

SANYO

No.1413C

2SA1371/2SC3468

PNP/NPN Epitaxial Planar Silicon Transistors

High-Definition CRT Display,
Video Output Applications

Use

- Color TV chroma output and high breakdown voltage driver

Features

- High breakdown voltage: $V_{CE0} \geq 300V$
- Small reverse transfer capacitance and excellent high frequency characteristic
 $c_{re} = 1.8pF$ (NPN), $2.3pF$ (PNP)
- Adoption of MBIT process

(): 2SA1371

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

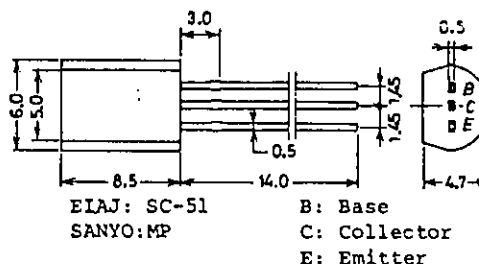
			unit
Collector-to-Base Voltage	V_{CB0}	(-) 300	V
Collector-to-Emitter Voltage	V_{CE0}	(-) 300	V
Emitter-to-Base Voltage	V_{EB0}	(-) 5	V
Collector Current	I_C	(-) 100	mA
Collector Current(Pulse)	I_{CP}	(-) 200	mA
Collector Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	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
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-) 20mA, I_B = (-) 2mA$			(-) 0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-) 20mA, I_B = (-) 2mA$			(-) 1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-) 10\mu A, I_E = 0$	(-) 300			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-) 1mA, R_{BE} = \infty$	(-) 300			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-) 10\mu A, I_C = 0$	(-) 5			V
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

