



No.3018

2SA1697/2SC4474

PNP/NPN Epitaxial Planar Silicon Transistors

High-Definition CRT Display,
Video Output Applications

Applications

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

Features

- High f_T : $f_T = 300\text{MHz}$
- High breakdown voltage: $V_{CEO} = 200\text{Vmin}$
- Small reverse transfer capacitance and excellent high frequency characteristic: $c_{re} = 2.2\text{pF/NPN}$, 2.7pF/PNP .
- Adoption of FBET process.
- Micaless type.

(): 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
Peak Collector Current	i_{cp}	(-)300	mA
Collector Dissipation	P_C	1.8	W
		10	W
		150	$^\circ\text{C}$
Junction Temperature	T_j		
Storage Temperature	T_{stg}	- 55 to + 150	$^\circ\text{C}$

$T_c = 50^\circ\text{C}$

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

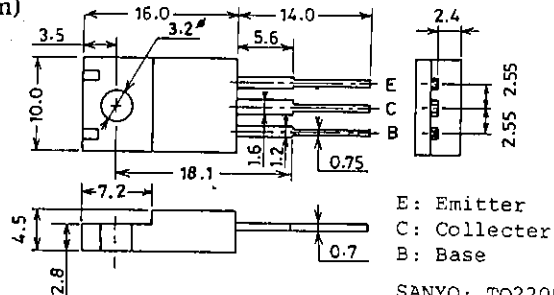
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)150\text{V}, I_E = 0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)2\text{V}, I_C = 0$			(-)1.0	μA
DC Current Gain	h_{FE1}	$V_{CE} = (-)10\text{V}, I_C = (-)10\text{mA}$	40*		320*	
	h_{FE2}	$V_{CE} = (-)10\text{V}, I_C = (-)100\text{mA}$	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
E-B Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)30\text{mA}, I_B = (-)3\text{mA}$			(-)1.0	V

* h_{FE1} : The 2SA1697/2SC4474 are classified by 10mA h_{FE} as follows:

