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| SANYO | No.1426B | 2SA1381 / 2SC3503 |
| Silicon PNP/NPN Epitaxial Planar Transistor FOR HIGH-DEFINITION CRT DISPLAY, VIDEO OUTPUT | | |

Features

- . High breakdown voltage: $V_{CEO} \geq 300V$.
- . Small reverse transfer capacitance and excellent high frequency characteristic $c_{re}=1.8pF(NPN), 2.3pF(PNP) V_{CB}=30V$.
- . Adoption of MBIT process.

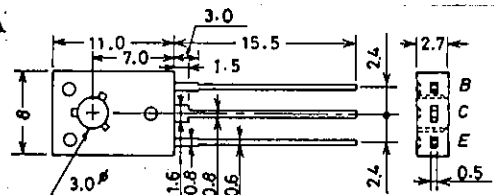
| Absolute Maximum Ratings at $T_a=25^\circ C$ | | unit |
|--|-----------|------------------------|
| Collector-to-Base Voltage | V_{CBO} | (-)300 V |
| Collector-to-Emitter Voltage | V_{CEO} | (-)300 V |
| Emitter-to-Base Voltage | V_{EBO} | (-)5 V |
| Collector Current | I_C | (-)100 mA |
| Peak Collector Current | i_{cp} | (-)200 mA |
| Allowable Collector Dissipation | P_C | 1.2 W |
| Junction Temperature | T_j | 7 W |
| Storage Temperature | T_{stg} | 150 $^\circ C$ |
| | | -55 to +150 $^\circ C$ |

| Electrical Characteristics at $T_a=25^\circ C$ | | min | typ | max | unit |
|--|---|--------|-------|--------|---------|
| Collector Cutoff Current | I_{CBO} $V_{CB}=(-)200V, I_E=0$ | | | (-)0.1 | μA |
| Emitter Cutoff Current | I_{EBO} $V_{EB}=(-)4V, I_C=0$ | | | (-)0.1 | μA |
| DC Current Gain | h_{FE} $V_{CE}=(-)10V, I_C=(-)10mA$ | 40* | | 320* | |
| Gain Bandwidth Product | f_T $V_{CE}=(-)30V, I_C=(-)10mA$ | | 150 | | MHz |
| Output Capacitance | c_{ob} $V_{CB}=(-)30V, f=1MHz$ | | 2.6 | | pF |
| | | | (3.1) | | |
| Reverse Transfer Capacitance | c_{re} $V_{CB}=(-)30V, f=1MHz$ | | 1.8 | | pF |
| | | | (2.3) | | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ $I_C=(-)20mA, I_B=(-)2mA$ | | | (-)0.6 | V |
| Base to Emitter Saturation Voltage | $V_{BE(sat)}$ $I_C=(-)20mA, I_B=(-)2mA$ | | | (-)1.0 | V |
| Collector to Base Breakdown Voltage | $V_{(BR)CBO}$ $I_C=(-)10\mu A, I_E=0$ | (-)300 | | | V |
| Collector to Emitter Breakdown Voltage | $V_{(BR)CEO}$ $I_C=(-)1mA, R_{BE}=\infty$ | (-)300 | | | V |
| Base to Emitter Breakdown Voltage | $V_{(BR)EBO}$ $I_C=(-)10\mu A, I_C=0$ | (-)5 | | | V |

* The 2SA1381/2SC3503 are classified by 10mA h_{FE} as follows:

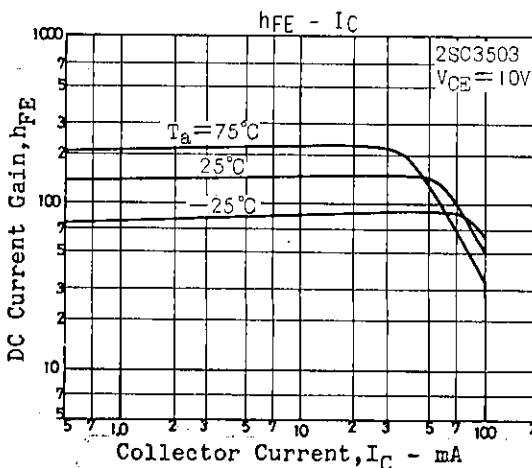
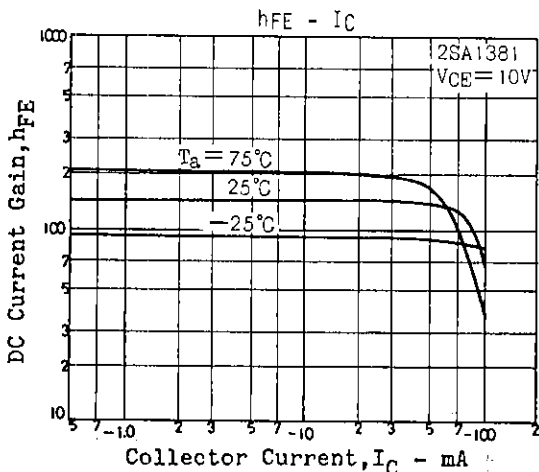
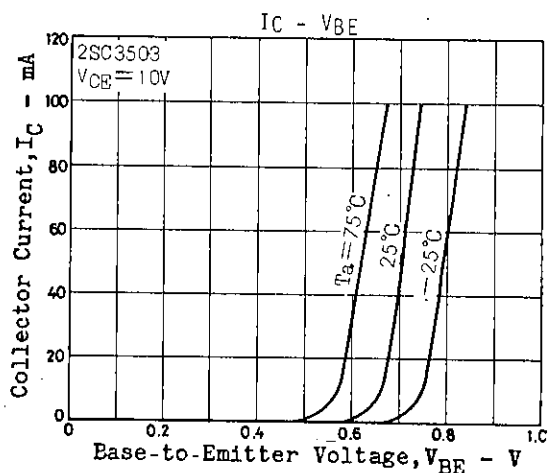
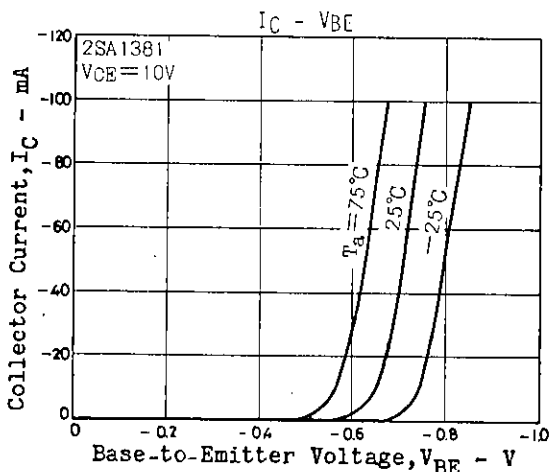
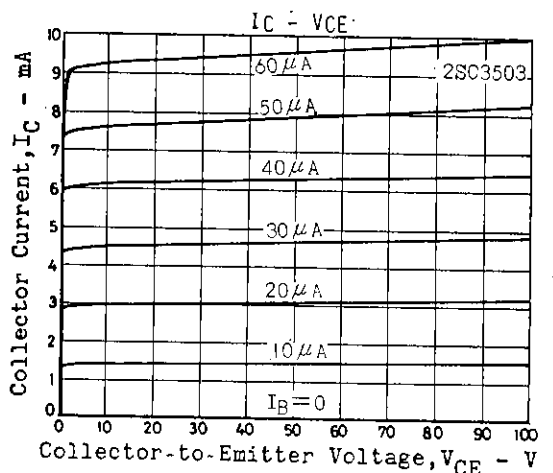
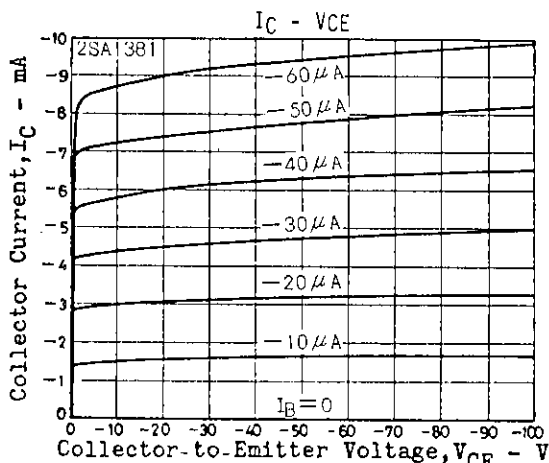
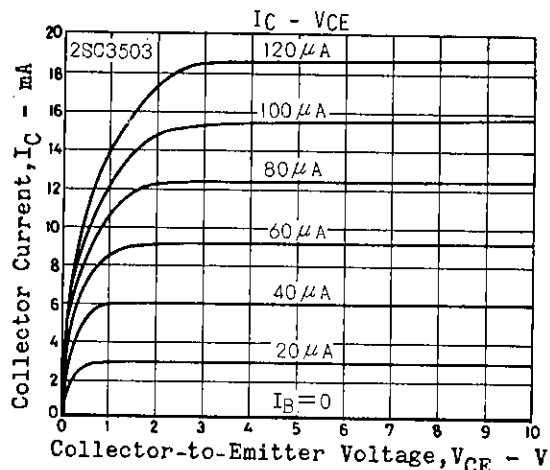
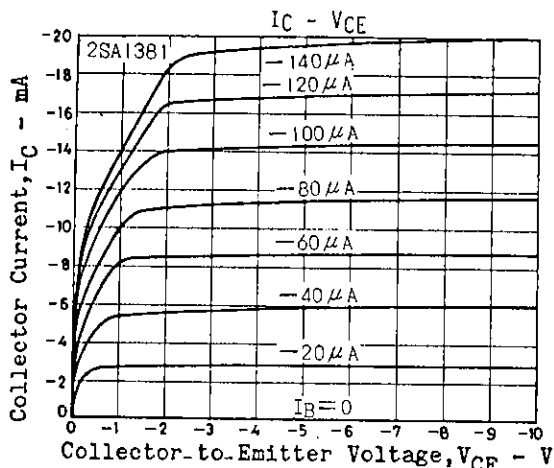
| | | | | | | | | | | | |
|----|---|----|----|---|-----|-----|---|-----|-----|---|-----|
| 40 | C | 80 | 60 | D | 120 | 100 | E | 200 | 160 | F | 320 |
|----|---|----|----|---|-----|-----|---|-----|-----|---|-----|

