

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.

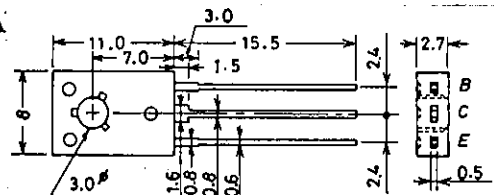
Absolute Maximum Ratings at $T_a=25^\circ C$		unit
Collector-to-Base Voltage	V_{CBO}	(-)300 V
Collector-to-Emitter Voltage	V_{CEO}	(-)300 V
Emitter-to-Base Voltage	V_{EBO}	(-)5 V
Collector Current	I_C	(-)100 mA
Peak Collector Current	i_{cp}	(-)200 mA
Allowable Collector Dissipation	P_C	1.2 W
Junction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

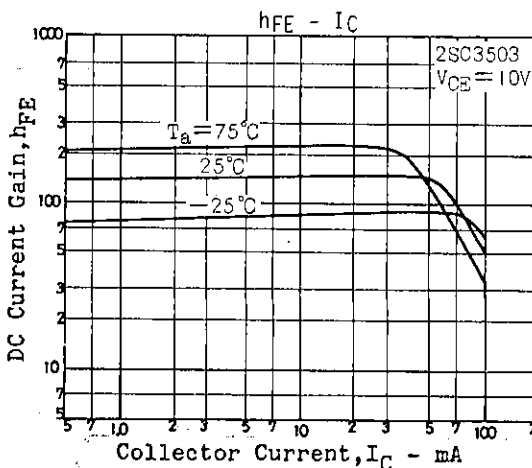
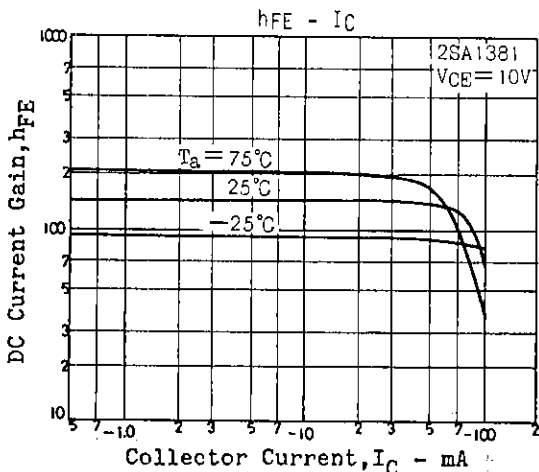
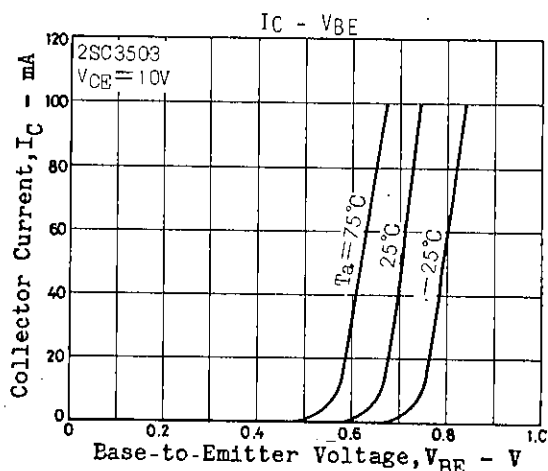
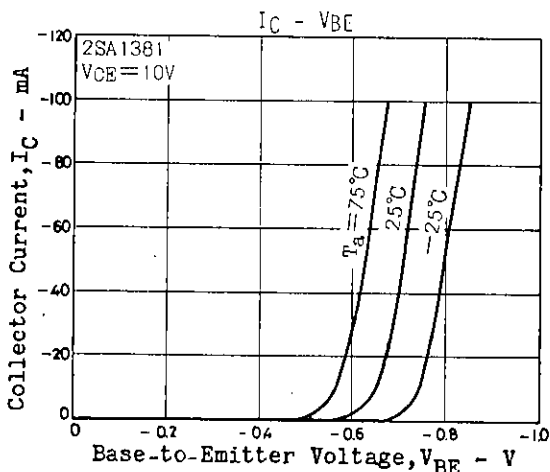
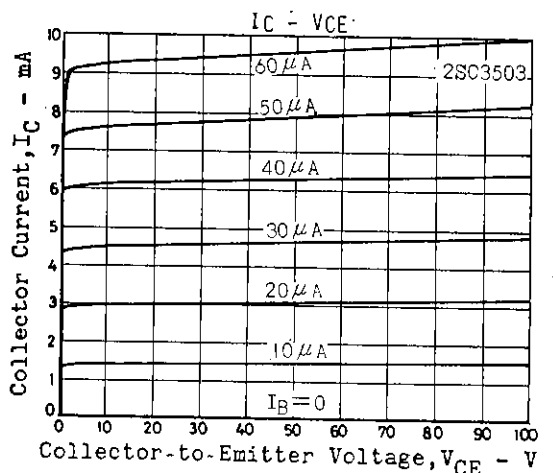
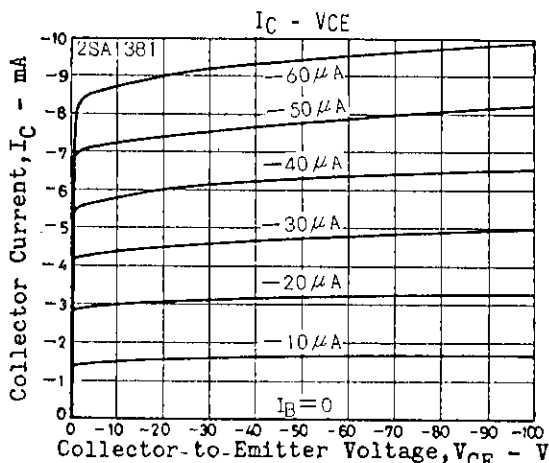
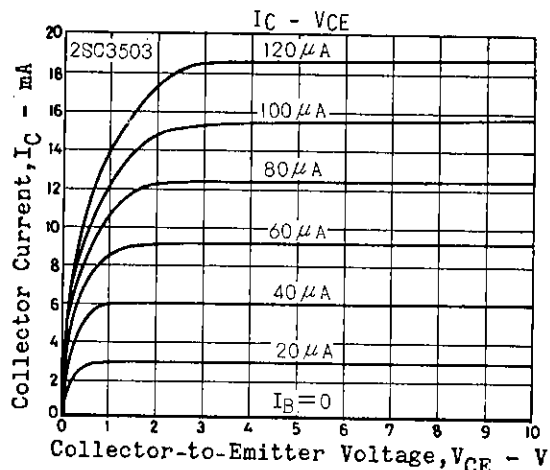
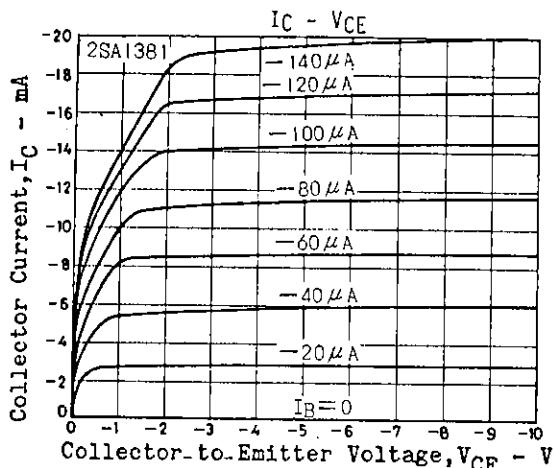
