

# 2SA1371/2SC3468

# High-Definition CRT Display, Video Output Applications

#### Use

· Color TV chroma output and high breakdown voltage driver.

#### **Features**

- · High breakdown votage : V<sub>CEO</sub>≥300V.
- · Small reverse transfer capacitance and excellent high frequency characteristic
  - : C<sub>re</sub>=1.8pF (NPN), 2.3pF (PNP).
- · Adoption of MBIT process.

(): 2SA1371

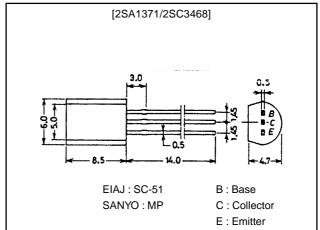
### **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

## **Package Dimensions**

unit:mm

2006A



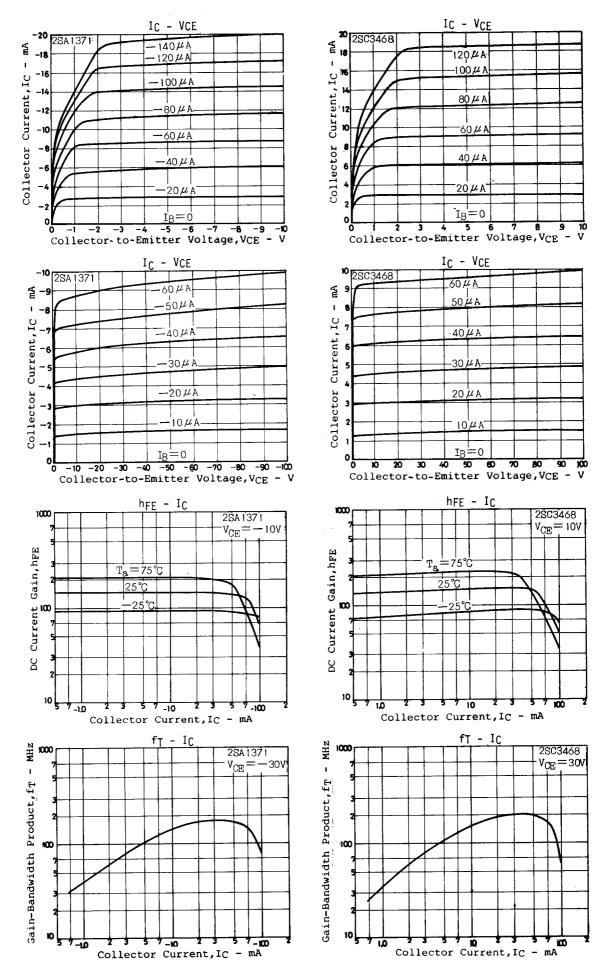
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		(-)300	V
Collector-to-Emitter Voltage	VCEO		(-)300	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		(-)5	V
Collector Current	IC		(–)100	mA
Collector Current (Pulse)	I <sub>CP</sub>		(–)200	mA
Collector Dissipation	PC		1.0	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta = 25°C

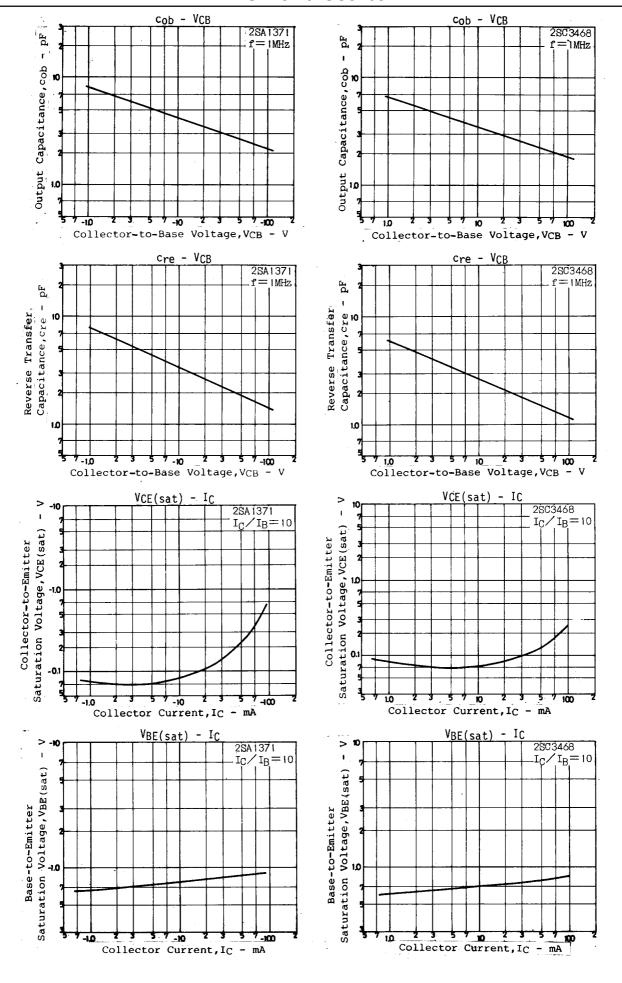
Parameter	Symbol	Conditions		Ratings		
			min	typ	max	Unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =(-)200V, I <sub>E</sub> =0			(–)0.1	μΑ
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB=</sub> (-)4V, I <sub>C</sub> =0			(–)0.1	μΑ
DC Current Gain	hFE	V <sub>CE</sub> =(-)10V, I <sub>C</sub> =(-)10mA	40*		320*	
Gain-Bandwidth Product	fT	V <sub>CE</sub> =(-)30V, I <sub>C</sub> =(-)10mA		150		MHz
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =(-)20mA, I <sub>B</sub> =(-)2mA			(-)0.6	V
Base-to-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =(-)20mA, I <sub>B</sub> =(-)2mA			(–)1.0	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	I <sub>C</sub> =(-)10μΑ, I <sub>E</sub> =0	(-)300			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =(-)1mA, R <sub>BE</sub> =∞	(-)300			V
Emitter-to-Base Breakdown Votage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =(-)10μΑ, I <sub>C</sub> =0	(-)5			V
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =(-)30V, f=1MHz		2.6		pF
				(3.1)		pF
Reverse Transfer Capacitance	C <sub>re</sub>	VCB=(-)30V, f=1MHz		1.8		pF
				(2.3)		pF

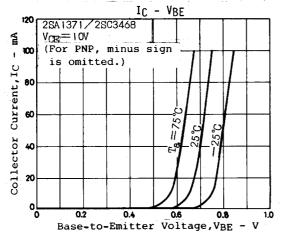
 $\ensuremath{^*}$  : The 2SA1371/2SC3468 are classified by 10mA  $\ensuremath{h_{FE}}$  as follows :

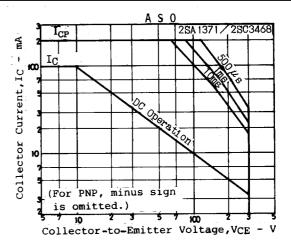
40 C 80 60 D	100 E 200	160 F 320
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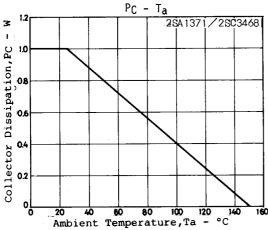


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