

SANYO	No.4132	2SA1850/2SC4824
		PNP/NPN Epitaxial Planar Silicon Transistors High Definition CRT Display Video Output Applications

Applications

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

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

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

			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
Peak Collector Current	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 $T_a = 25^\circ\text{C}$

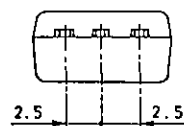
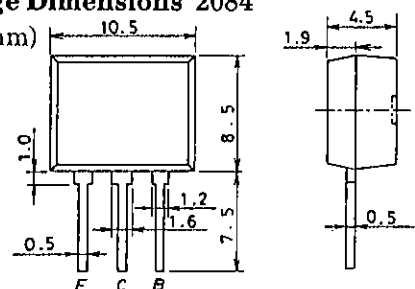
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)80\text{V}, I_E = 0$			(-) 0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)2\text{V}, I_C = 0$			(-) 1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-)10\text{V}, I_C = (-)10\text{mA}$	60^*		320^*	
	$h_{FE(2)}$	$V_{CE} = (-)10\text{V}, I_C = (-)100\text{mA}$	20			
Gain Bandwidth Product	f_T	$V_{CE} = (-)10\text{V}, I_C = (-)50\text{mA}$		400		MHz
Output Capacitance	C_{ob}	$V_{CB} = (-)30\text{V}, f = 1\text{MHz}$		(2.8) 2.1		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB} = (-)30\text{V}, f = 1\text{MHz}$		(2.2) 1.7		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 2SA1850/2SC4824 are classified by 10mA h_{FE} as follows :

