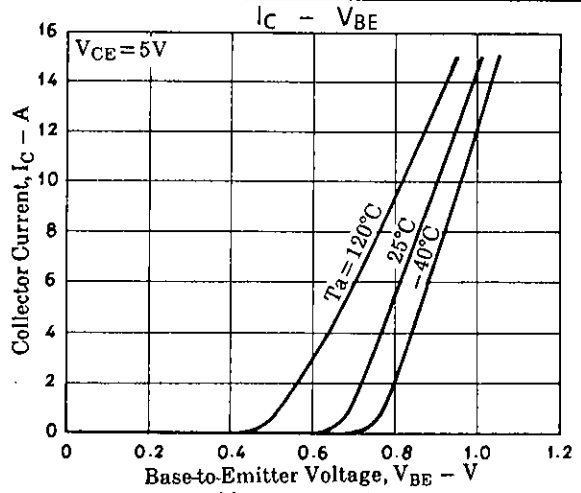
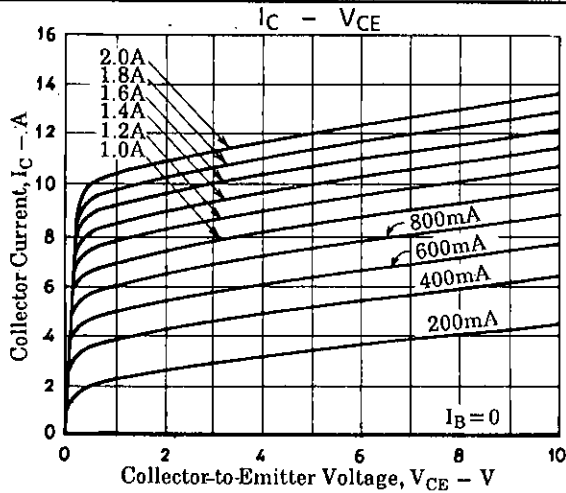
Unit (resistance: Ω , capacitance:F)

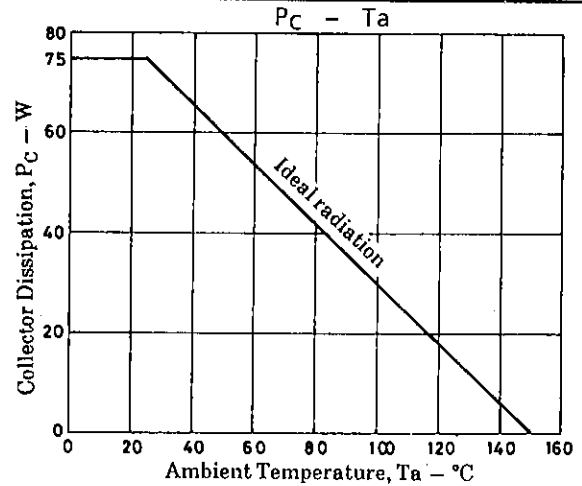
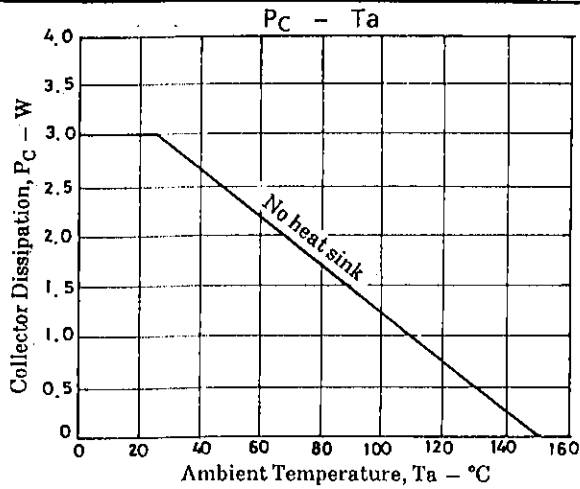
Package Dimensions 2039A

(unit: mm)



E: Emitter
 C: Collector
 B: Base
 SANYO:TO3PML





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