* The 2SA1381/2SC3503 are classified by 10mA h_{FE} as follows:

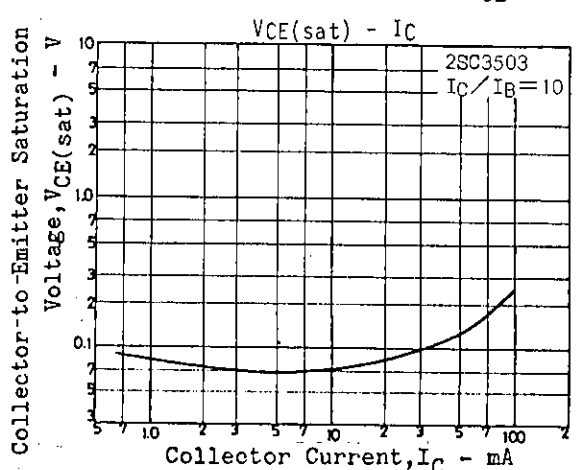
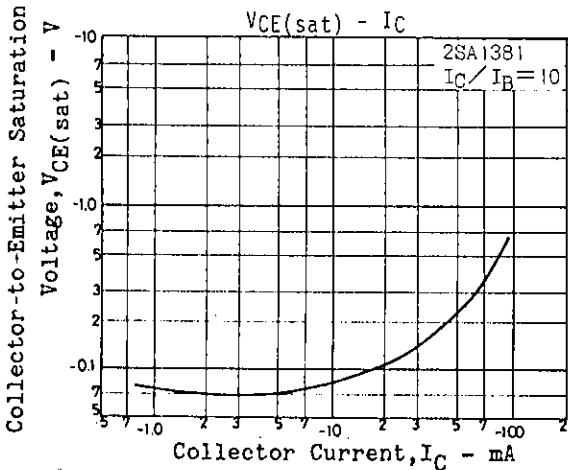
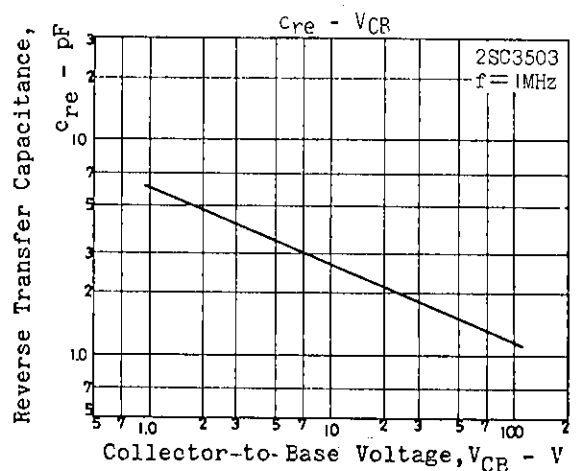
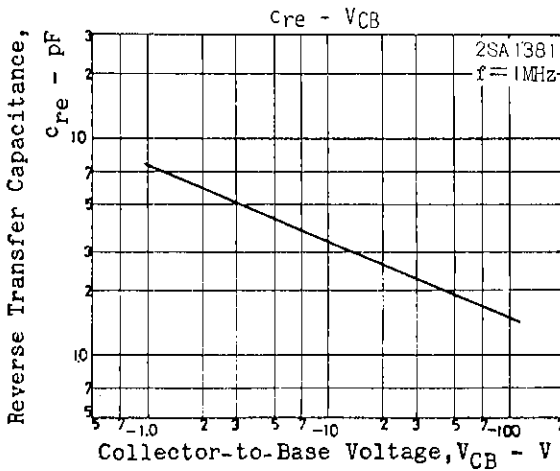
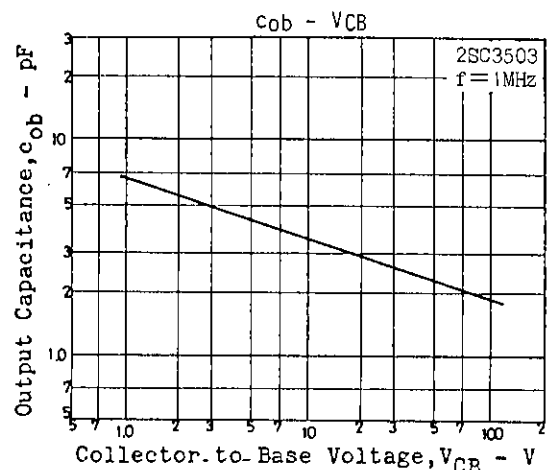
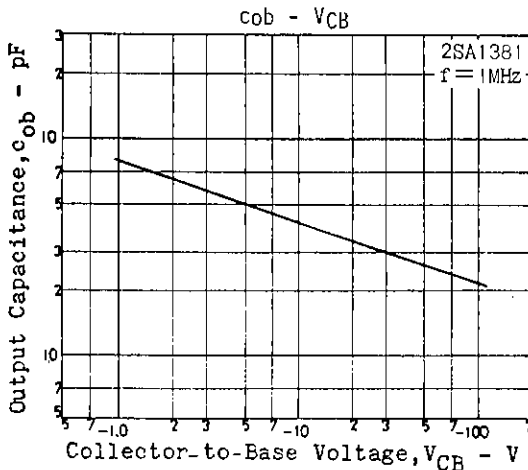
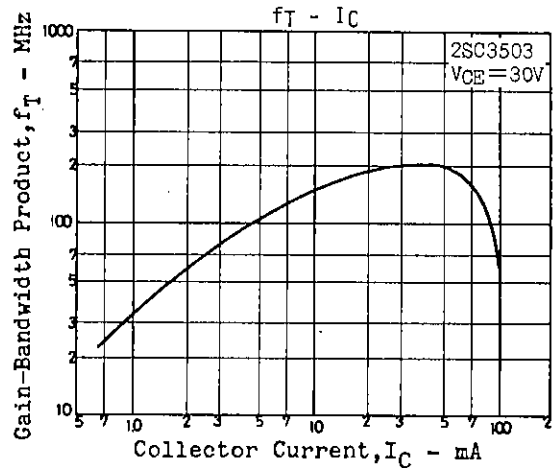
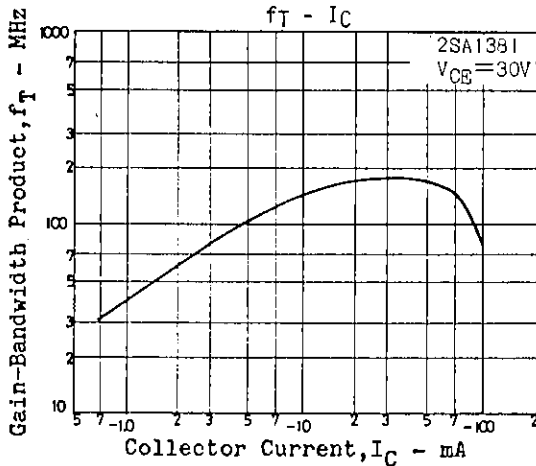
40	C	80	60	D	120	100	E	200	160	F	320
