



2SA1850/2SC4824

High Definition CRT Display Video Output Applications

Applications

- High Definition CRT Display Video Output Applications, Wide-Band Amplifier.

Features

- Adoption of FBET process.
- High Gain Bandwidth product ($f_T=400\text{MHz}$).
- High breakdown voltage ($V_{CEO}=120\text{V}$).
- Small reverse transfer capacitance and excellent high-frequency characteristic :
 $C_{re}=1.7\text{pF/NPN}$, 2.2pF/PNP .
- Usage of radial taping to meet automatic mounting.

() : 2SA1850

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(-120)	V
Collector-to-Emitter Voltage	V_{CEO}		(-120)	V
Emitter-to-Base Voltage	V_{EBO}		(-3)	V
Collector Current	I_C		(-200)	mA
Collector Current (Pulse)	I_{CP}		(-400)	mA
Collector Dissipation	P_C		1.3	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)80\text{V}$, $I_E=0$			(-0.1)	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)2\text{V}$, $I_C=0$			(-1.0)	μA
DC Current Gain	h_{FE1}	$V_{CE}=(-)10\text{V}$, $I_C=(-)10\text{mA}$	60*		320*	
	h_{FE2}	$V_{CE}=(-)10\text{V}$, $I_C=(-)100\text{mA}$	20			
Gain Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}$, $I_C=(-)50\text{mA}$		400		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)30\text{V}$, $f=1\text{MHz}$		(2.8)		pF
				2.1		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=(-)30\text{V}$, $f=1\text{MHz}$		(2.2)		pF
				1.7		pF

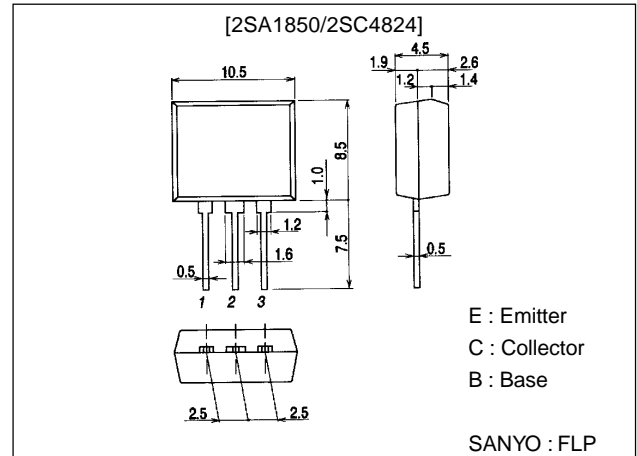
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■ SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

