

SANYO	No.4717	2SA1853/2SC4827
		PNP/NPN Epitaxial Planar Silicon Transistors High-Definition CRT Display Video Output Applications

Applications

- High-definition CRT display video output. Wide-band amp.

Features

- Adoption of FBET process.
- High f_T : $f_T = 300\text{MHz}$.
- High breakdown voltage: $V_{CEO} = 200\text{V}$.
- Small reverse transfer capacitance and excellent high-frequency characteristic: $C_{re} = 2.2\text{pF/NPN}$, 2.7pF/PNP .
- Possible to offer the 2SA1853/2SC4827 devices in a tape reel packaging, which facilitates automatic insertion.

() : PNP

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

			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	(-)200	mA
Collector Current(Pulse)	I_{CP}	(-)300	mA
Collector Dissipation	P_C	1.3	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

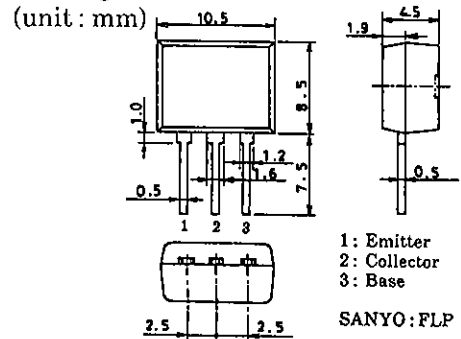
Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
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
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-)10\text{V}, I_C = (-)10\text{mA}$	60*		320*	
	$h_{FE(2)}$	$V_{CE} = (-)10\text{V}, I_C = (-)100\text{mA}$	20			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)30\text{V}, I_C = (-)50\text{mA}$		300		MHz
Output Capacitance	C_{ob}	$V_{CB} = (-)30\text{V}, f = 1\text{MHz}$		2.7		pF
				(3.2)		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB} = (-)30\text{V}, f = 1\text{MHz}$		2.2		pF
				(2.7)		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)30\text{mA}, I_B = (-)3\text{mA}$			(-)1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)30\text{mA}, I_B = (-)3\text{mA}$			(-)1.0	V

