

SANYO

No.2526

2SA1474/2SC3780

PNP/NPN Epitaxial Planar Type

Silicon Transistors

VERY HIGH-DEFINITION CRT DISPLAY

VIDEO OUTPUT APPLICATIONS

Applications

- Video output
- Color TV chroma output
- Wide-band amp

Features

- High f_T (f_T typ=800MHz)
- Small reverse transfer capacitance and excellent high frequency characteristic (c_{re} =3.0pF(NPN), 4.7pF(PNP))
- Complementary PNP and NPN types
- Adoption of FBET process

(): 2SA1474

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

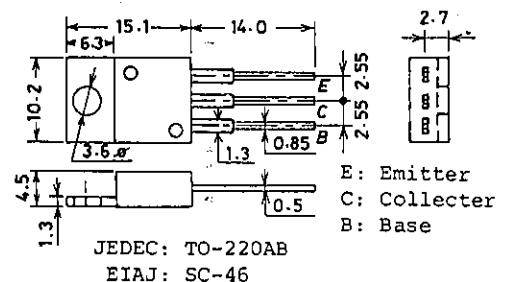
			unit
Collector-to-Base Voltage	V_{CBO}	(-)80	V
Collector-to-Emitter Voltage	V_{CEO}	(-)60	V
Emitter-to-Base Voltage	V_{EBO}	(-)4	V
Collector Current	I_C	(-)800	mA
Peak Collector Current	i_{cp}	(-)1	A
Collector Dissipation	P_C	1.5	W
	$T_c=50^{\circ}\text{C}$	15	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
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}	$V_{CB}=(-)60\text{V}, I_E=0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)2\text{V}, I_C=0$			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$	40*		320*	
	$h_{FE}(2)$	$V_{CE}=(-)10\text{V}, I_C=(-)400\text{mA}$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}, I_C=(-)100\text{mA}$		800		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)100\text{mA}, I_B=(-)10\text{mA}$			0.6	V
					(-0.8)	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)100\text{mA}, I_B=(-)10\text{mA}$			(-)1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)60			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)100\mu\text{A}, I_C=0$	(-)4			V
Output Capacitance	c_{ob}	$V_{CB}=(-)30\text{V}, f=1\text{MHz}$		3.5(5.3)		pF
Reverse Transfer Capacitance	c_{re}	$V_{CB}=(-)30\text{V}, f=1\text{MHz}$		3.0(4.7)		pF