Package Dimensions

unit:mm

2084

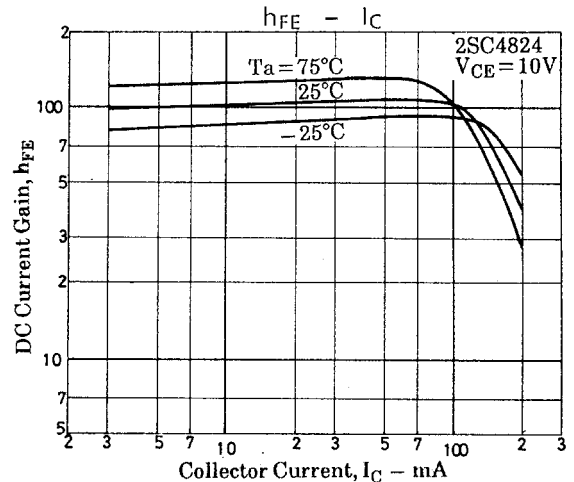
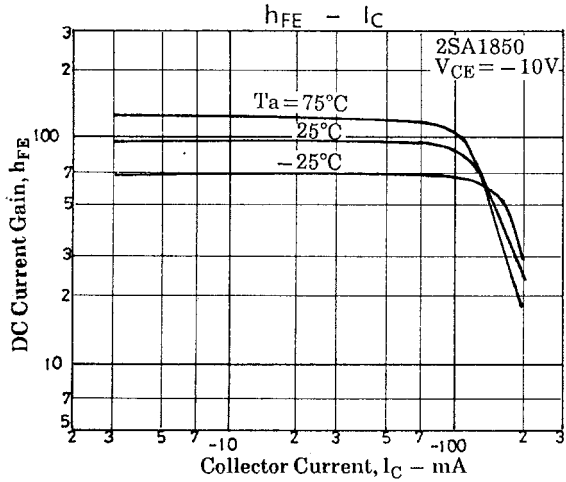
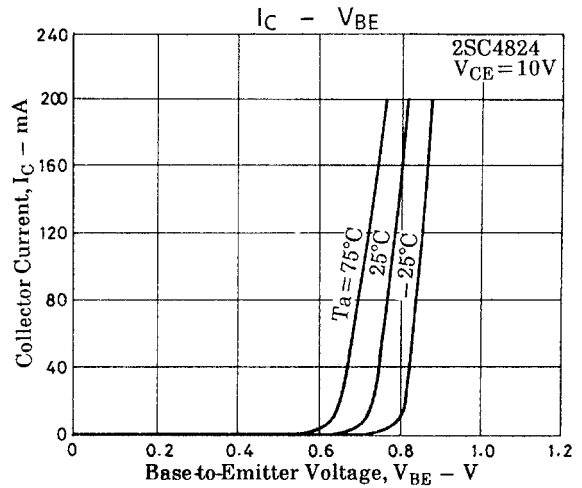
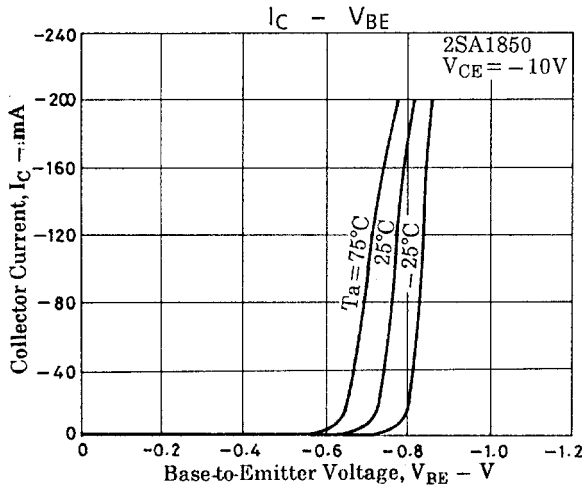
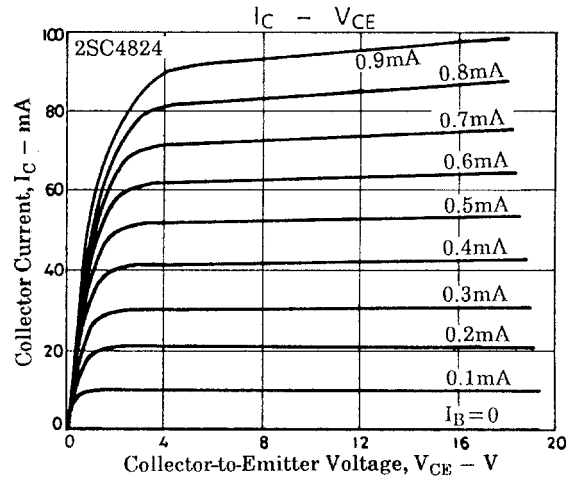
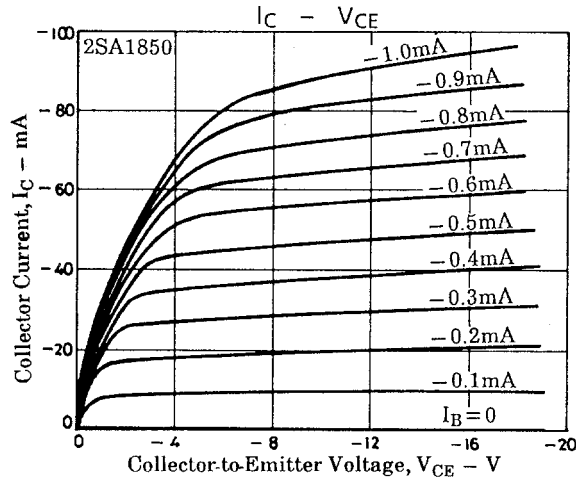