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

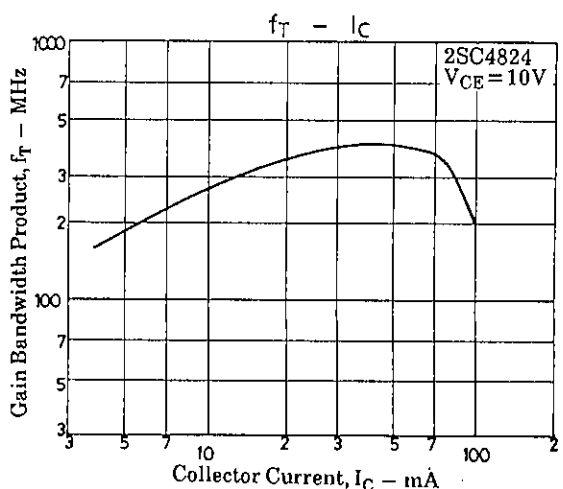
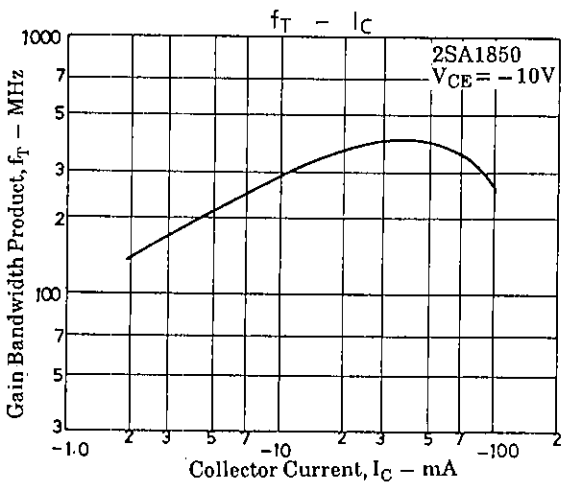
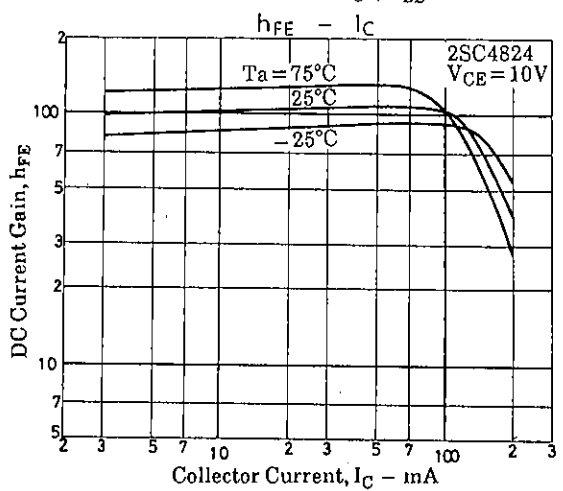
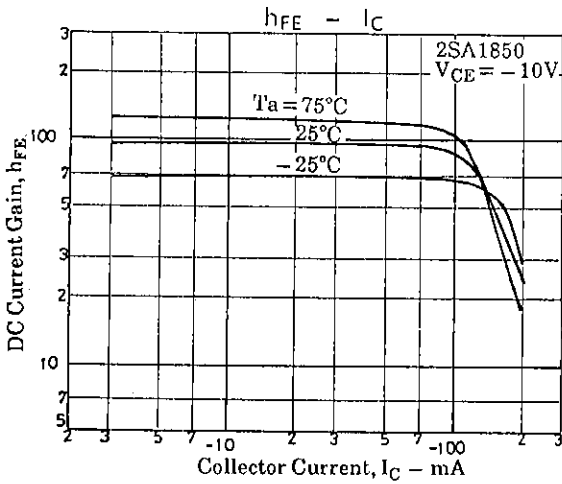
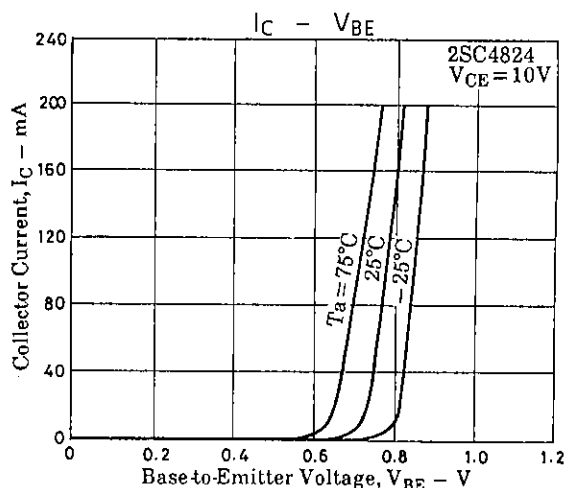
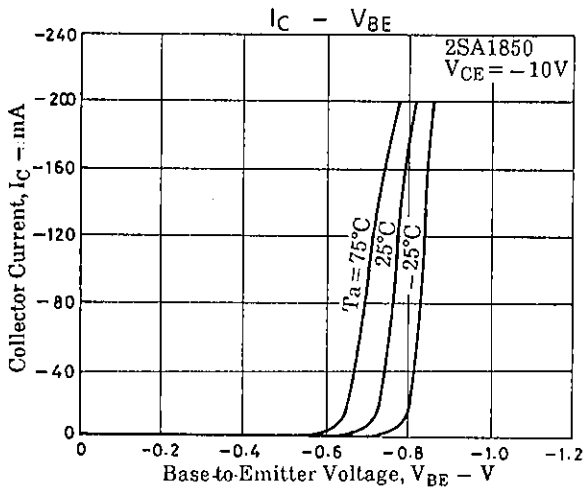
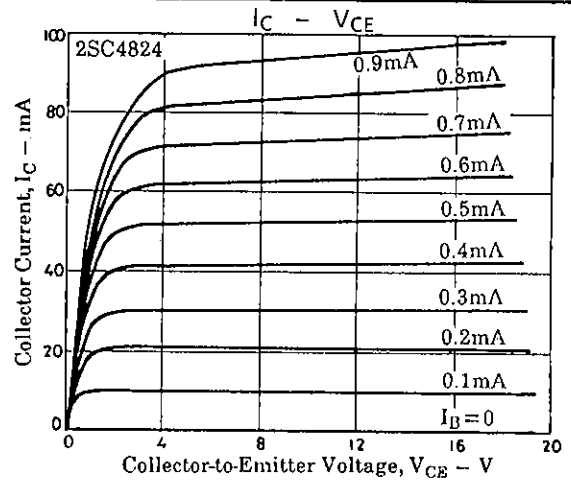
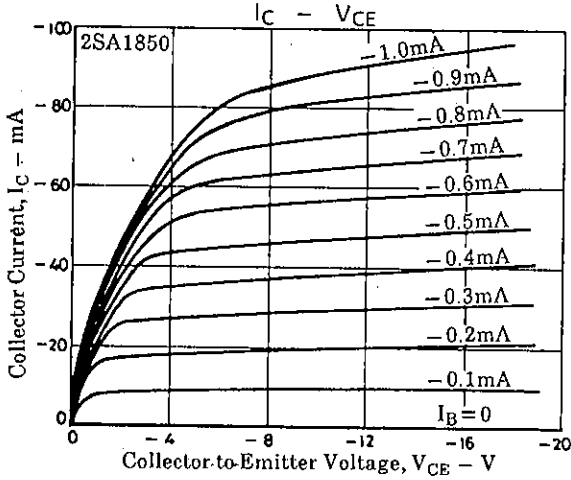
(unit: mm)



