

<b>SANYO</b>	No.1413C	<b>2SA1371/2SC3468</b>
		PNP/NPN Epitaxial Planar Silicon Transistors <b>High-Definition CRT Display, Video Output Applications</b>

**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
<b>Collector Current(Pulse)</b>	<b><math>I_{CP}</math></b>	(-) 200	mA
Collector Dissipation	PC	1.0	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

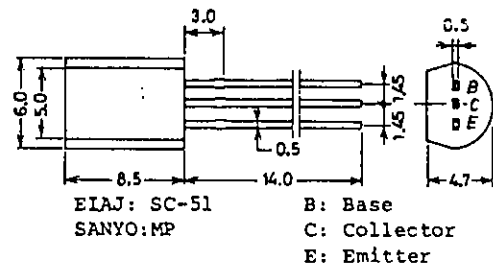
**Electrical Characteristics at  $T_a = 25^\circ C$**

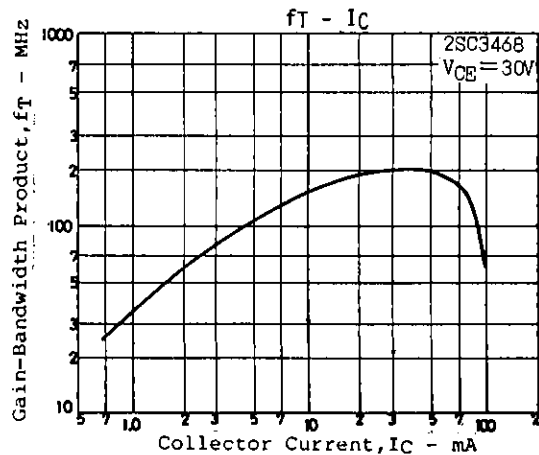
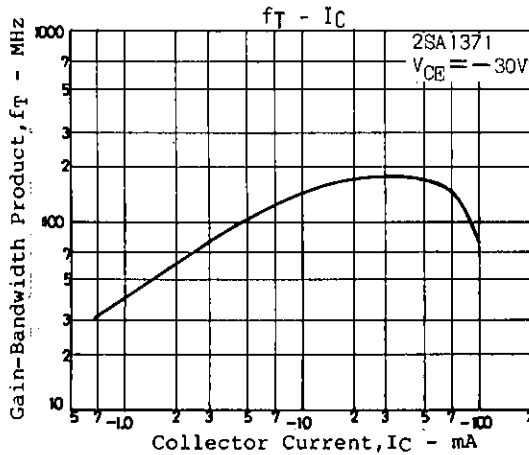
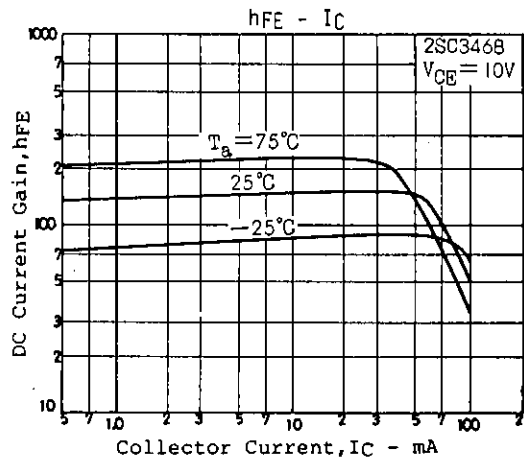