40	C	80	60	D	120	100	E	200	160	F	320
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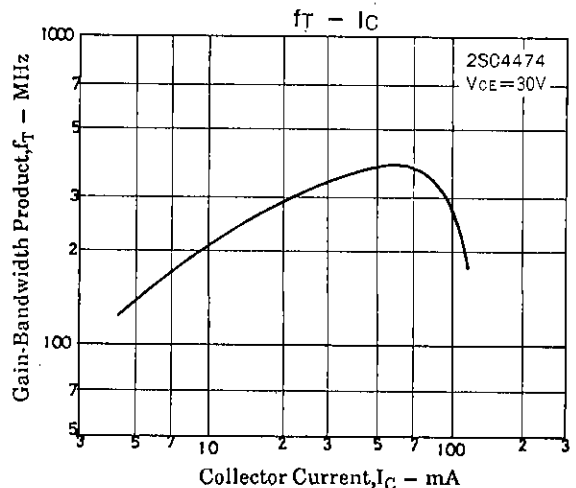
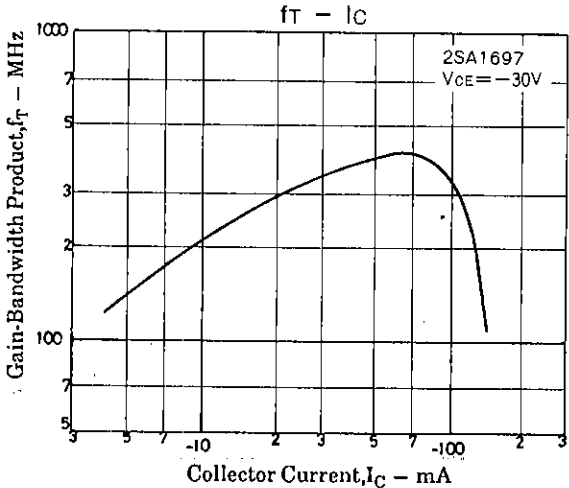
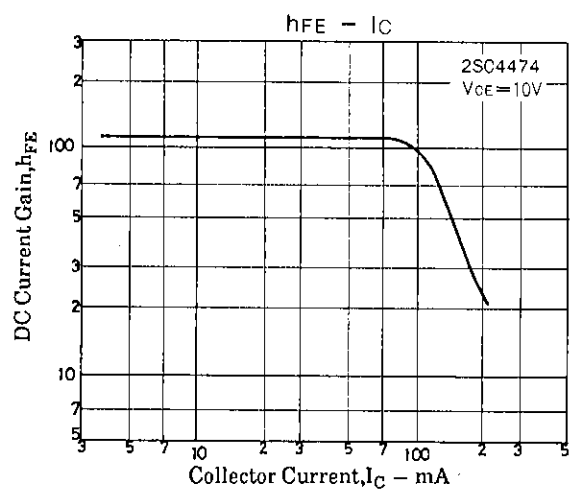