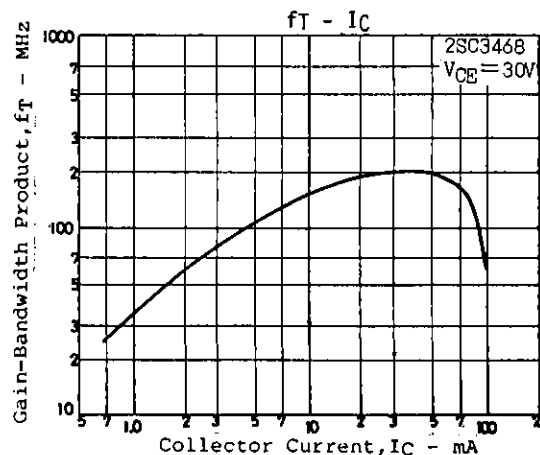
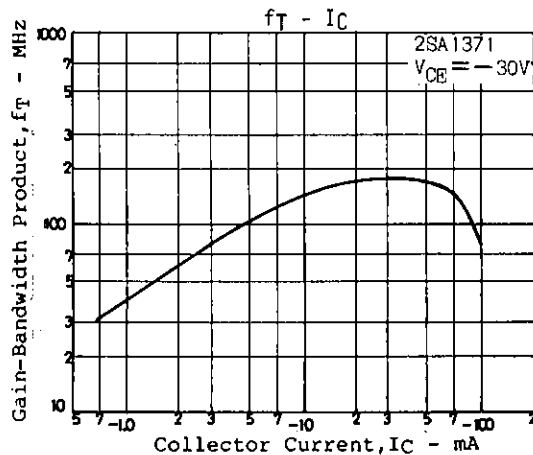
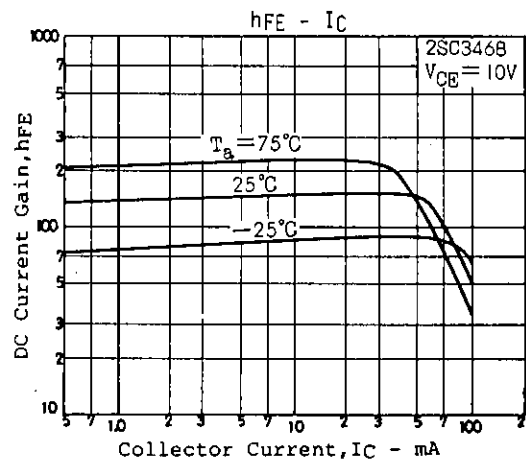
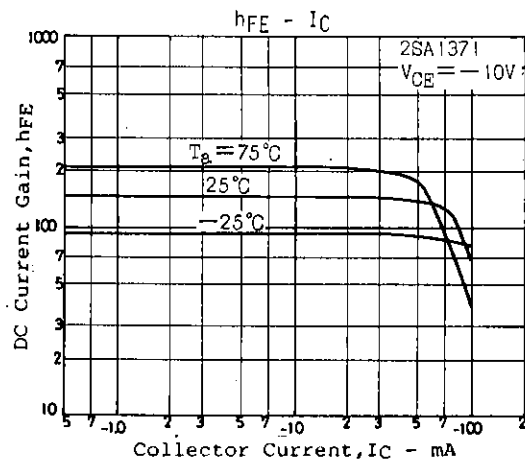
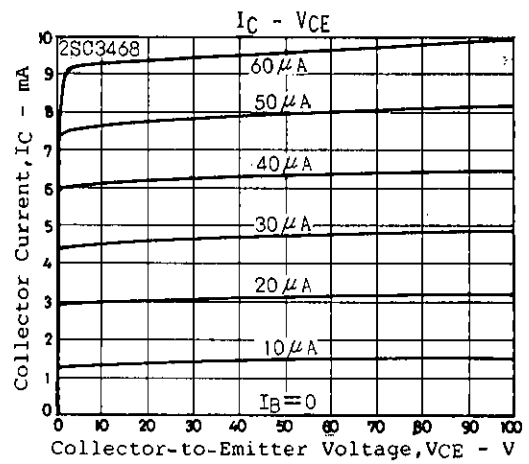
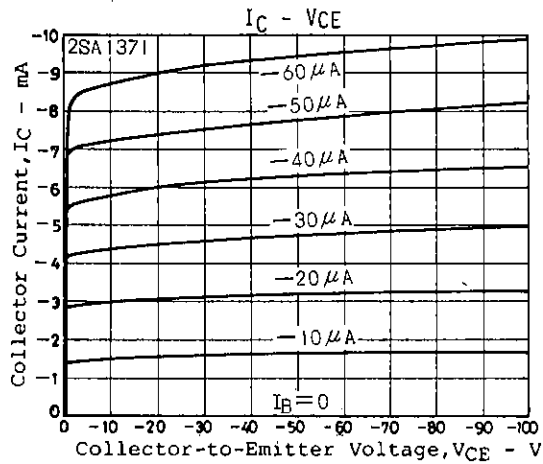
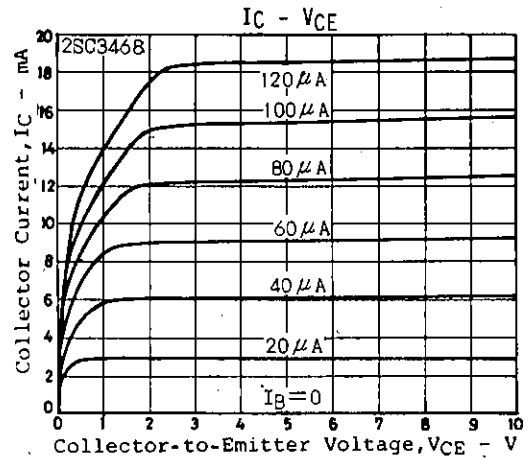
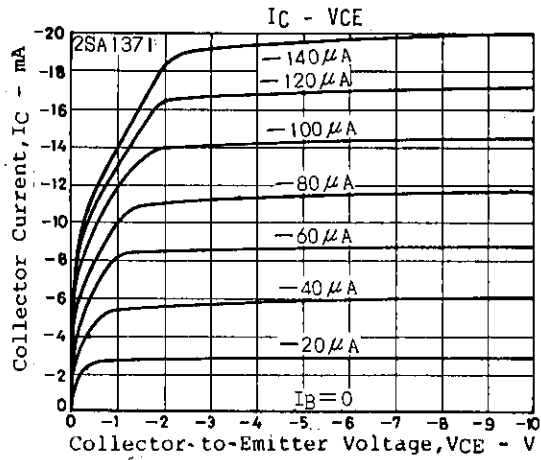
* : The 2SA1371/2SC3468 are classified by 10mA h_{FE} as follows:

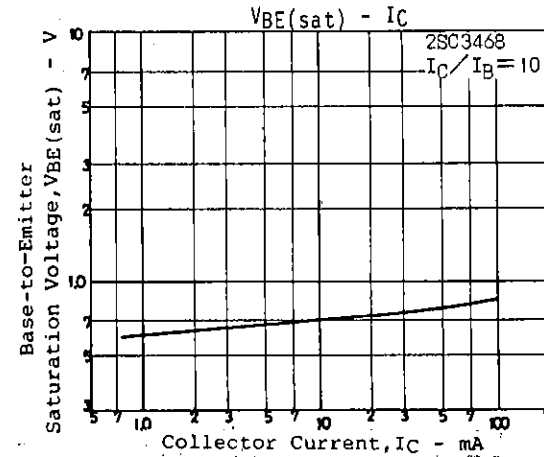
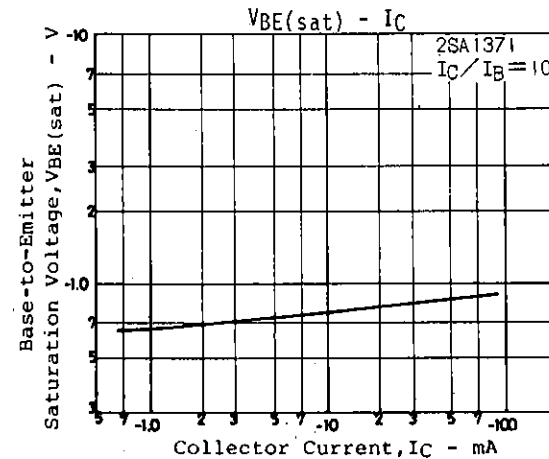
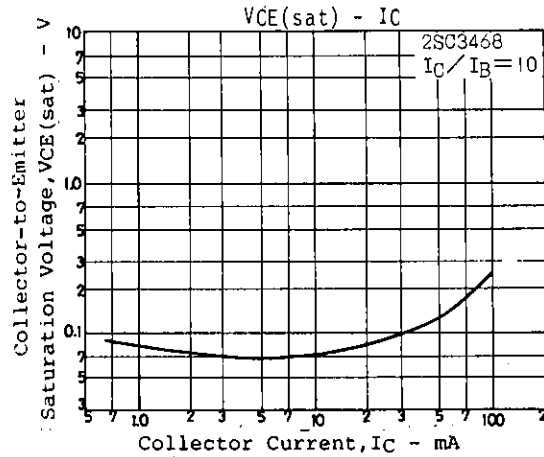
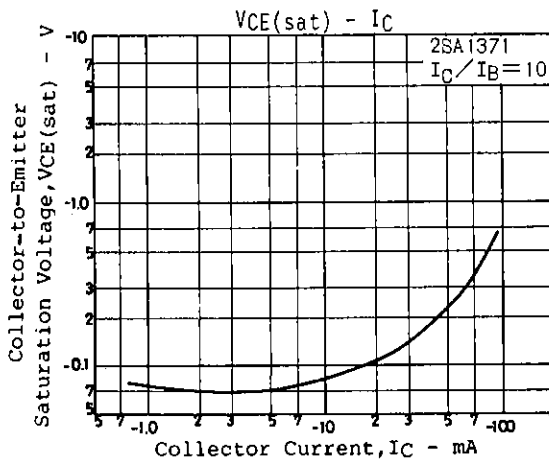
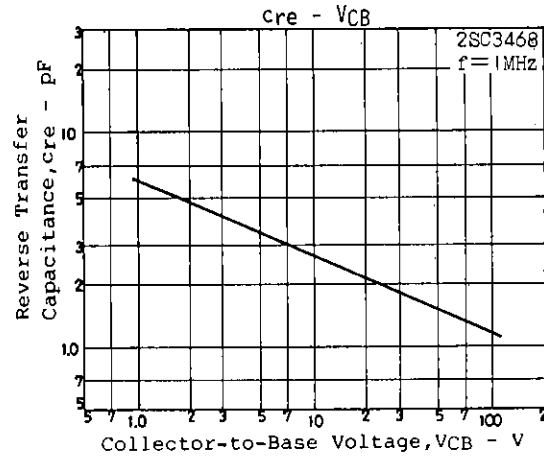
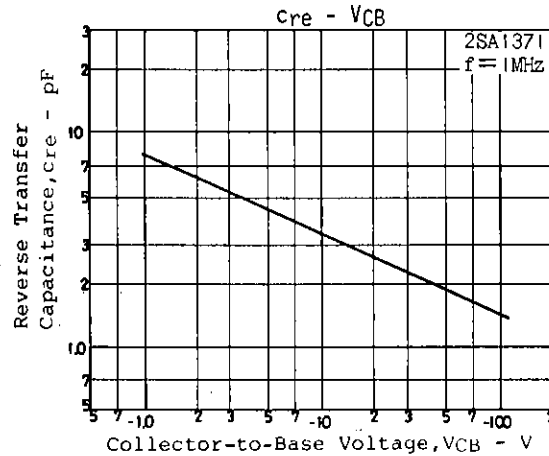
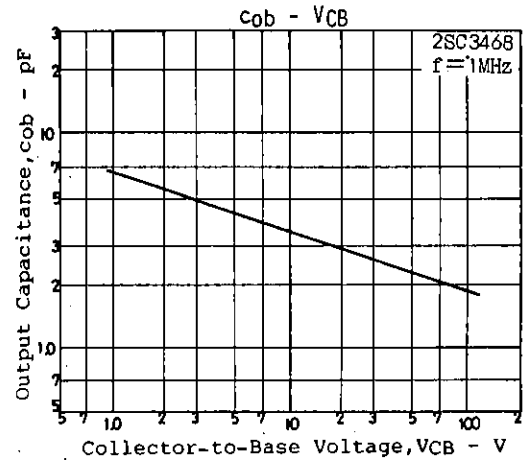
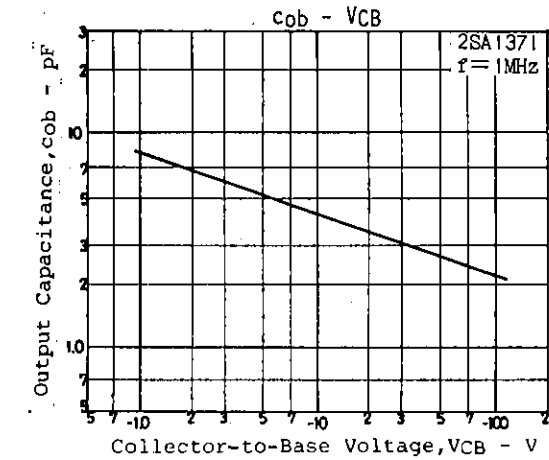