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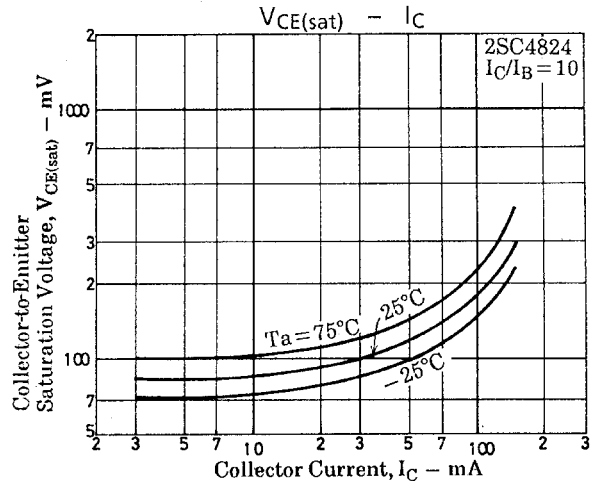
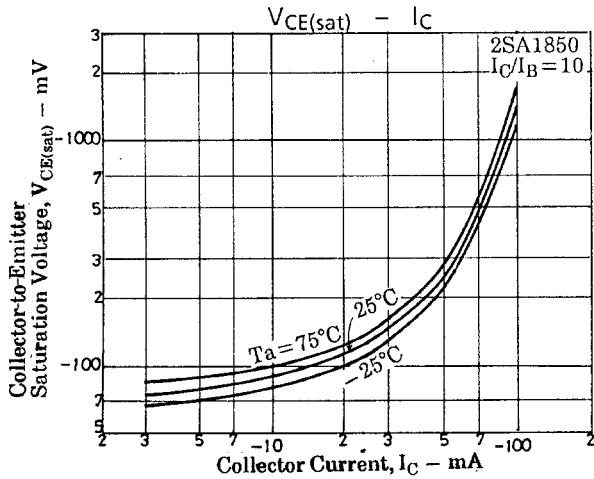
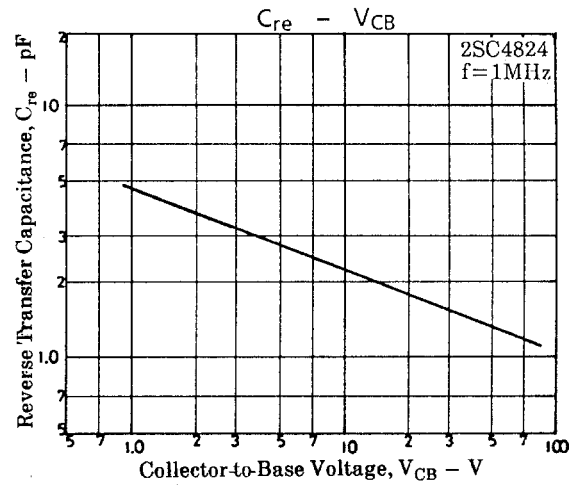
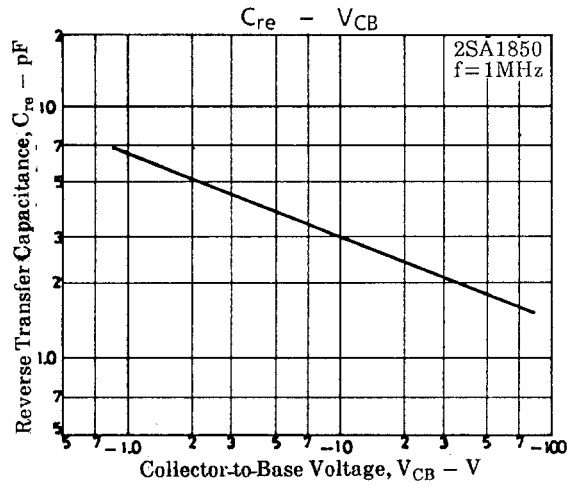
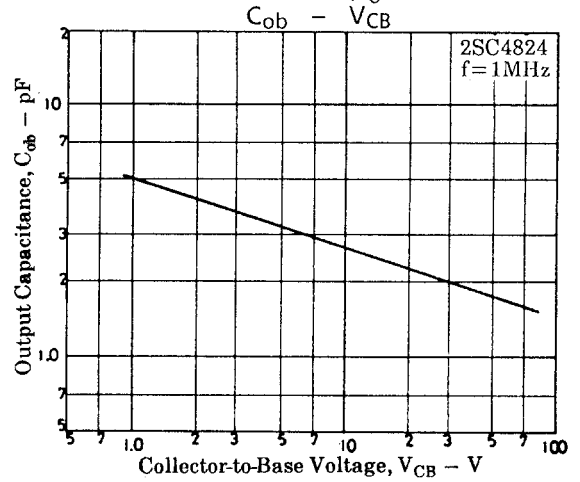
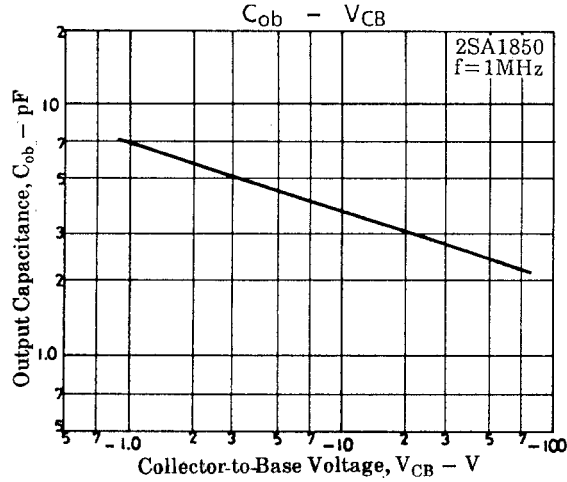
