

SANYO	No.1426B	<h2 style="margin: 0;">2SA1381 / 2SC3503</h2> <p style="margin: 0;">Silicon PNP/NPN Epitaxial Planar Transistor</p> <p style="margin: 0;">FOR HIGH-DEFINITION CRT DISPLAY, VIDEO OUTPUT</p>
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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.

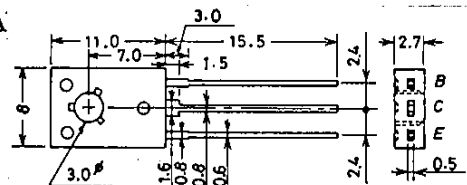
Absolute Maximum Ratings at $T_a = 25^\circ C$		unit
Collector-to-Base Voltage	V_{CBO}	(-)300 V
Collector-to-Emitter Voltage	V_{CEO}	(-)300 V
Emitter-to-Base Voltage	V_{EBO}	(-)5 V
Collector Current	I_C	(-)100 mA
Peak Collector Current	i_{cp}	(-)200 mA
Allowable Collector Dissipation	P_C	1.2 W
Junction Temperature	T_j	7 $^\circ C$
Storage Temperature	T_{stg}	-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
Reverse Transfer Capacitance	c_{re}	$V_{CB} = (-)30V, f = 1MHz$		(3.1)	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)20mA, I_B = (-)2mA$		1.8	pF
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)20mA, I_B = (-)2mA$		(2.3)	
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:

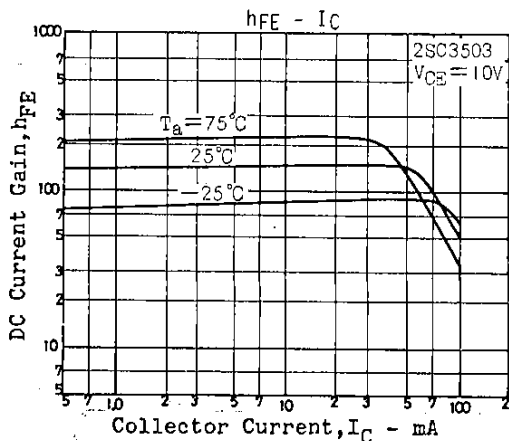
