



2SA1852 / 2SC4826

High Definition CRT Display Video Output Applications

Applications

- High definition CRT display video output, wide-band amplifier.

Features

- Adoption of FBET process.
- High f_T : $f_T=300\text{MHz}(\text{typ})$.
- High breakdown voltage : $V_{CEO}=200\text{V}$.
- Small reverse transfer capacitance and excellent high-frequency characteristic :
 $C_{re}=1.5\text{pF} / \text{NPN}, 1.8\text{pF} / \text{PNP}$.
- Shipped in reel tape container to facilitate automatic mounting.

Specifications

() : 2SA1852

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(-)200	V
Collector-to-Emitter Voltage	V_{CEO}		(-)200	V
Emitter-to-Base Voltage	V_{EBO}		(-)3	V
Collector Current	I_C		(-)100	mA
Collector Current (Pulse)	I_{CP}		(-)200	mA
Base Current	I_B		(-)20	mA
Collector Dissipation	P_C		1.3	W
Junction Temperature	T_j		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

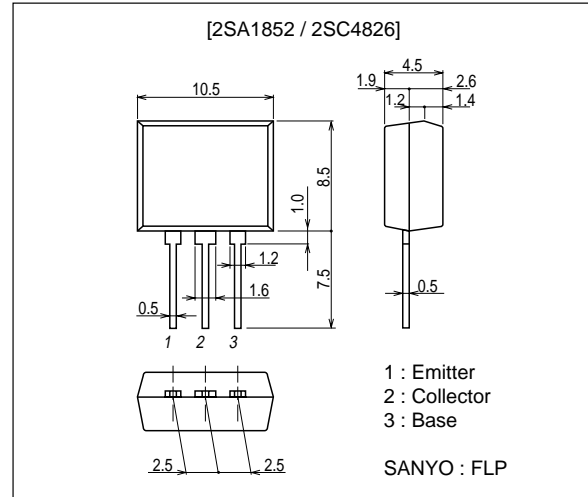
Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=-150\text{V}, I_E=0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-2\text{V}, I_C=0$			(-)1.0	μA