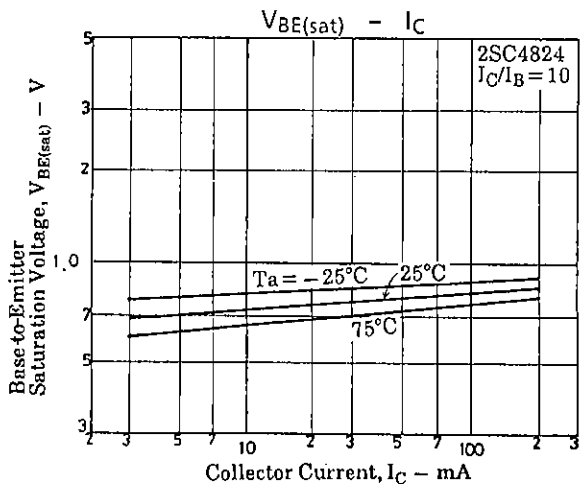
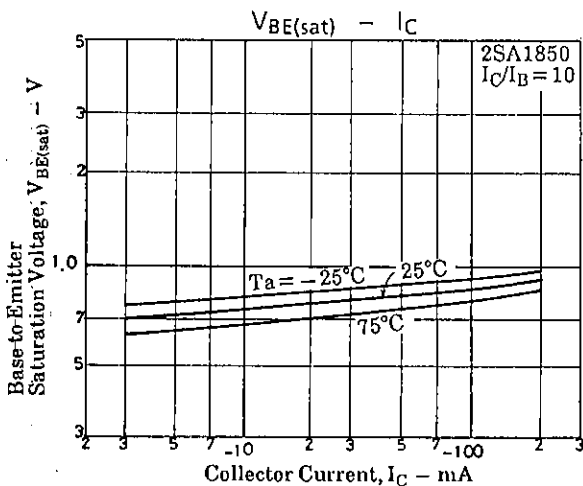
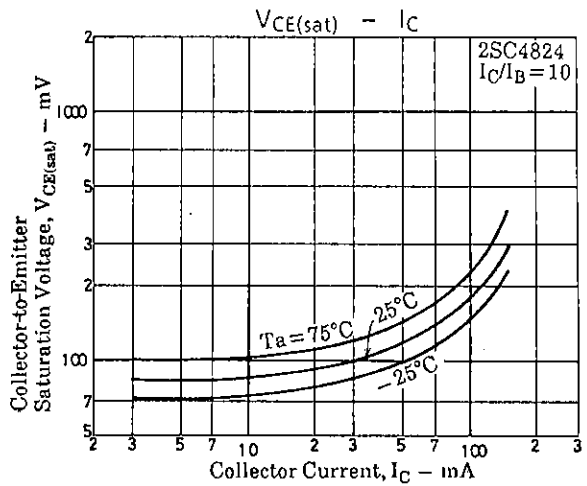
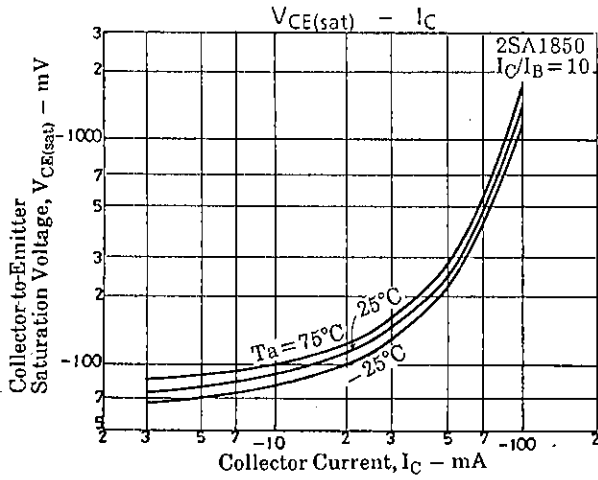
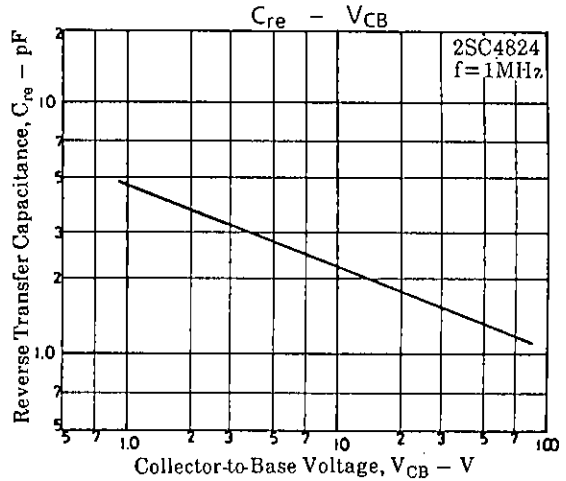
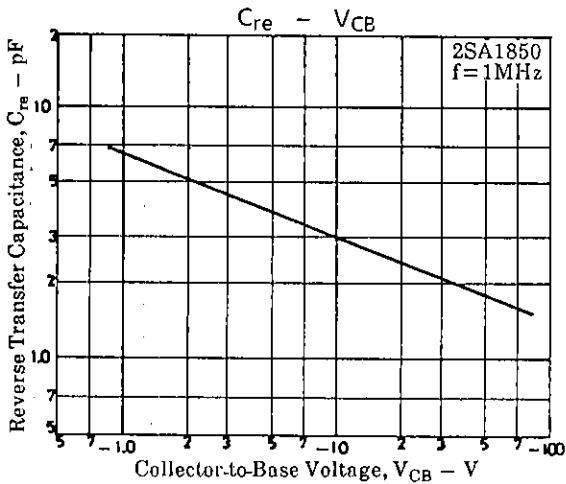
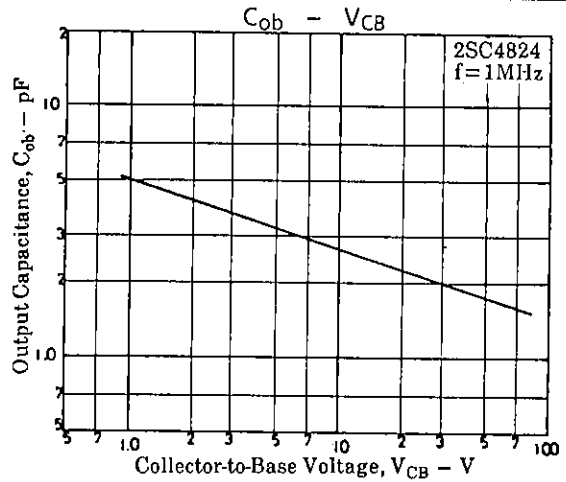
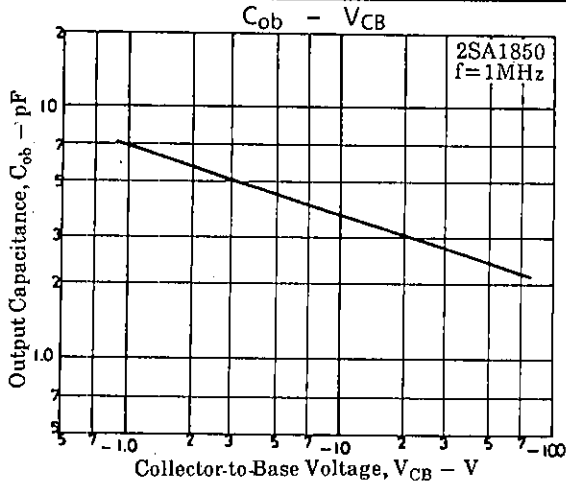
E : Emitter
C : Collector
B : Base