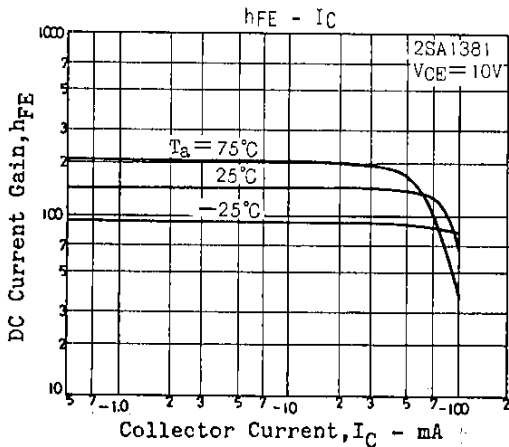
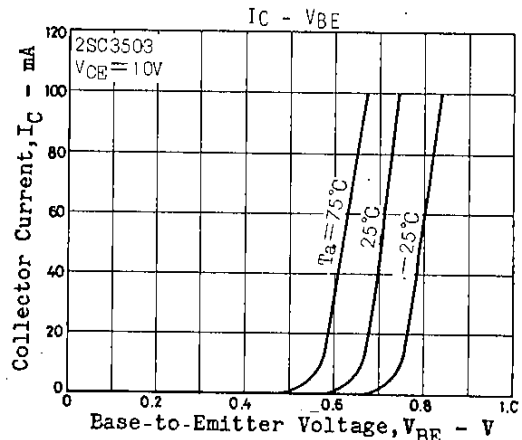
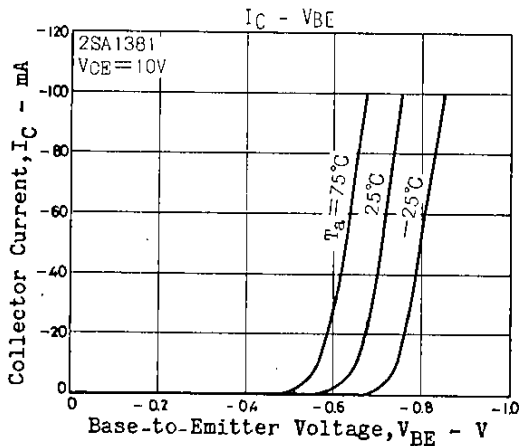
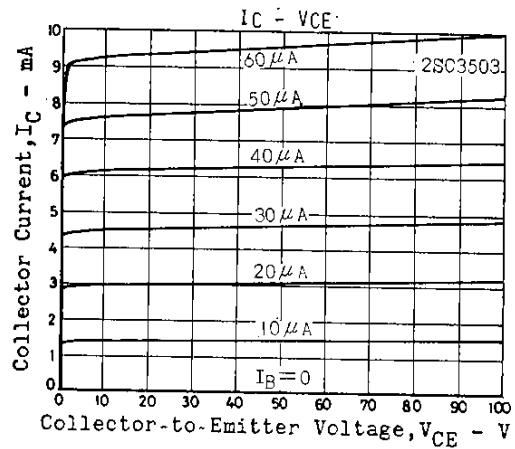
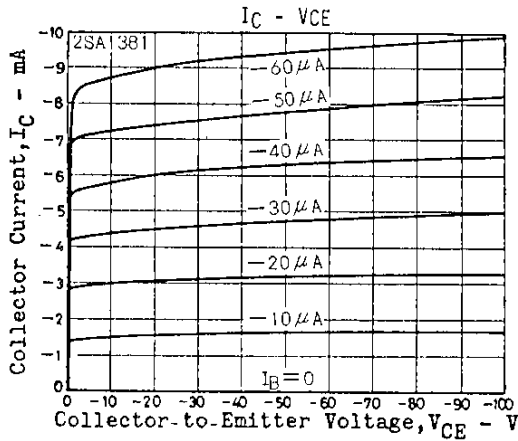
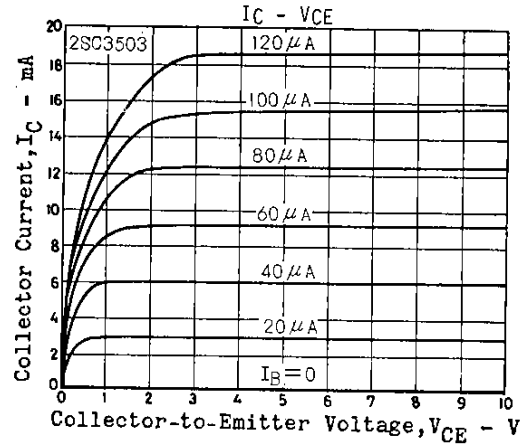
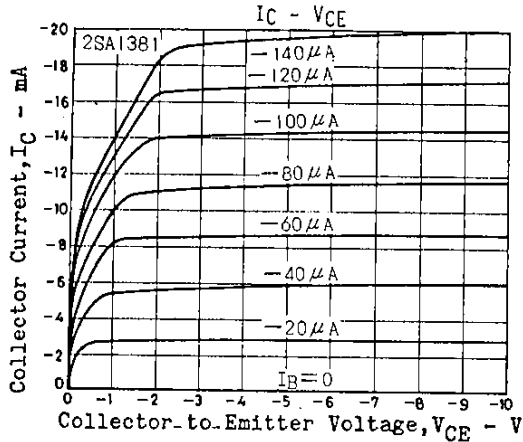
40	C	80	60	D	120	100	E	200	160	F	320
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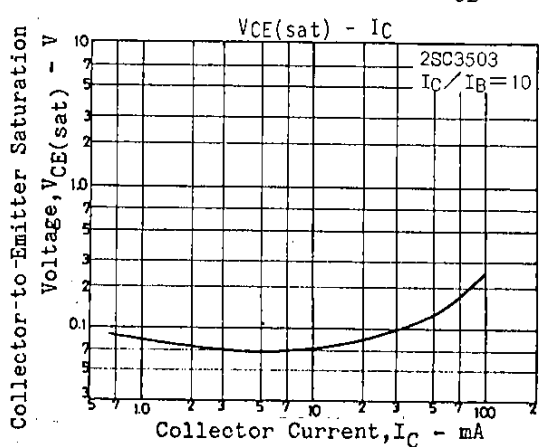
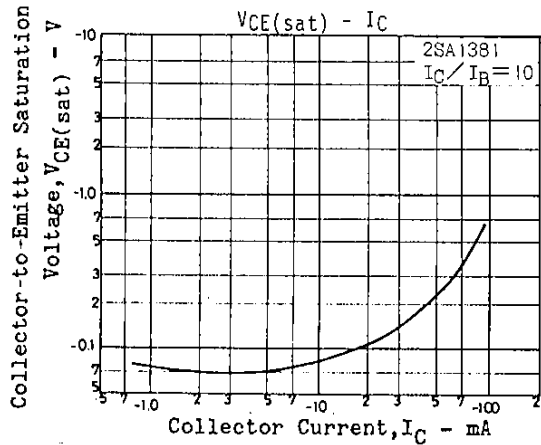
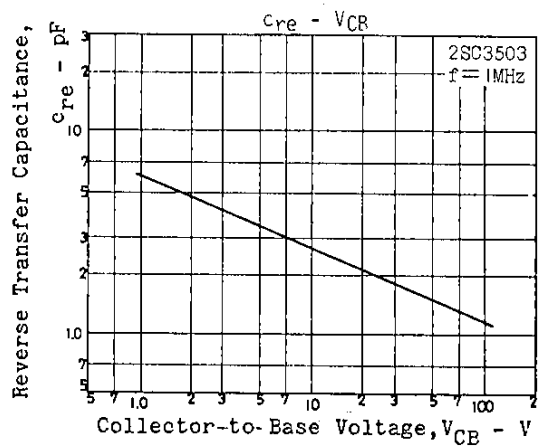
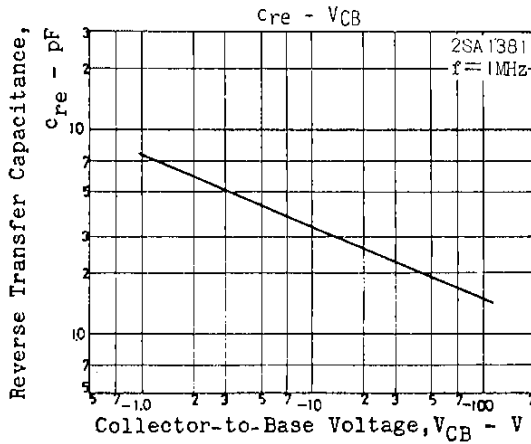
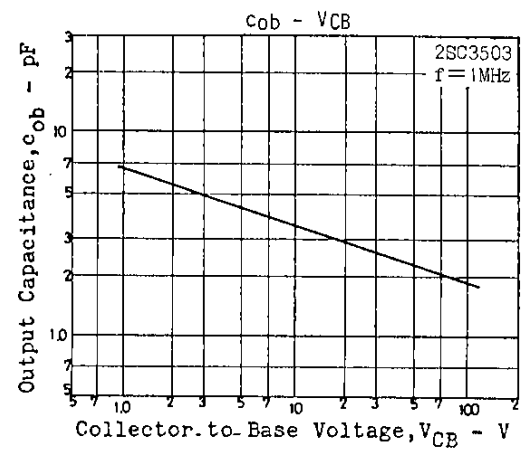