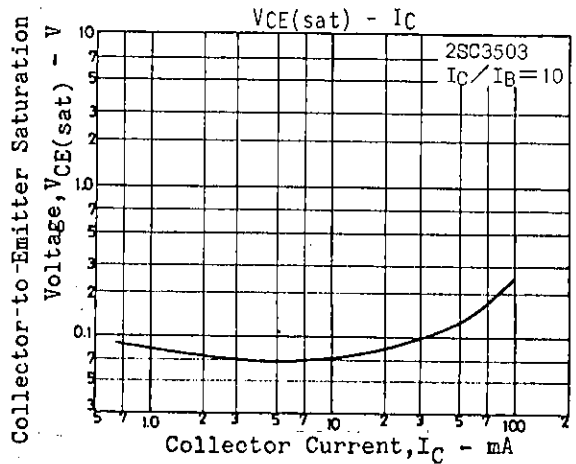
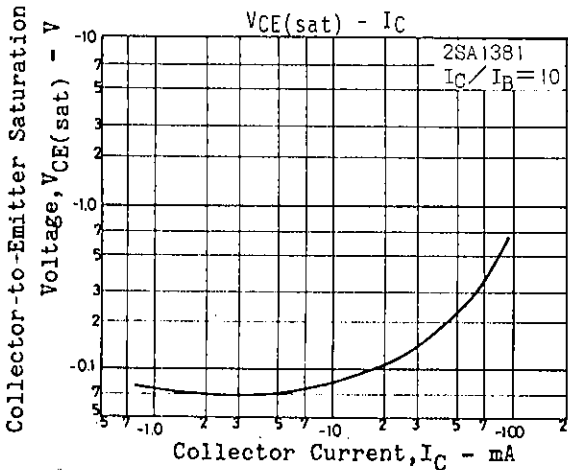
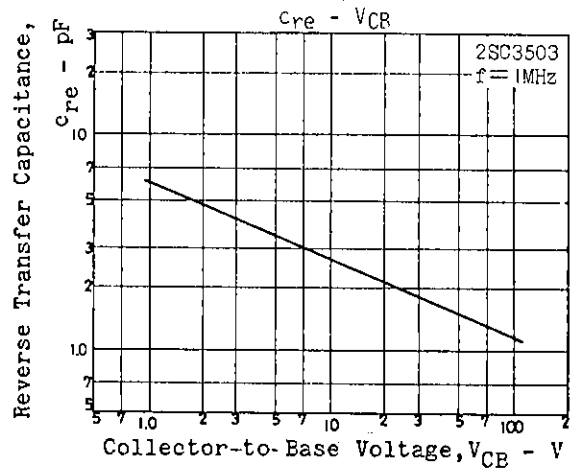
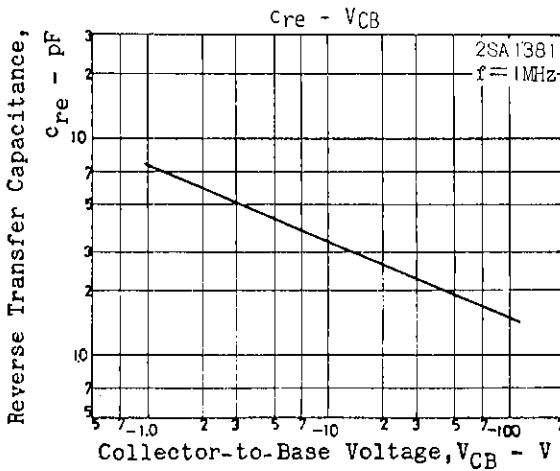
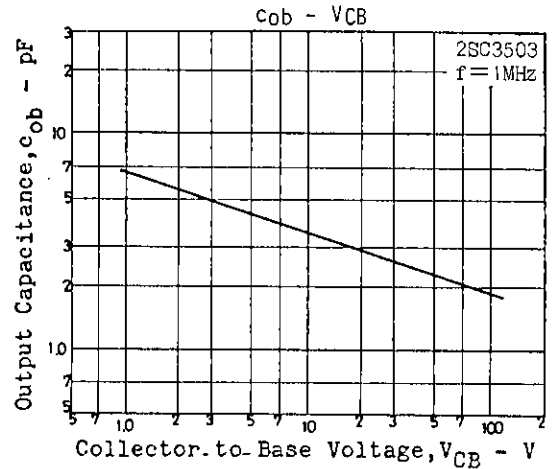
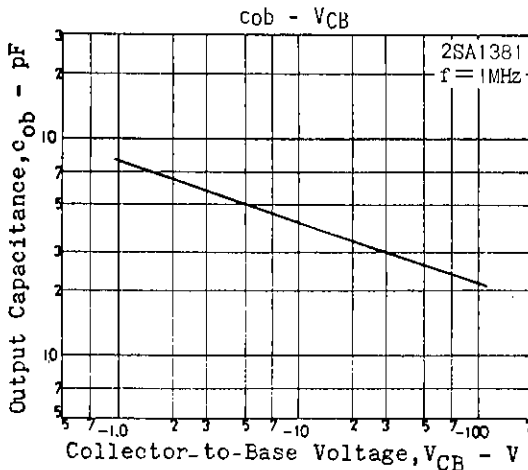
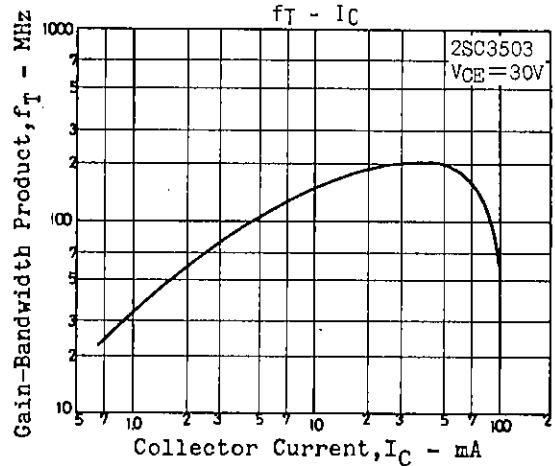
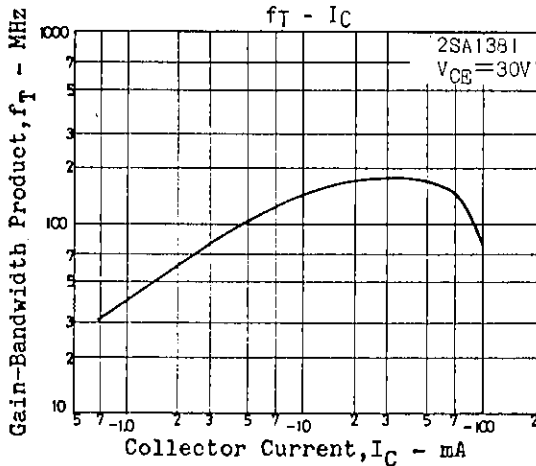
Package Dimensions 2009A
(unit:mm)

