

SANYO	No.1438B	2SC3504
		NPN Epitaxial Planar Silicon Transistor High-Definition CRT Display, Video Output Applications

Features

- . High f_T .
- . Small reverse transfer capacitance.

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

			unit
Collector to Base Voltage	V_{CB0}	70	V
Collector to Emitter Voltage	V_{CE0}	60	V
Emitter to Base Voltage	V_{EBO}	4	V
Collector Current	I_C	50	mA
Collector Current(Pulse)	I_{CP}	100	mA
Collector Dissipation	P_C	900	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

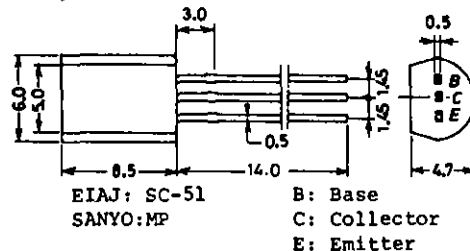
			min	typ	max	unit
Collector Cutoff Current	I_{CB0} $V_{CB}=40\text{V}, I_E=0$				0.1	μA
Emitter Cutoff Current	I_{EBO} $V_{EB}=3\text{V}, I_C=0$				1.0	μA
DC Current Gain	h_{FE} $V_{CE}=10\text{V}, I_C=10\text{mA}$	60*			320*	
Gain-Bandwidth Product	f_T $V_{CE}=10\text{V}, I_C=10\text{mA}$	300	500			MHz
Base to Collector Time Constant	$r_{bb}'C_c$ $V_{CE}=10\text{V}, I_C=10\text{mA}$		8	20		ps
Reverse Transfer Capacitance	c_{re} $V_{CB}=10\text{V}, f=1\text{MHz}$		1.0	1.6		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$ $I_C=20\text{mA}, I_B=2\text{mA}$				0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$ $I_C=20\text{mA}, I_B=2\text{mA}$				1.0	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$ $I_C=10\mu\text{A}, I_E=0$	70				V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$ $I_C=1\text{mA}, R_{BE}=\infty$	60				V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$ $I_E=10\mu\text{A}, I_C=0$	4				V

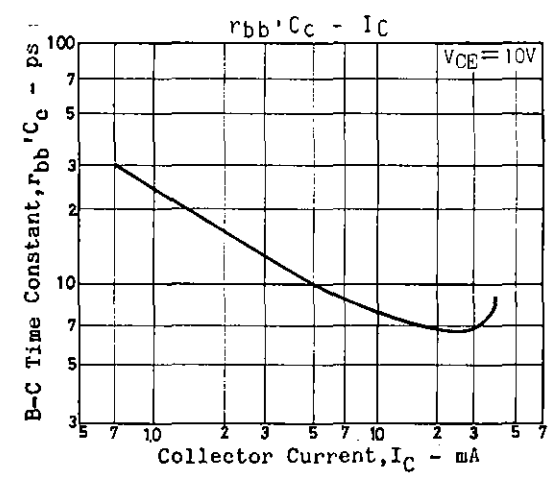
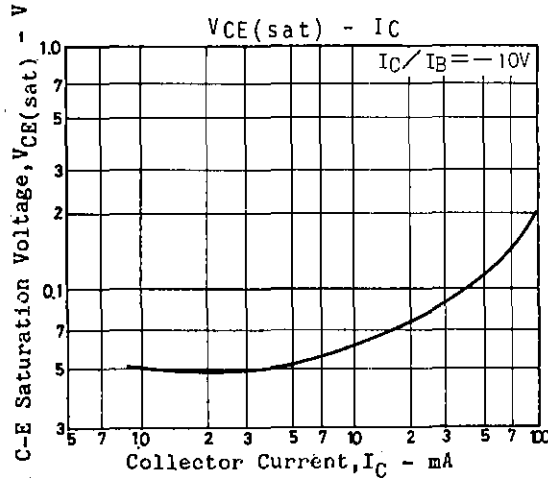
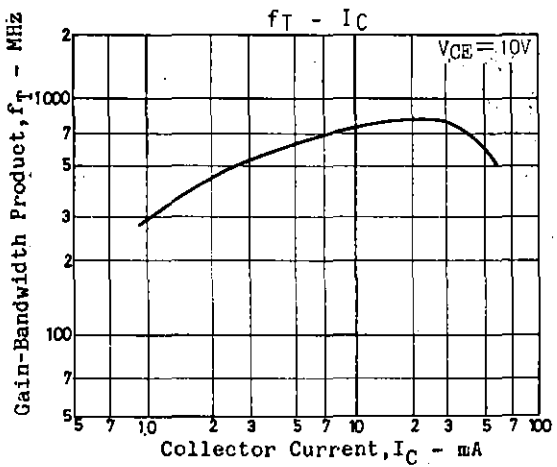
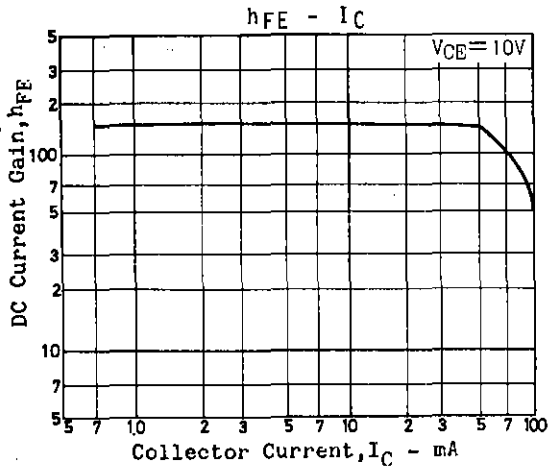
* The 2SC3504 is classified by 10mA h_{FE} as follows:

60	D	120	100	E	200	160	F	320
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Package Dimensions 2006A

(unit: mm)





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