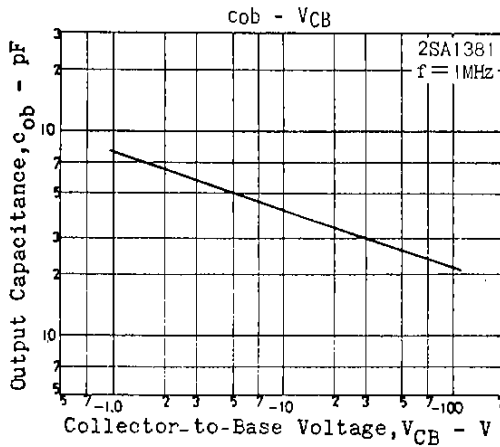
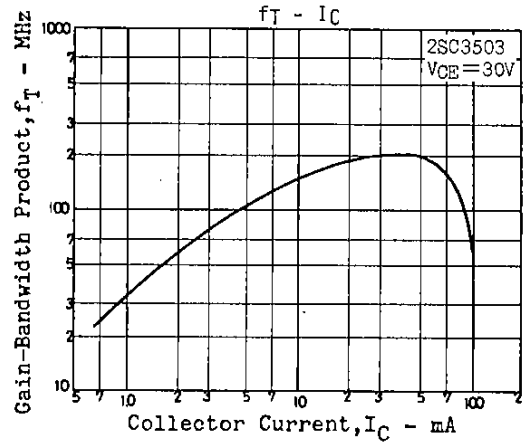
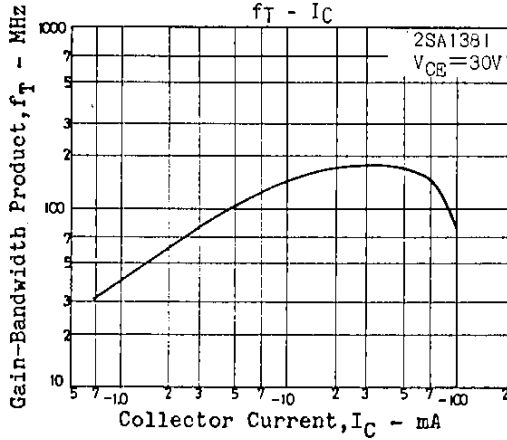
Package Dimensions 2009A
(unit: mm)



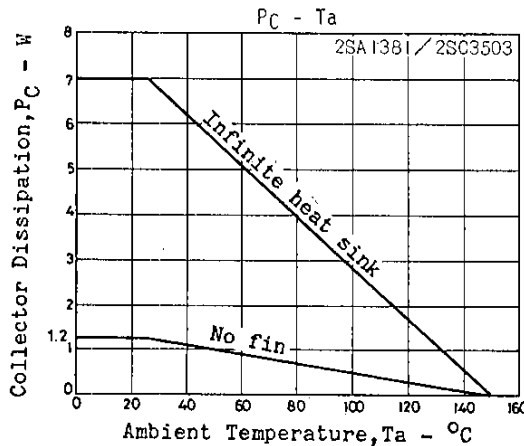
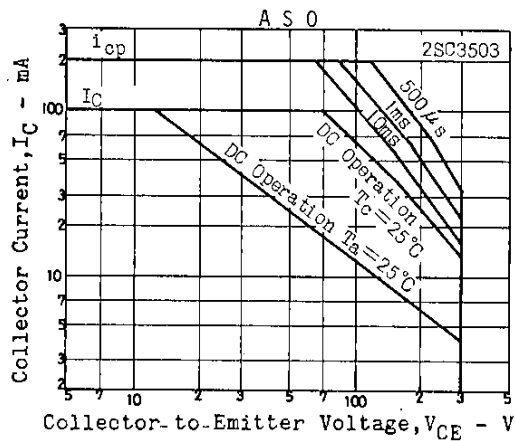
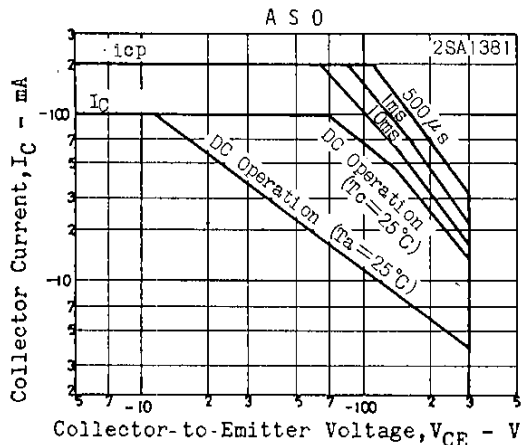
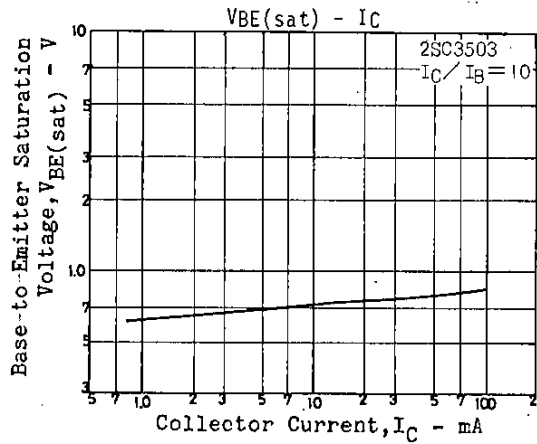
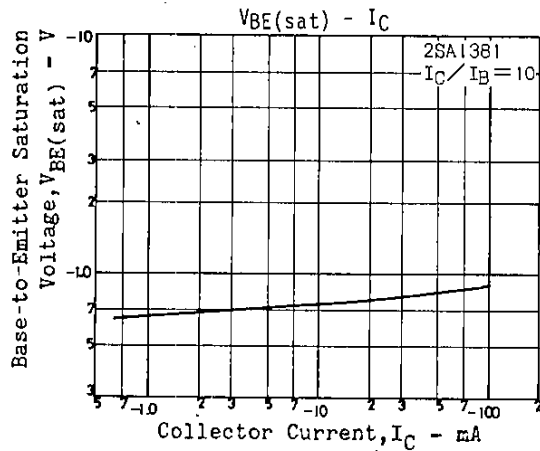
JEDEC: TO-126
 B: Base
 C: Collector
 E: Emitter

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2SA1381/2SC3503



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