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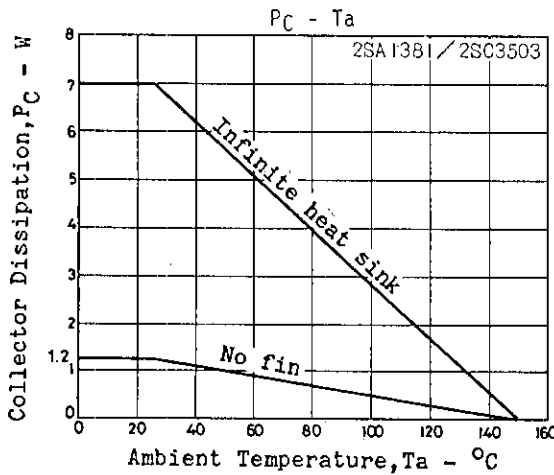
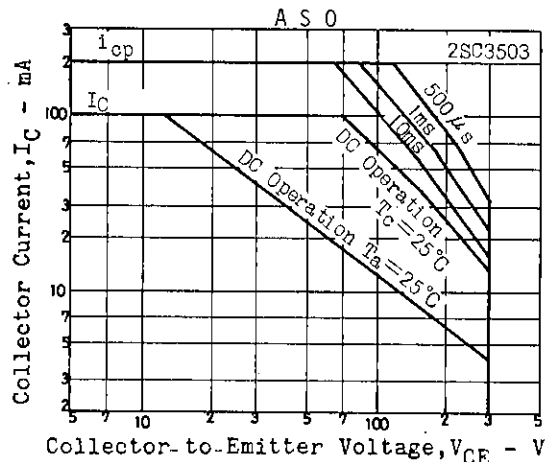
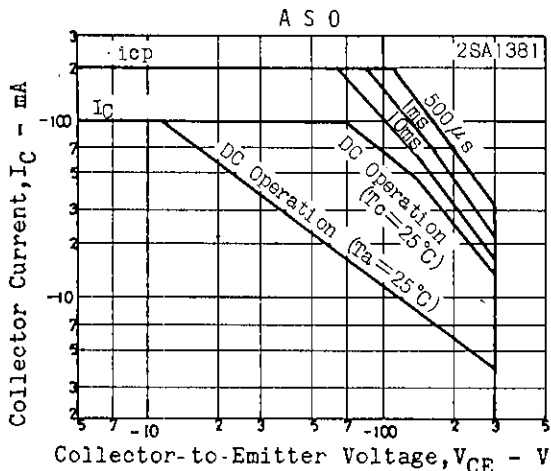
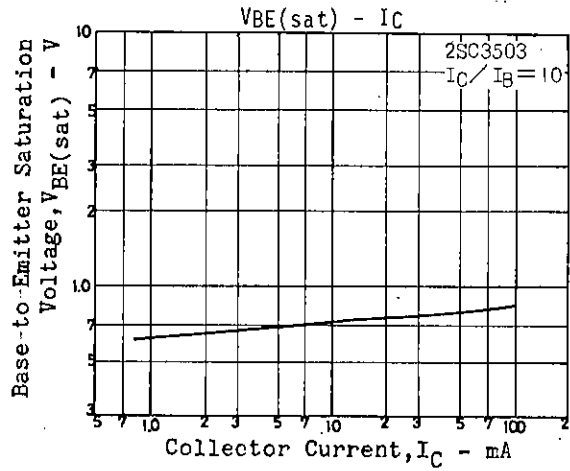
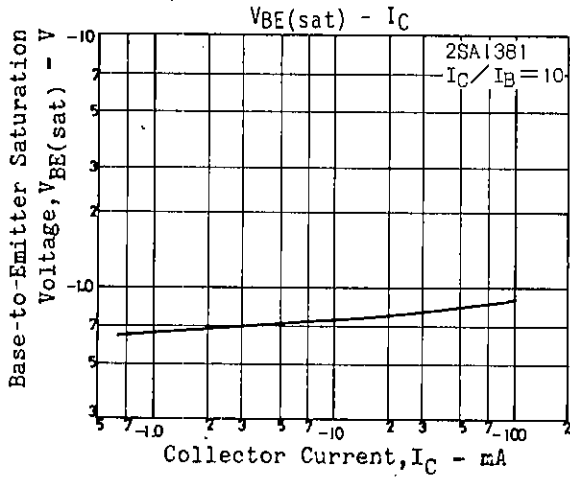
Package Dimensions 2009A
(unit:mm)



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







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