

# **High-Definition CRT Display Video Output Applications**

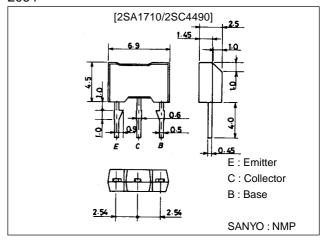
### **Features**

- · High breakdown voltage (V<sub>CEO</sub>≥300V).
- · Excellent high frequency characteristic.
- · Adoption of MBIT process.

# **Package Dimensions**

unit:mm

2064



(): 2SA1710

# **Specifications**

## Absolute Maximum Ratings at Ta = 25°C

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	W	
Junction Temperature	Tj		150	°C	
Storage Temperature	Tstg		-55 to +150		

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

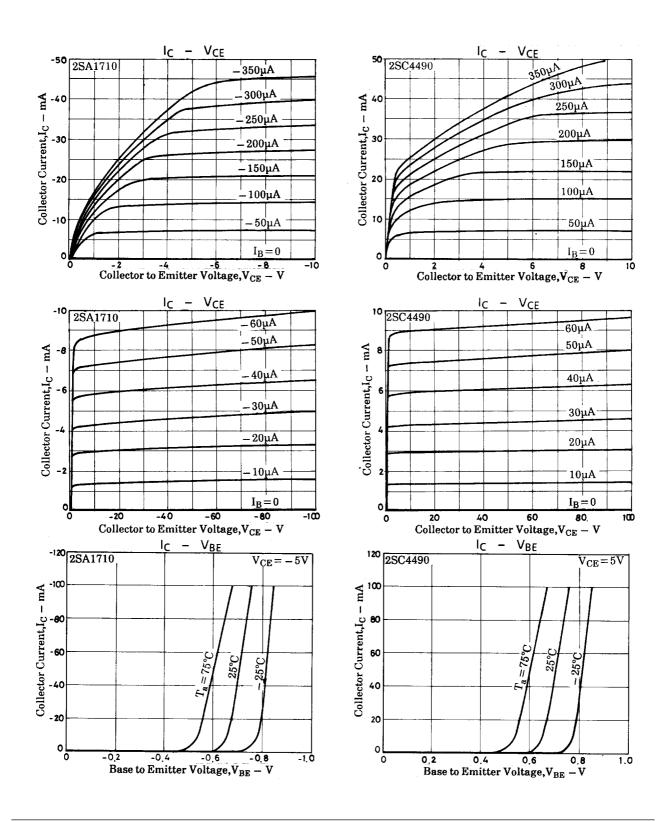
Parameter	Symbol	Conditions	Ratings			Unit
Faiametei	Symbol	Conditions	min	typ	max	Oill
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =(-)200V, I <sub>E</sub> =0			(-)100	nA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =(-)4V, I <sub>C</sub> =0			(–)100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =(-)10V, I <sub>C</sub> =(-)10mA	70*		280*	
Gain-Bandwidth Product	fT	V <sub>CE</sub> =(-)30V, I <sub>C</sub> =(-)10mA		70		MHz
Collector-to-Emitter Saturation Voltage	VCE(sat)	I <sub>C</sub> =(-)20mA, I <sub>B</sub> =(-)2mA			(-)0.6	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =(-)20mA, I <sub>B</sub> =(-)2mA			(–)1.0	V
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =(-)30V, f=1MHz		(3.1)		pF
				2.6		pF

