

2SA1697/2SC4474

High-Definition CRT Display, Video Output Applications

Applications

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

Features

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

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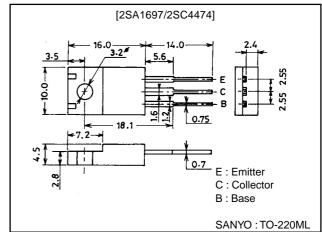
Specifications

Absolute Maximum Ratings at Ta = 25°C

Package Dimensions

unit:mm

2041



Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		(-)200	V
Collector-to-Emitter Voltage	VCEO		(-)200	V
Emitter-to-Base Voltage	V _{EBO}		(–)3	V
Collector Current	IC		(-)200	mA
Collector Current (Pulse)	ICP		(–)300	mA
Collector Dissipation	PC		1.8	W
		Tc=50°C	10	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)150V, I _E =0			(-)0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)2V, I _C =0			(–)1.0	μA
DC Current Gain	h _{FE} 1	V _{CE} =(-)10V, I _C =(-)10mA	40*		320*	
	h _{FE} 2	V _{CE} =(-)10V, I _C =(-)100mA	20			
Gain-Bandwidth Product	f⊤	V _C E=(-)30V, I _C =(-)50mA		300		MHz

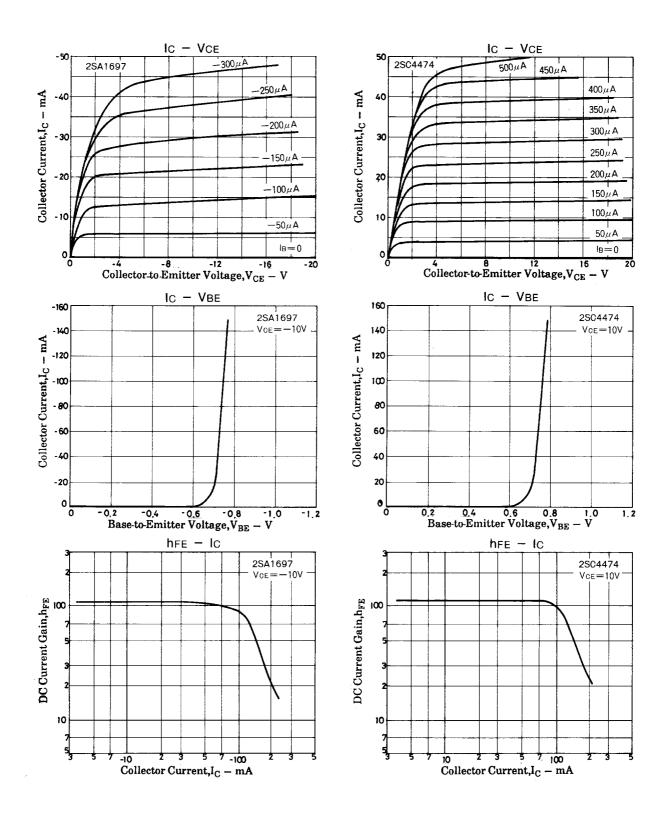
^{*} $h_{\mbox{\scriptsize FE}}1$: The 2SA1697/2SC4474 are classified by 10mA $h_{\mbox{\scriptsize FE}}$ as follows :

	40	С	80	60	D	120	100	Ε	200	160	F	320
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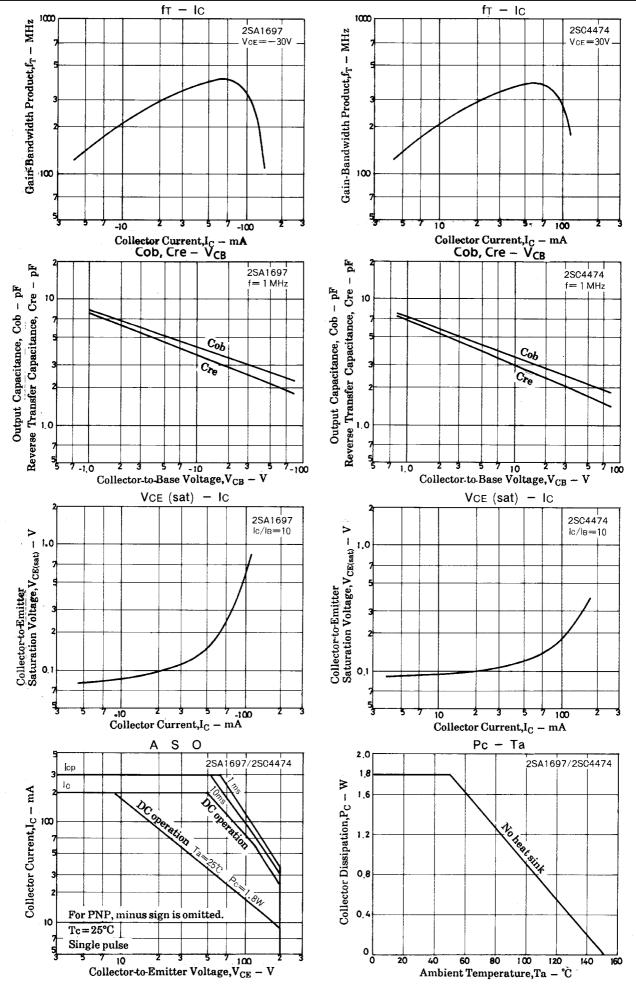
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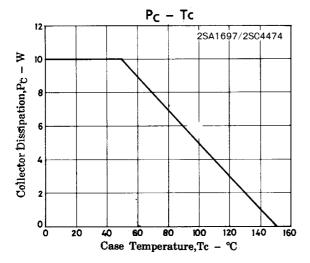
2SA1697/2SC4474

Parameter	Symbol	Conditions		Ratings			
Falanetei	Syllibol	Conditions	min	typ	max	Unit	
Output Capacitance	C _{ob}	V _{CB} =(-)30V, f=1MHz		2.7		pF	
				(3.2)		pF	
Reverse Transfer Capacitance	C _{re}	V _{CB} =(-)30V, f=1MHz		2.2		pF	
				(2.7)		pF	
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)30mA, I _B =(-)3mA			(-)1.0	V	
Emitter-to-Base Saturation Voltage	V _{BE(sat)}	I _C =(-)30mA, I _B =(-)3mA			(–)1.0	V	



2SA1697/2SC4474





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