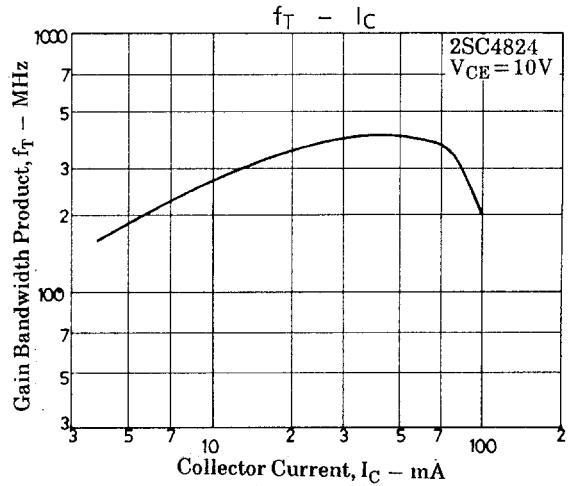
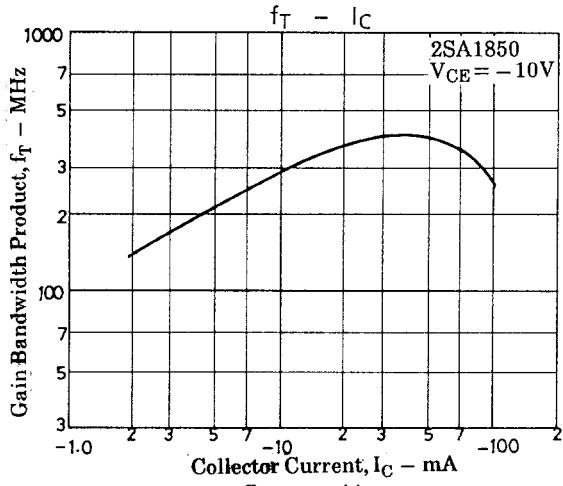
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)30\text{mA}, I_B=(-)3\text{mA}$			(-1.0)	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)30\text{mA}, I_B=(-)3\text{mA}$			(-1.0)	V