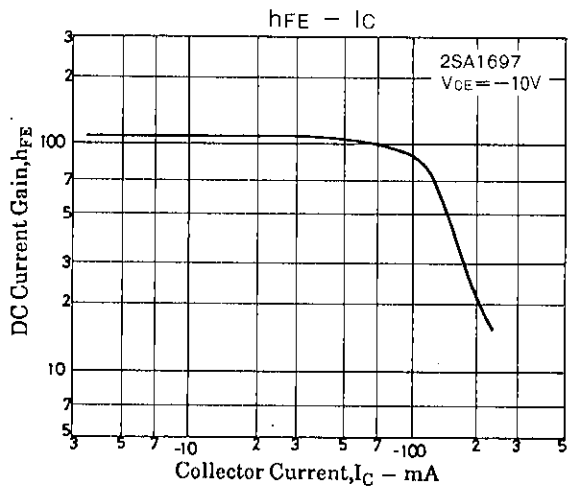
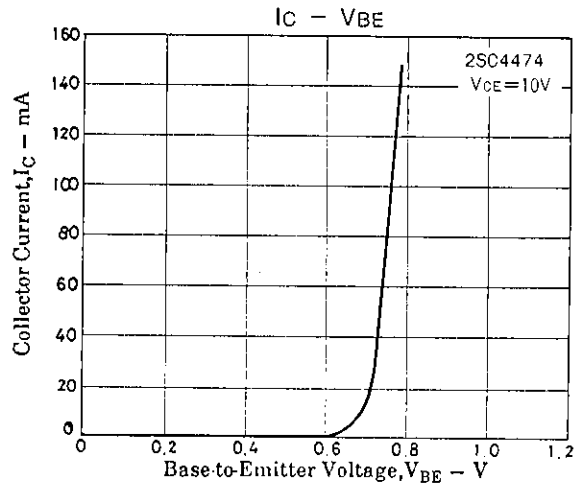
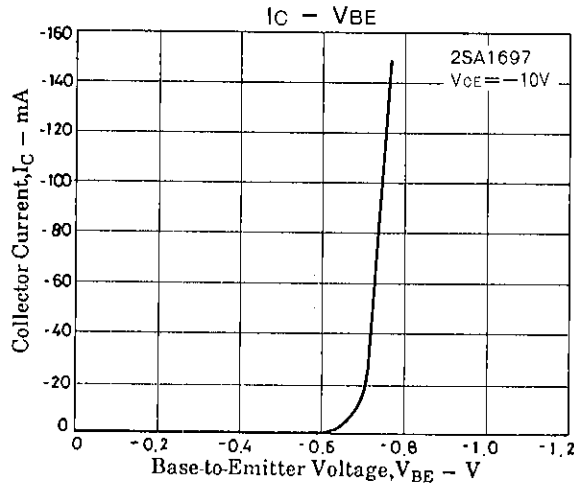
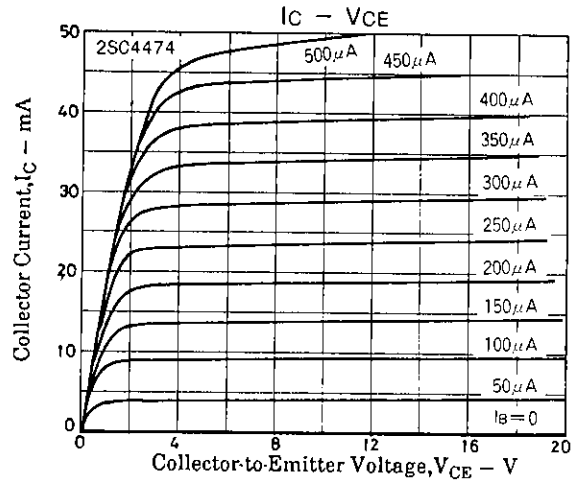
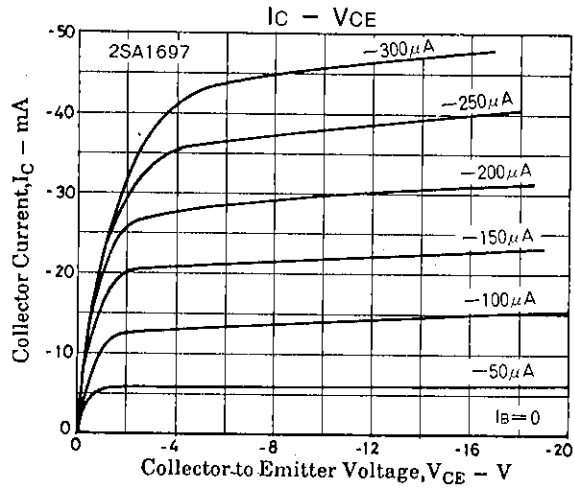
Package Dimensions 2041