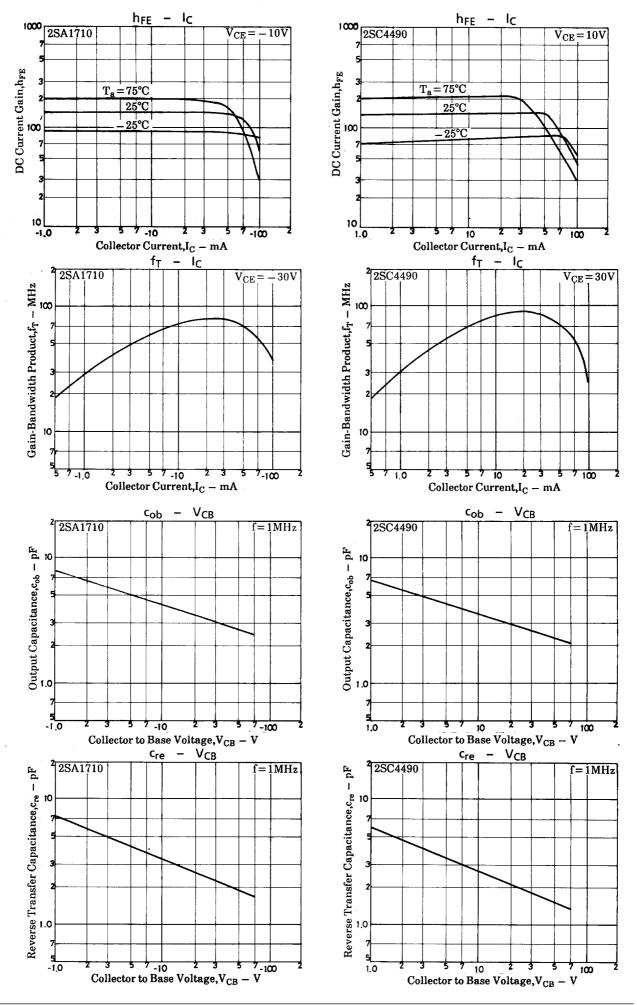
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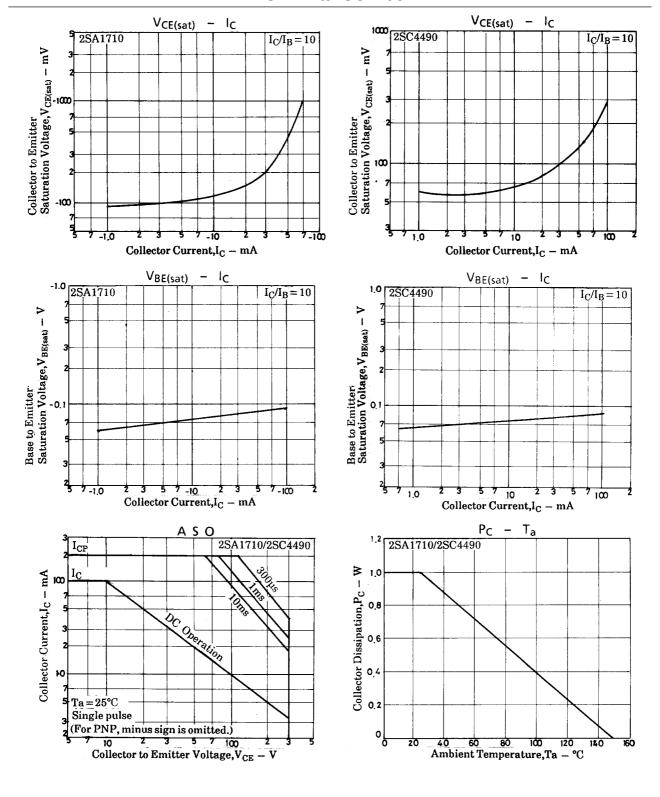
Parameter	Symbol	Conditions	Ratings			Unit
Faiametei	Symbol	Conditions	min	typ	max	Offic
Reverse Transfer Capacitance	C <sub>re</sub>	V <sub>CB</sub> =(-)30V, f=1MHz		(2.3)		pF
				1.8		pF
Collector-to-Base Breakdown Voltage	V(BR)CBO	I <sub>C</sub> =(-)10μA, I <sub>E</sub> =0	(-)300			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =(−)1mA, R <sub>BE</sub> =∞	(-)300			V
Emitter-to-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =(-)10μA, I <sub>C</sub> =0	(–)5			V

## $\mbox{\ast}$ : The 2SA1710/2SC4490 are classified by 100mA $\mbox{h}_{FE}$ as follows :

70 Q 140 100 R 200 140 S 28
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