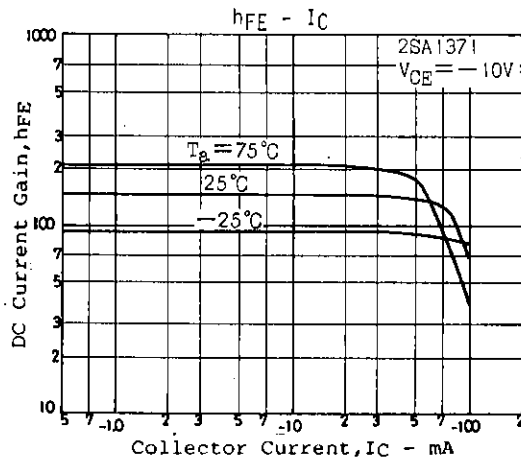
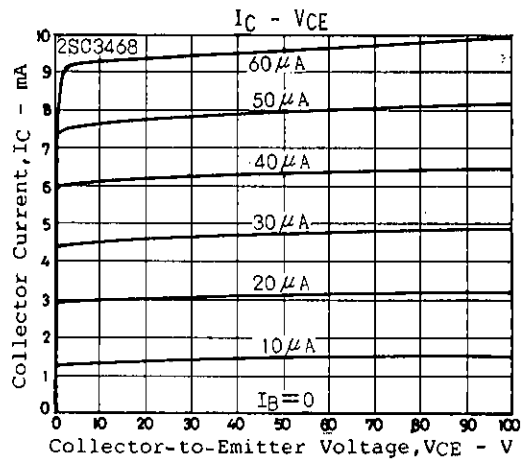
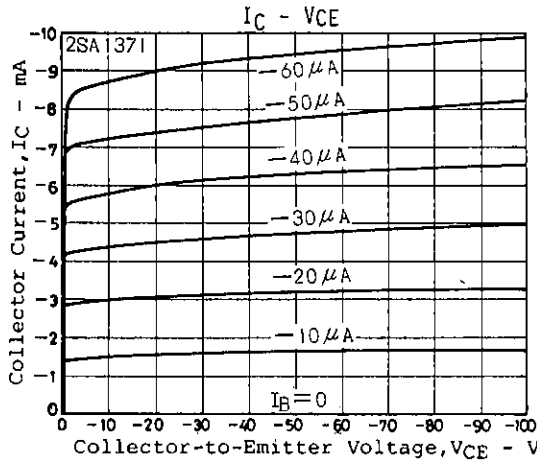
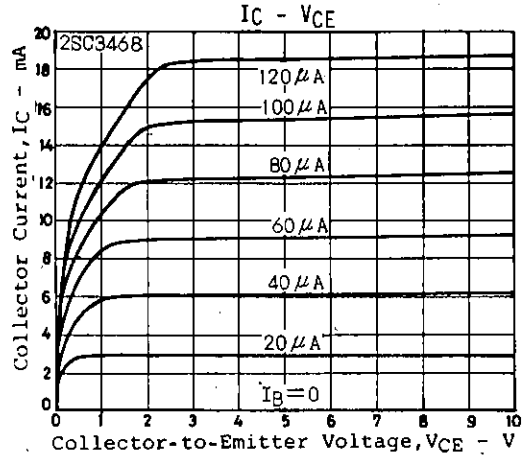
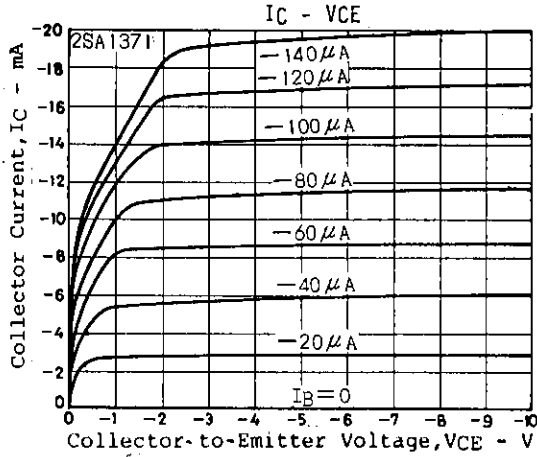
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-) 200V, I_E = 0$			(-) 0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-) 4V, I_C = 0$			(-) 0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = (-) 10V, I_C = (-) 10mA$	40*		320*	
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-) 30V, I_C = (-) 10mA$		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