* : The 2SA1850/2SC4824 are classified by 10mA hFE as follows :

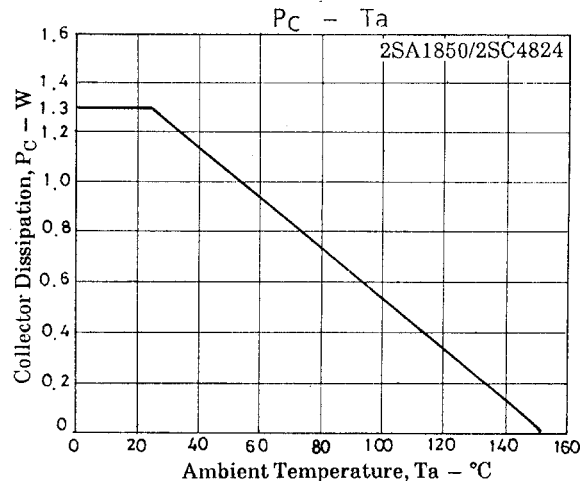
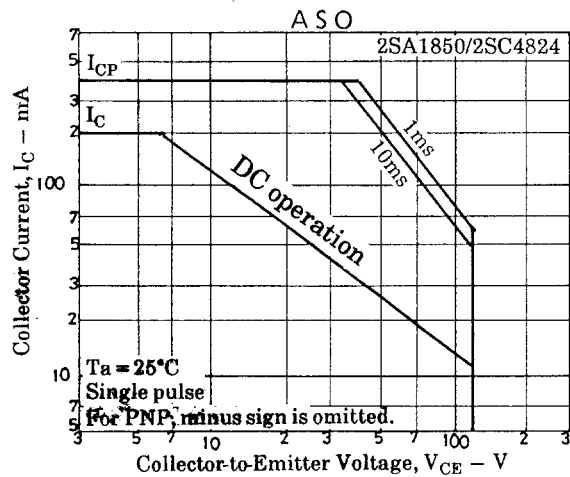
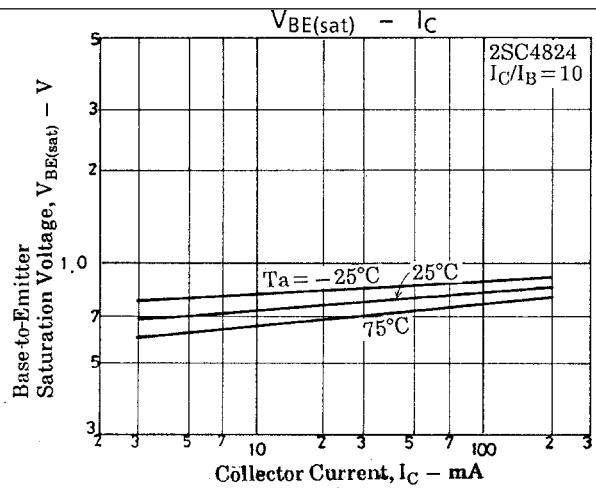
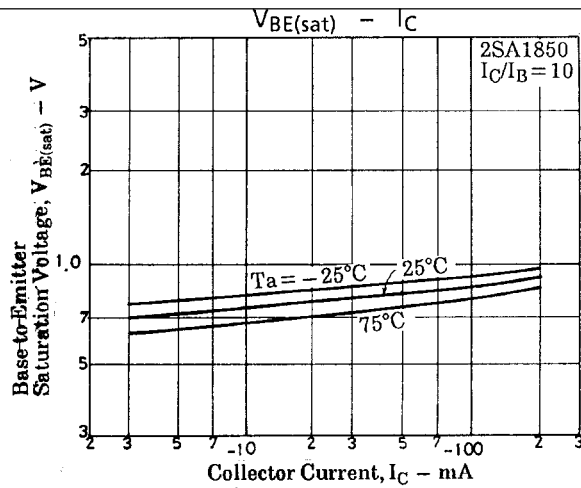
60	D	120	100	E	200	160	F	320
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