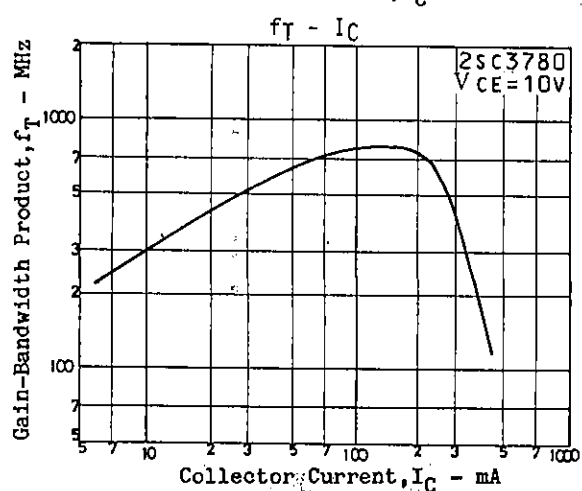
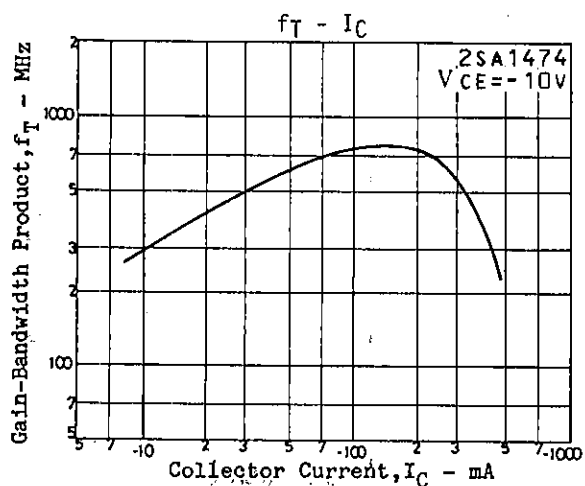
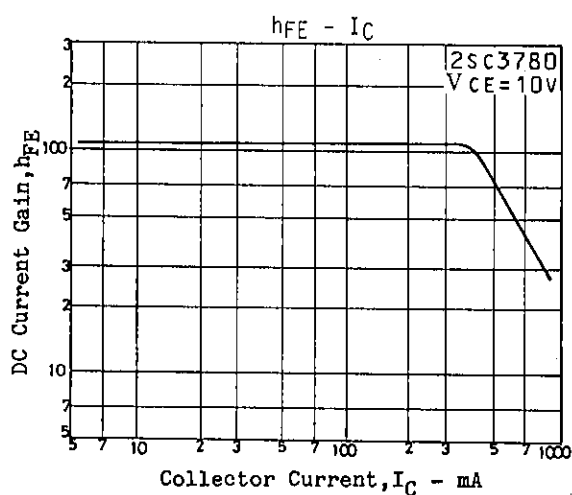
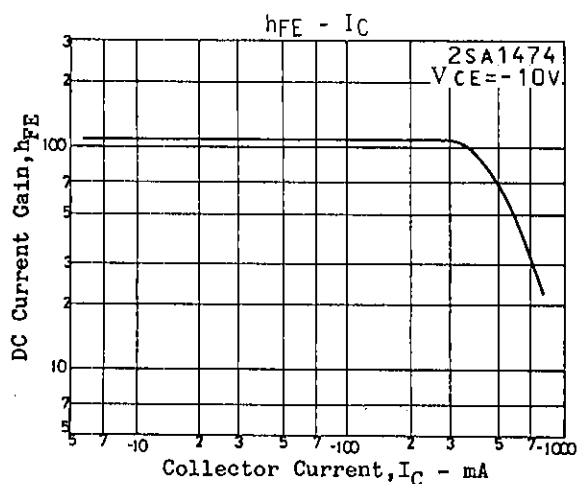
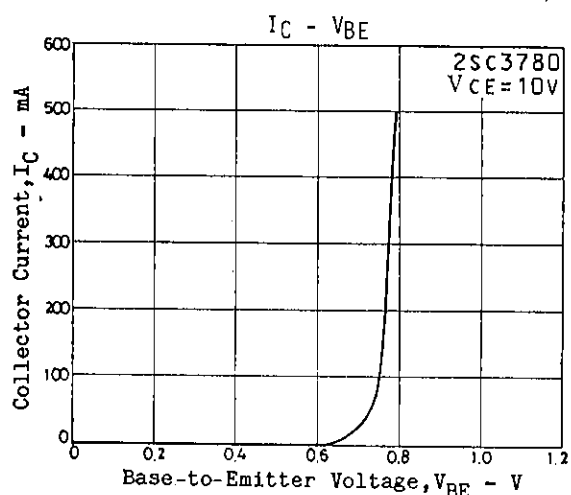