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Package Dimensions

unit : mm
2084B



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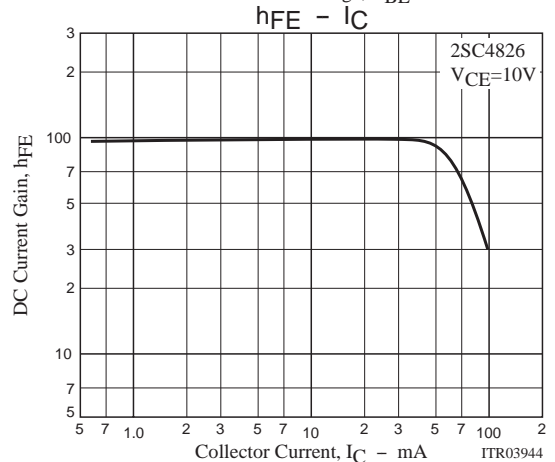
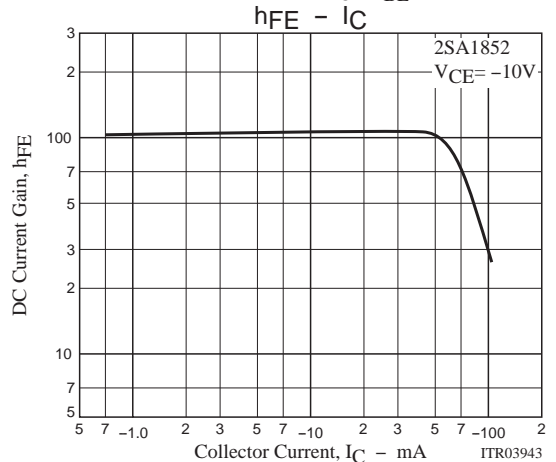
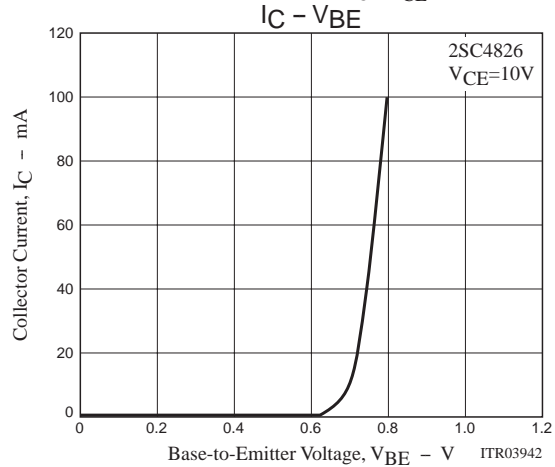
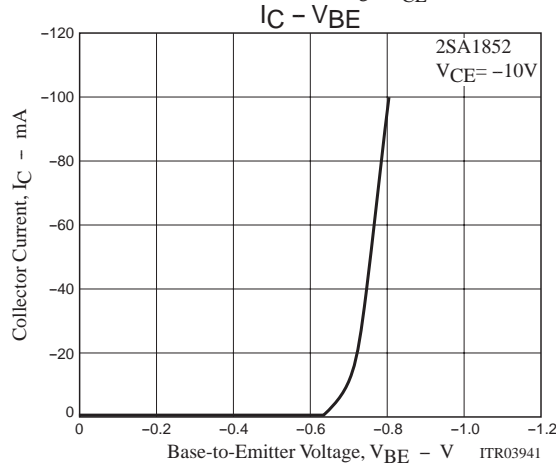
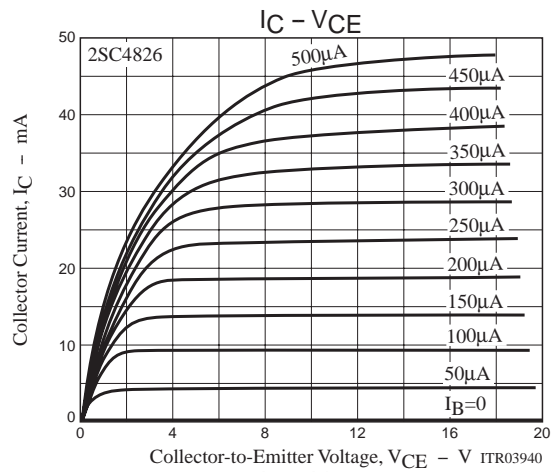
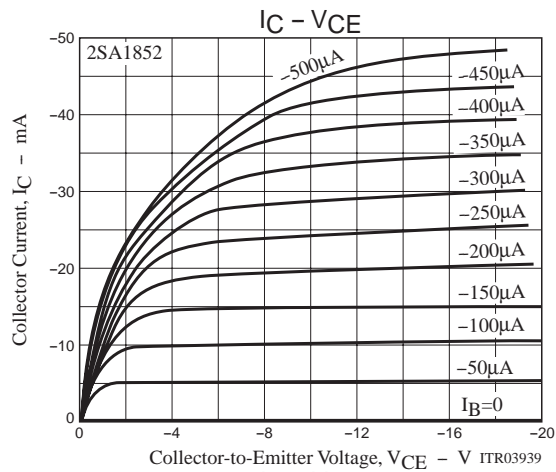
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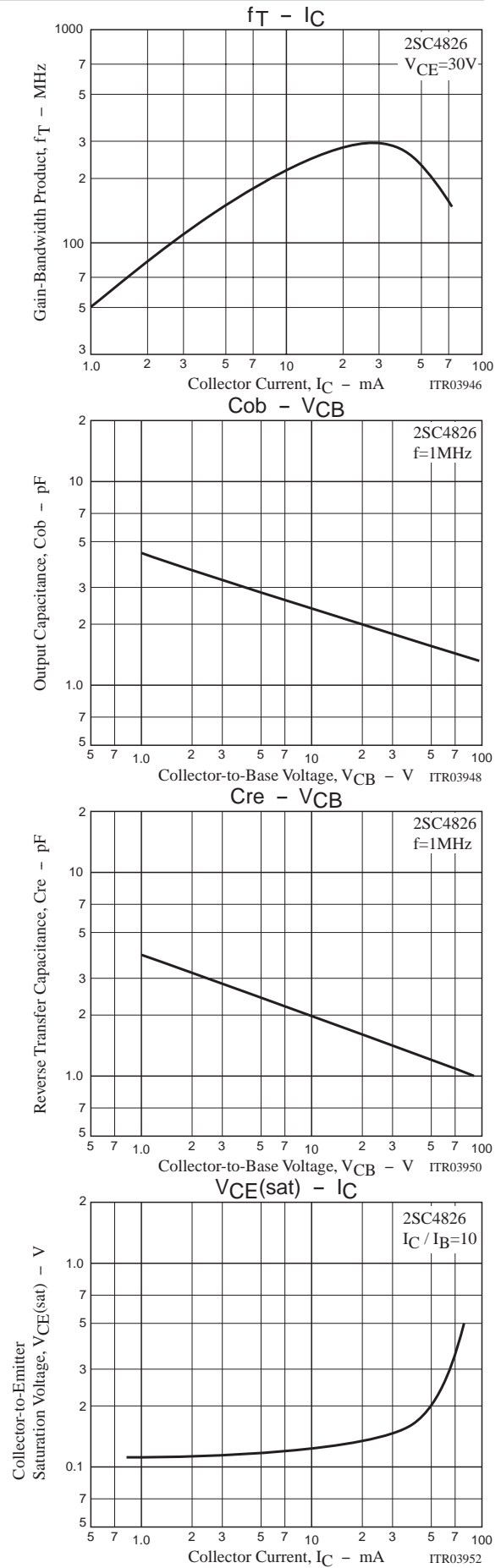
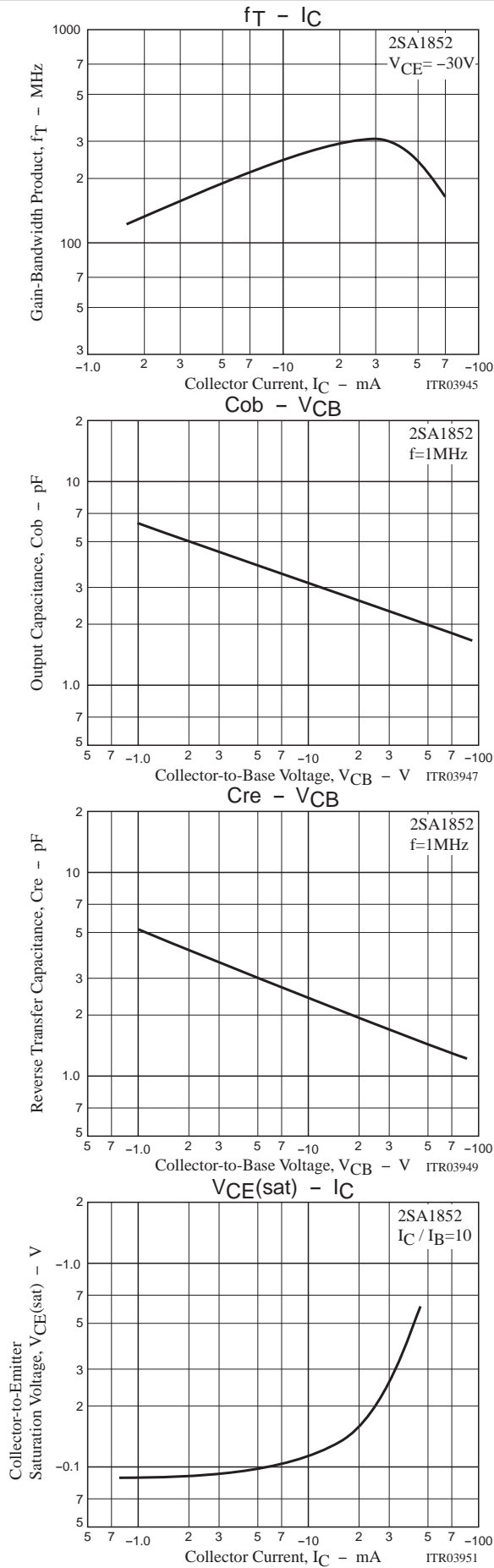
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	hFE1	VCE=(-)10V, IC=(-)10mA	60*		320*	
	hFE2	VCE=(-)10V, IC=(-)50mA	20			
Gain-Bandwidth Product	fT	VCE=(-)30V, IC=(-)30mA		300		MHz
Output Capacitance	Cob	VCB=(-)30V, f=1MHz		(2.4)1.9		pF
Reverse Transfer Capacitance	Cre	VCB=(-)30V, f=1MHz		(1.8)1.5		pF
Collector-to-Emitter Saturation Voltage	VCE(sat)	IC=(-)20mA, IB=(-)2mA			(-)1.0	V
Base-to-Emitter Saturation Voltage	VBE(sat)	IC=(-)20mA, IB=(-)2mA			(-)1.0	V