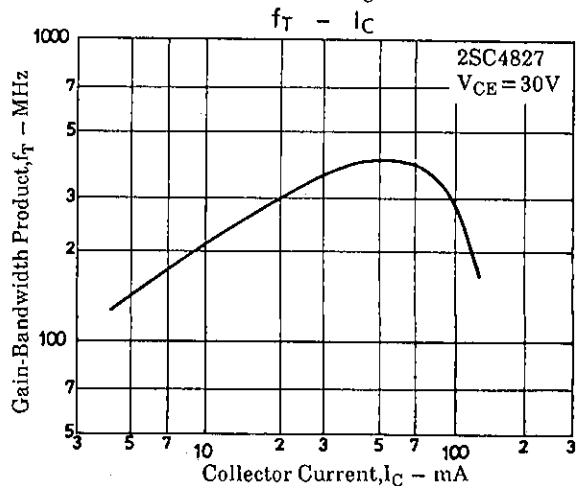
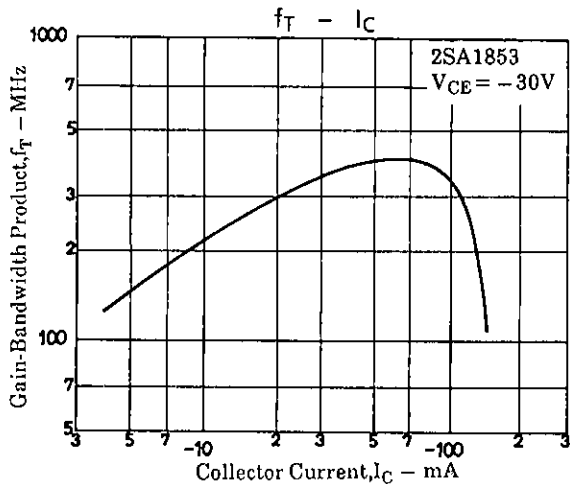
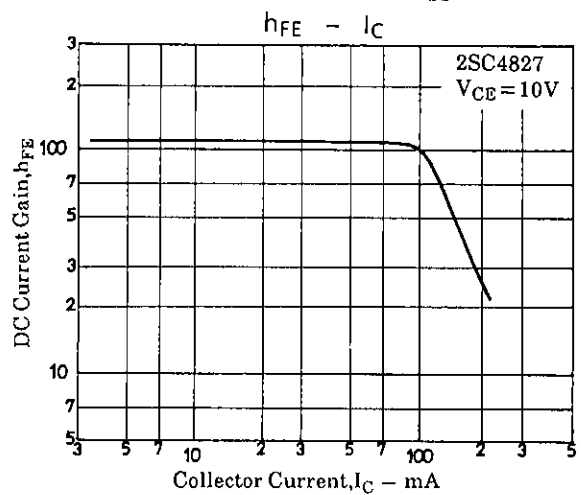
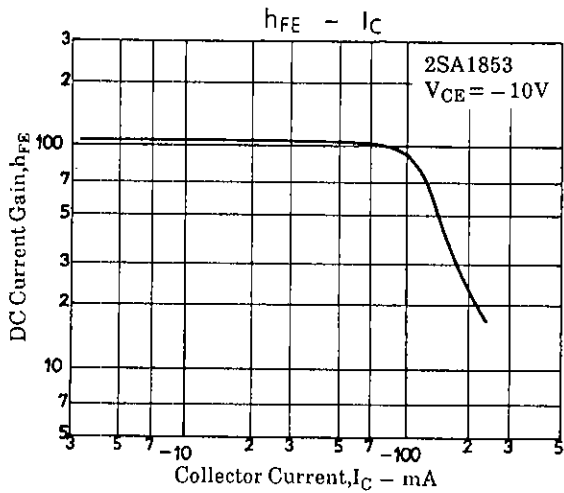
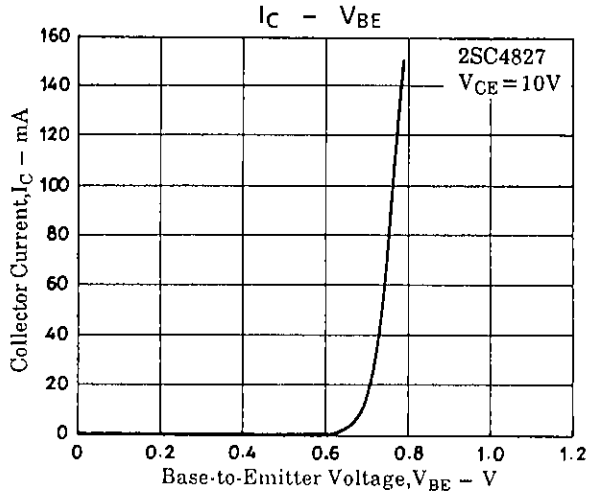