(unit: mm)

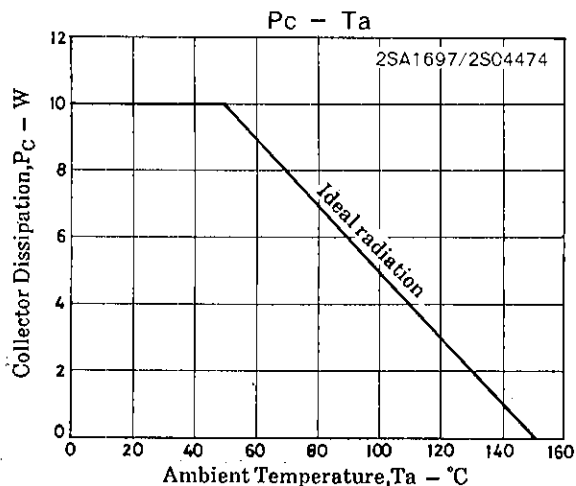
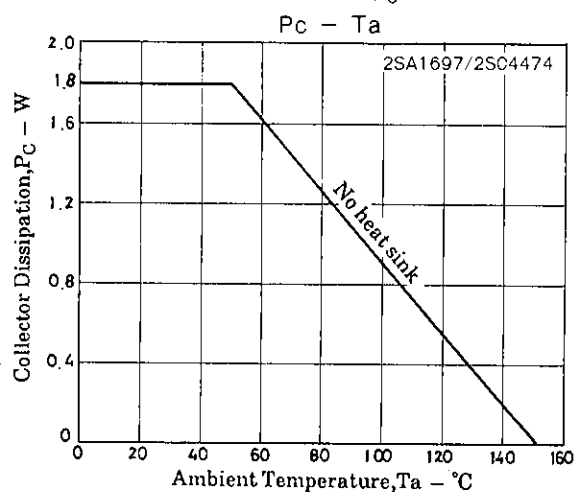
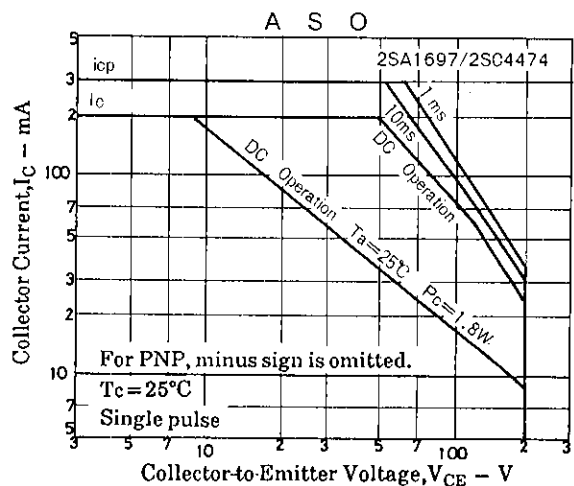
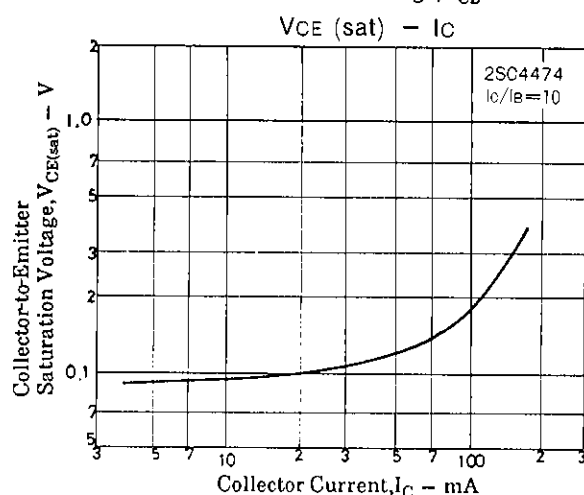
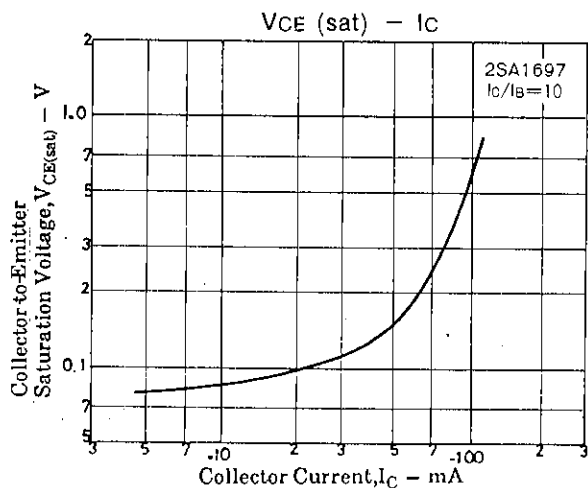
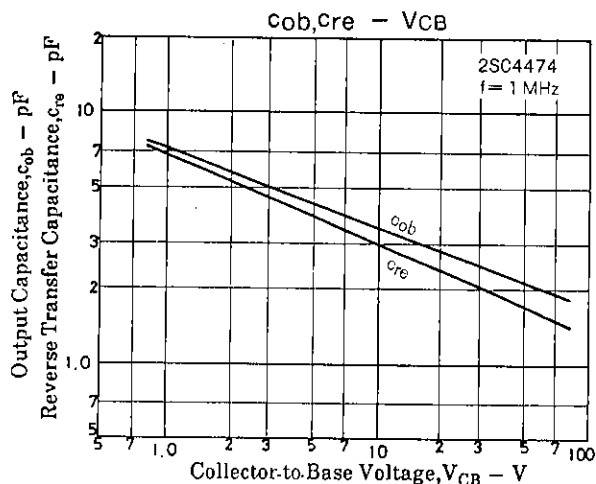
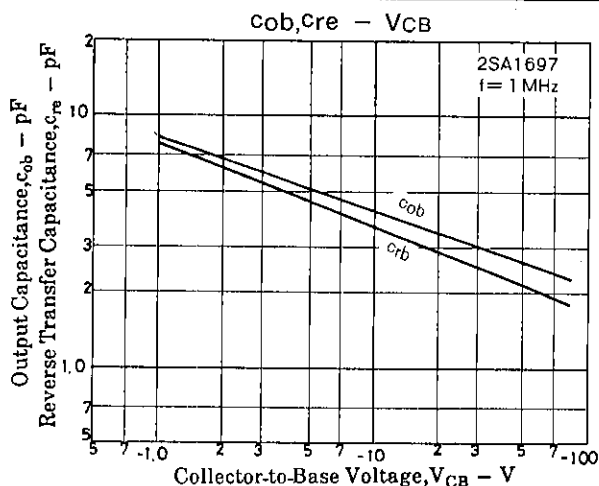


E: Emitter
C: Collector
B: Base
SANYO: TO220ML

2SA1697/2SC4474



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