* : The 2SA1852 / 2SC4826 are classified by 10mA hFE as follows :

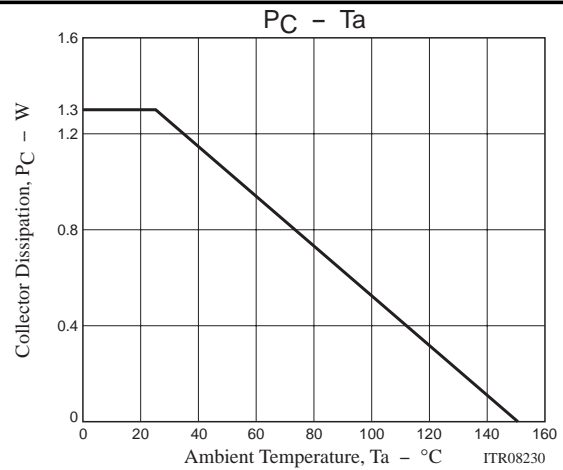
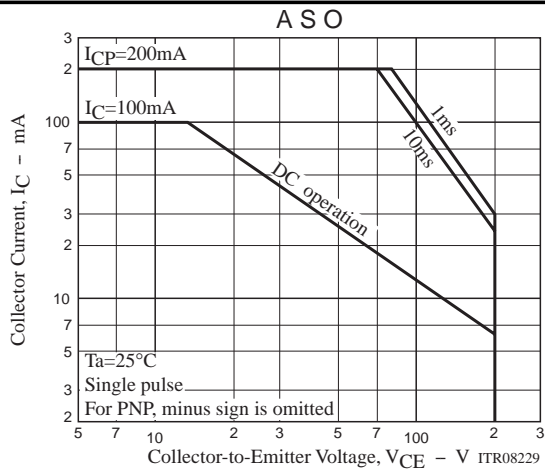
Rank	D	E	F
hFE	60 to 120	100 to 200	160 to 320



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