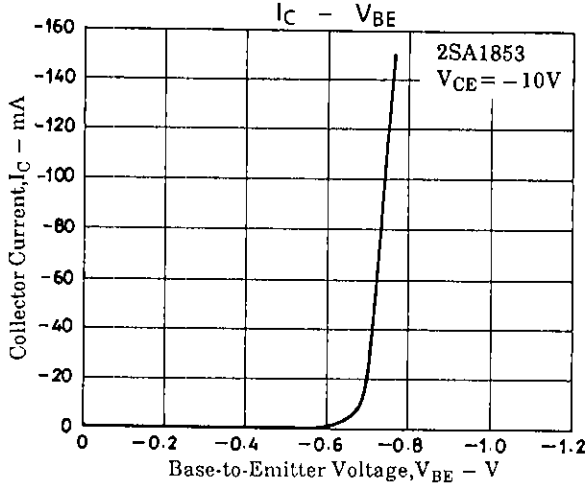
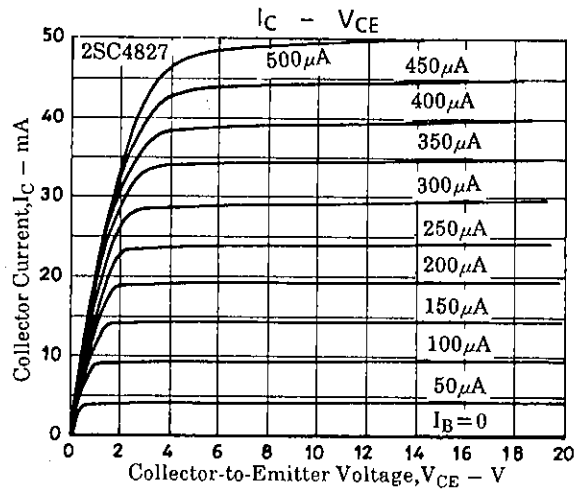
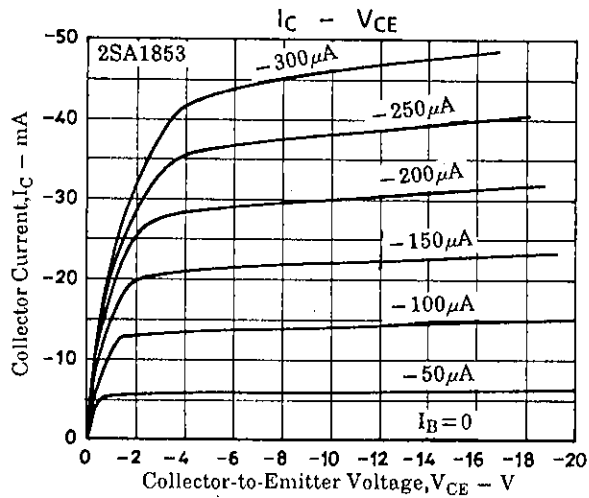
* : The 2SA1853/2SC4827 are classified by 10mA h_{FE} as follows:

60 D 120	100 E 200	160 F 320
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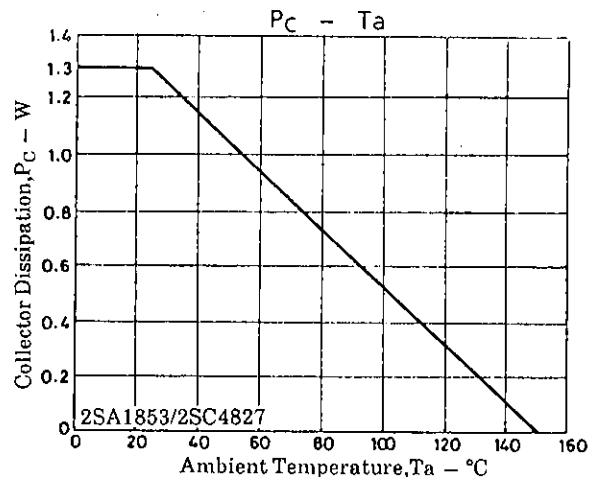
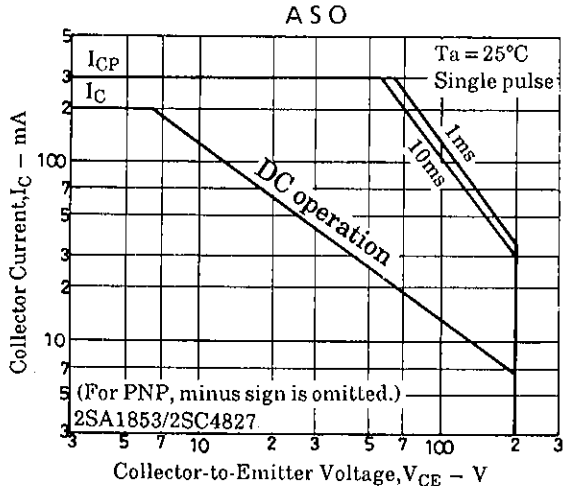
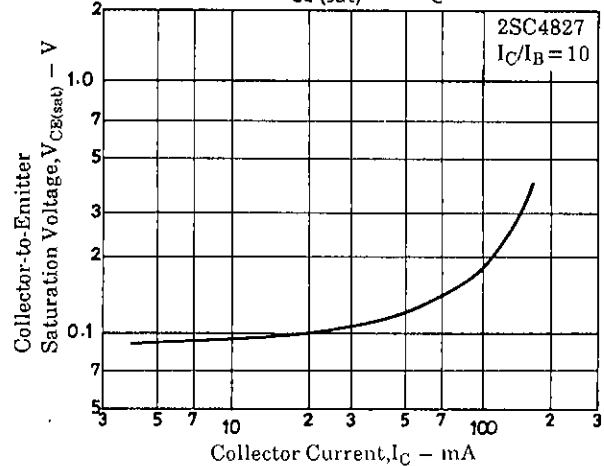
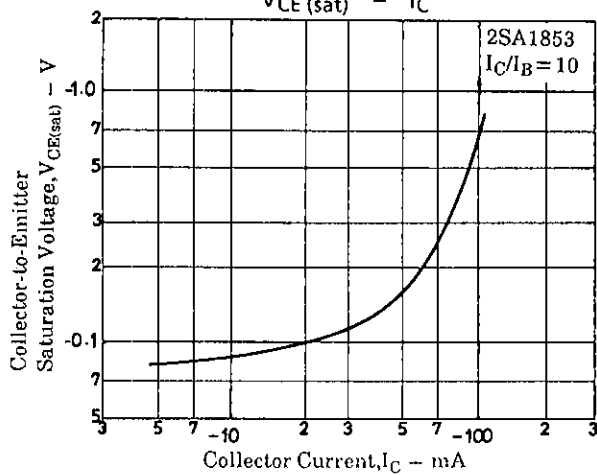
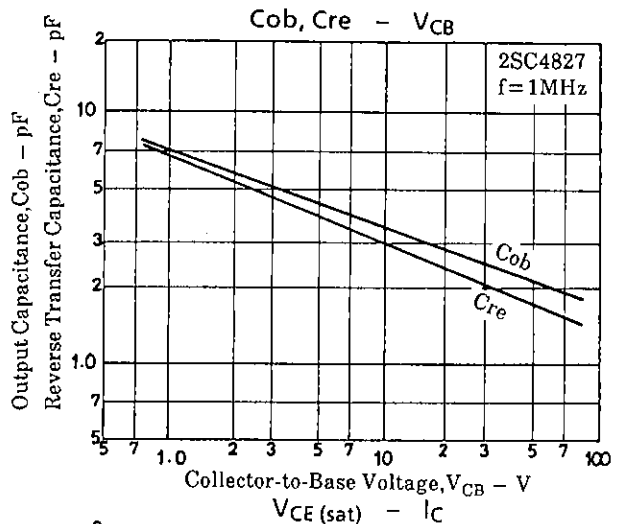
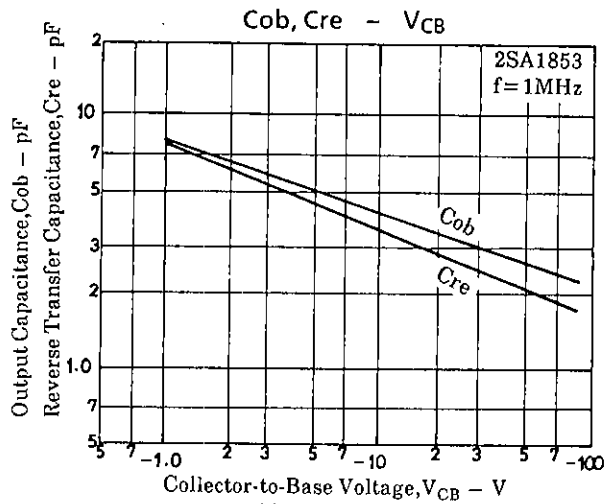
Package Dimensions 2084A



2SA1853/2SC4827



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