40	C	80	60	D	120	100	E	200	160	F	320
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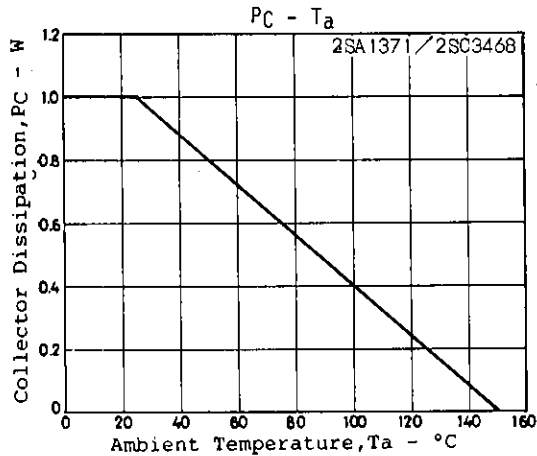
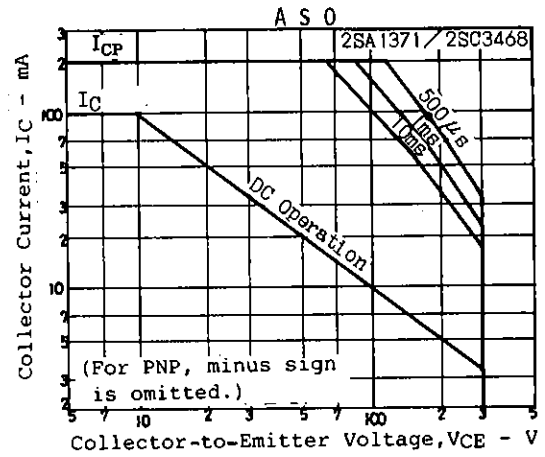
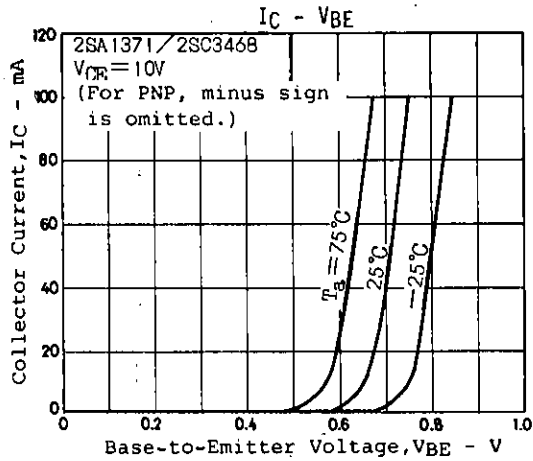
Package Dimensions
(unit: mm) 2006A

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