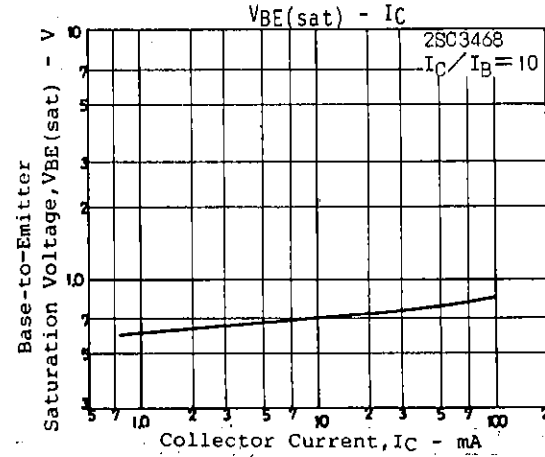
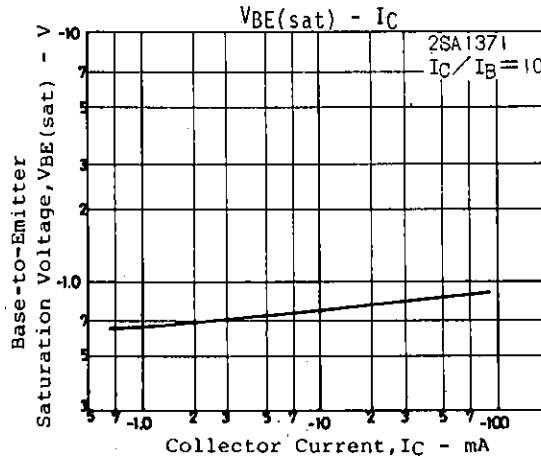
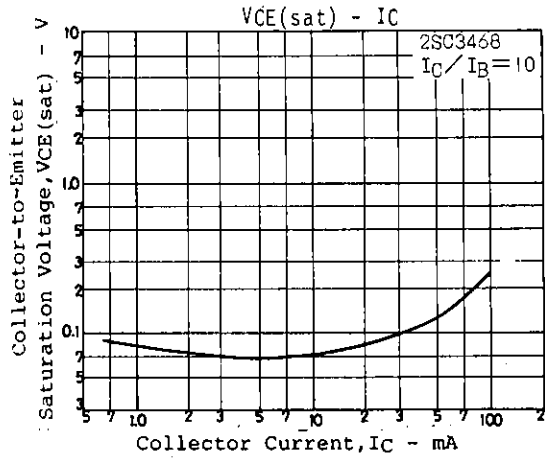
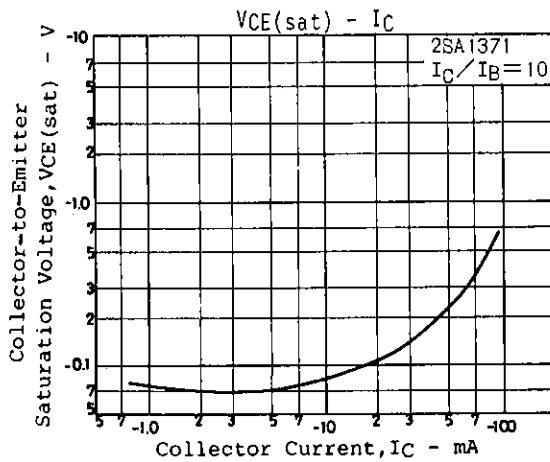
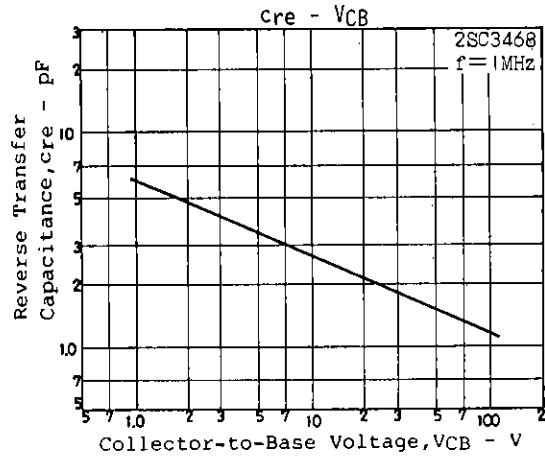
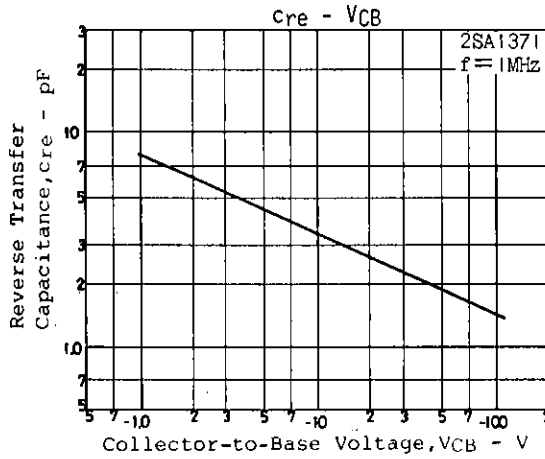
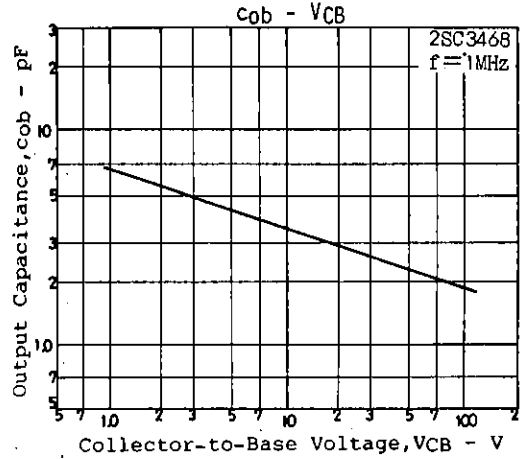
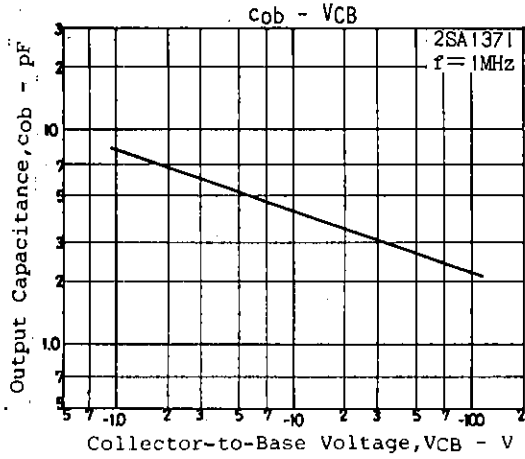
\* : The 2SA1371/2SC3468 are classified by 10mA  $h_{FE}$  as follows:

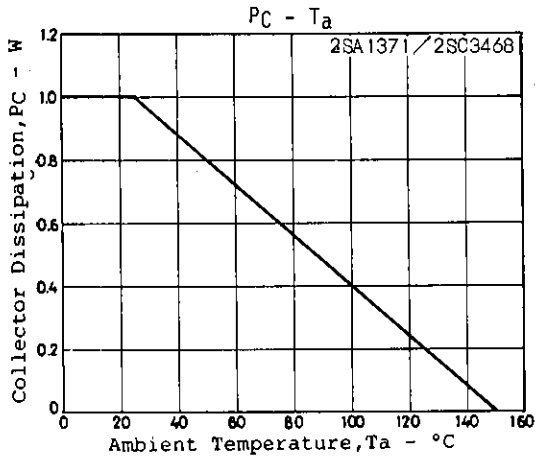
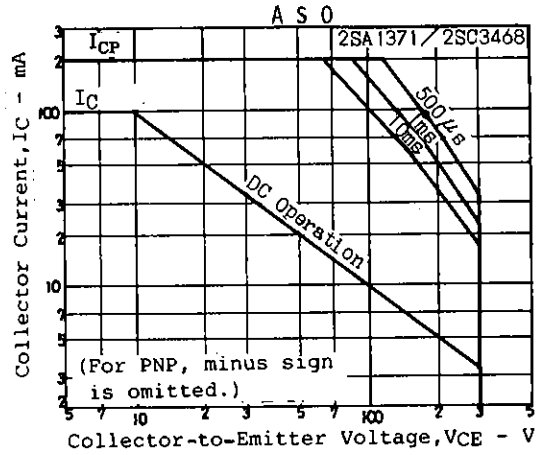
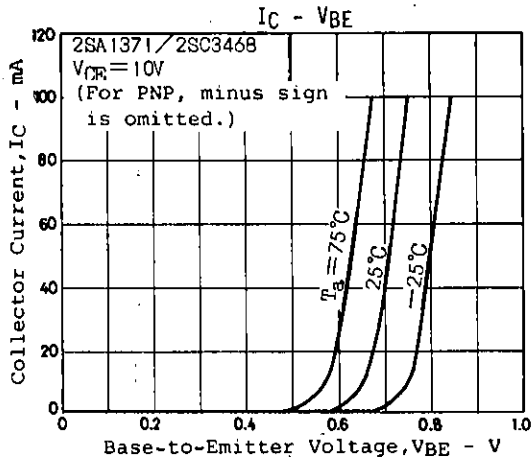
40	C	80	60	D	120	100	E	200	160	F	320
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**Package Dimensions**  
(unit: mm) 2006A









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