SANYO: FLP

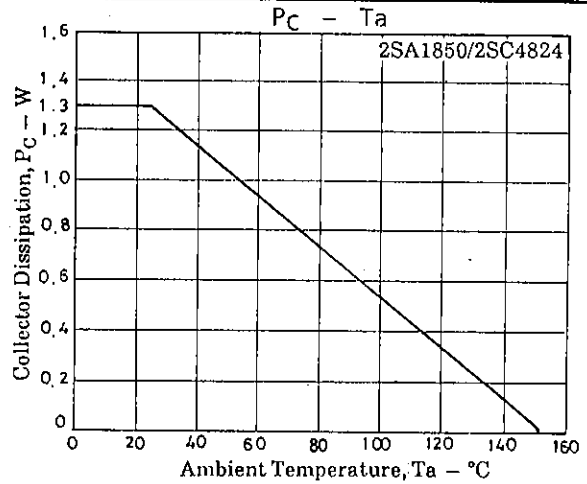
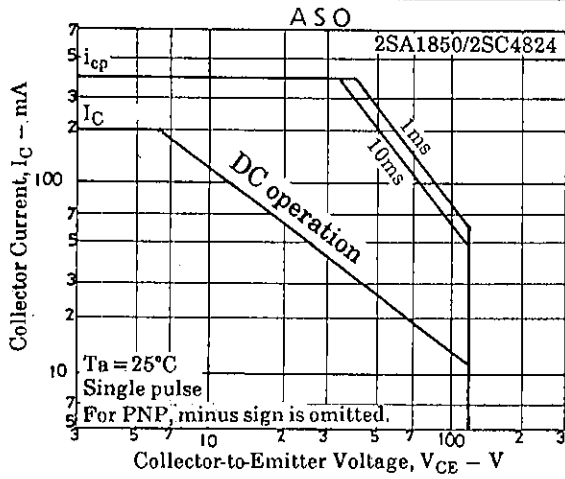
2SA1850/2SC4824



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