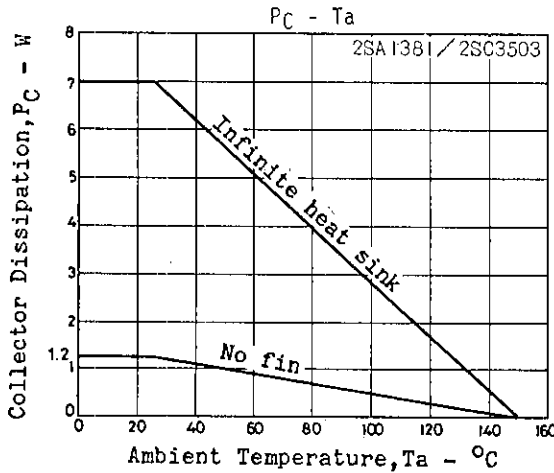
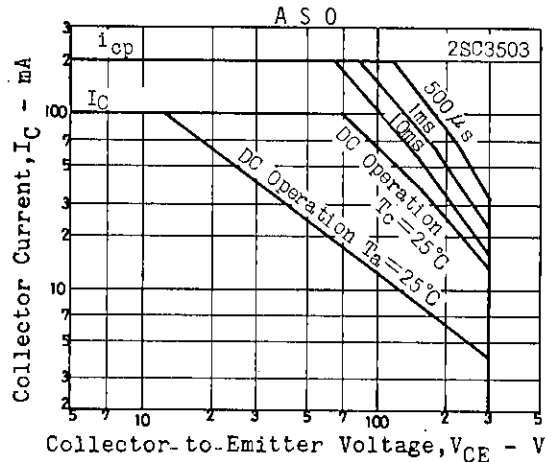
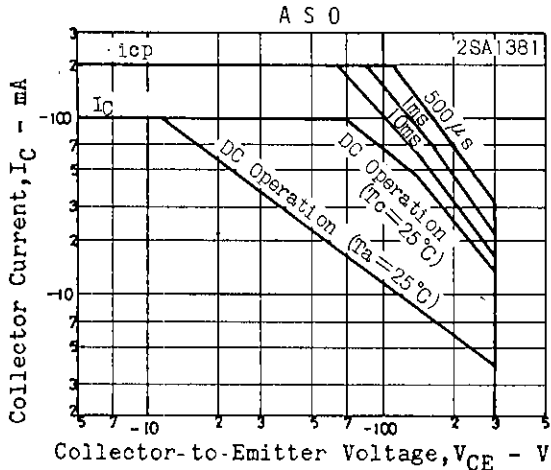
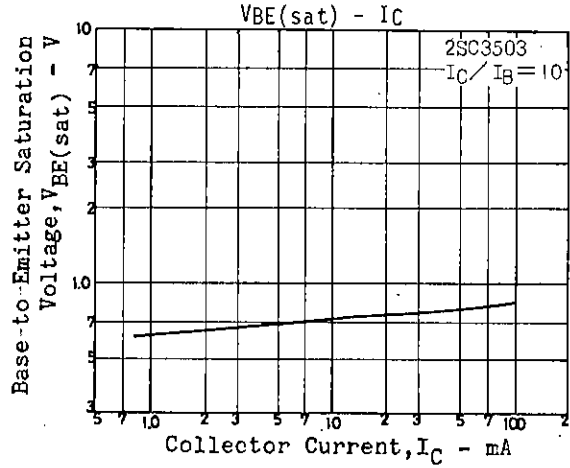
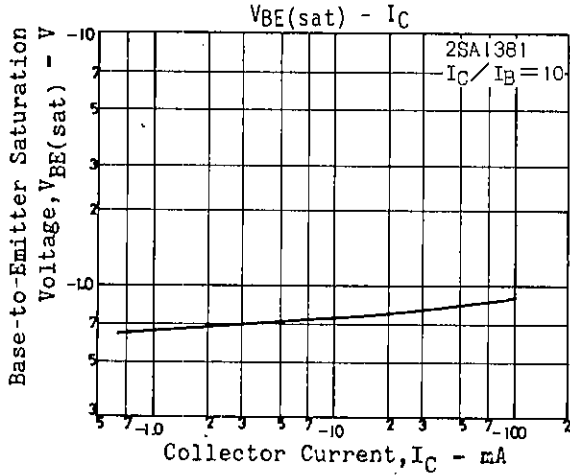


JEDEC: TO-126

B: Base
C: Collector
E: Emitter







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