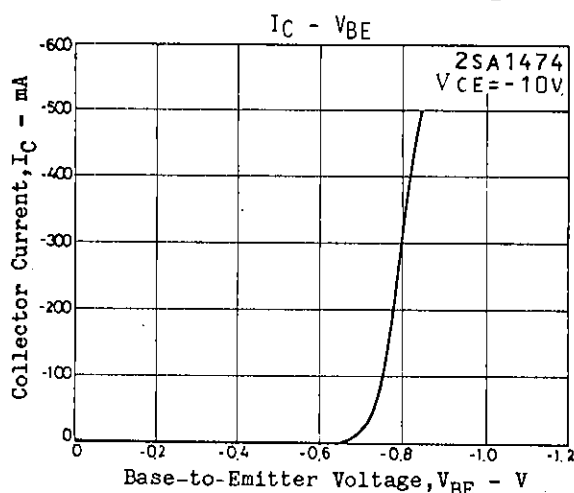
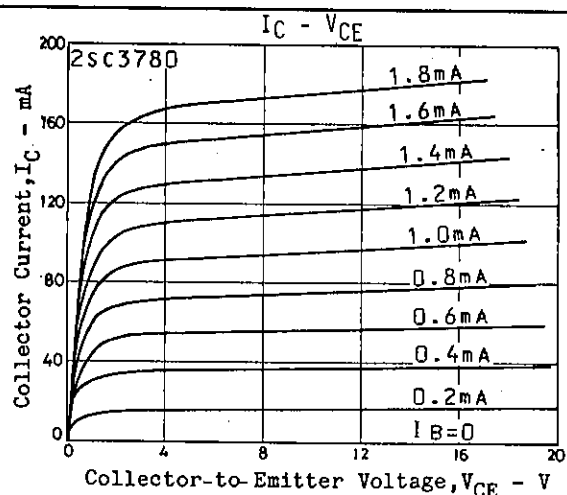
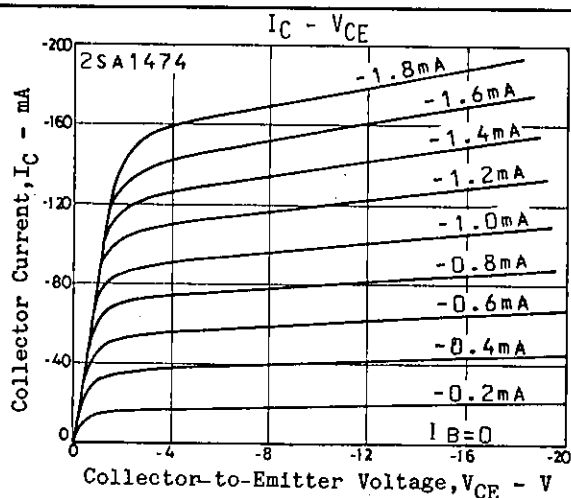
*: The 2SA1474/2SC3780 are classified by 50mA h_{FE} as follows:

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

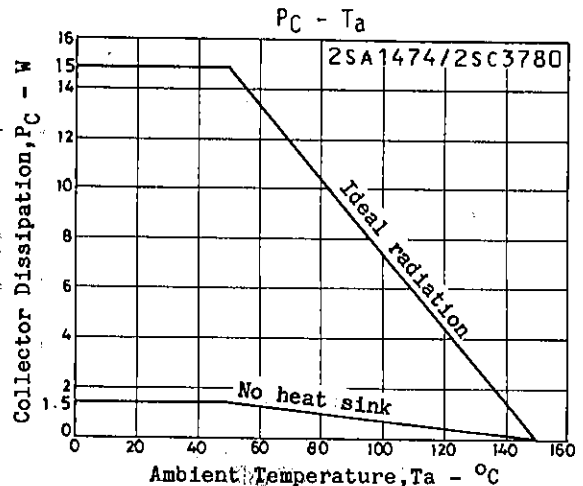
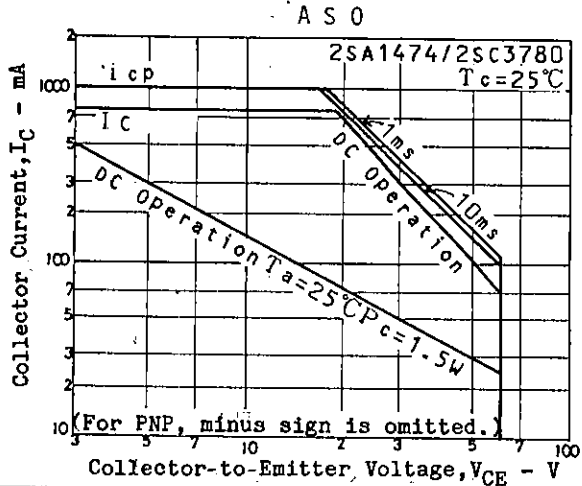
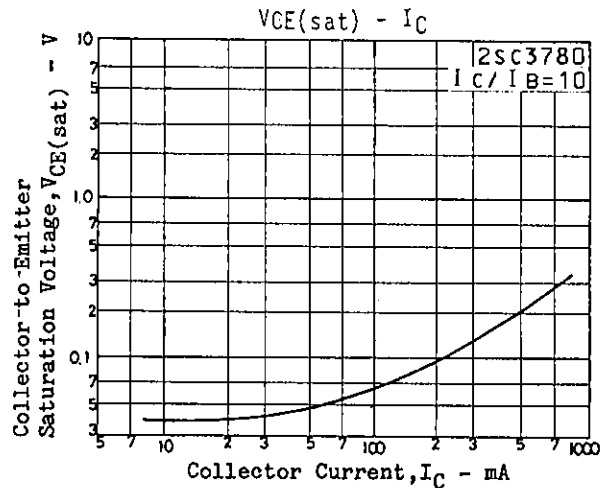
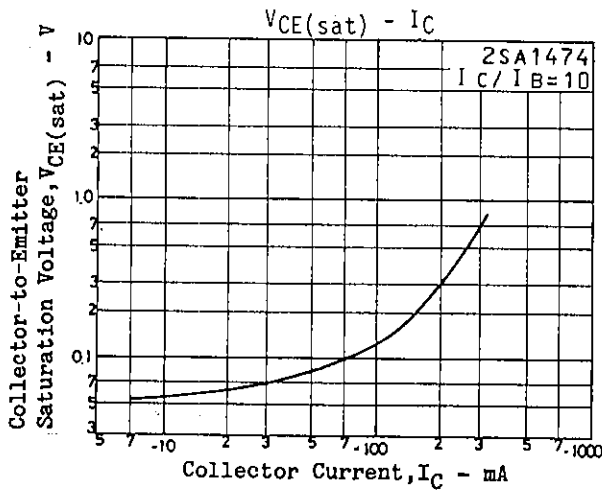
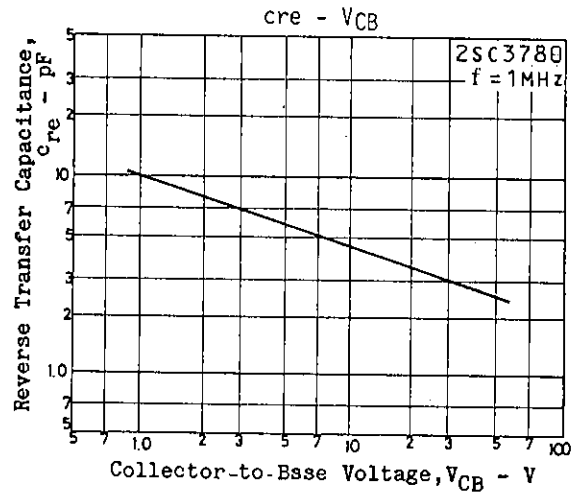
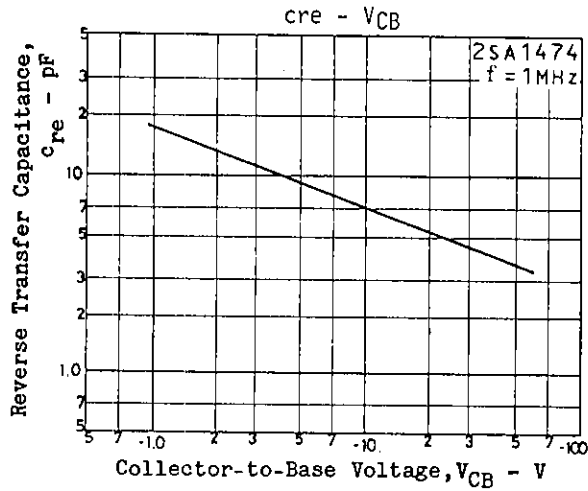
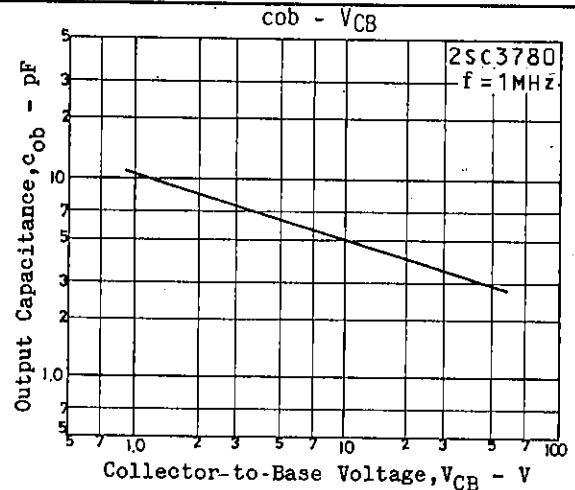
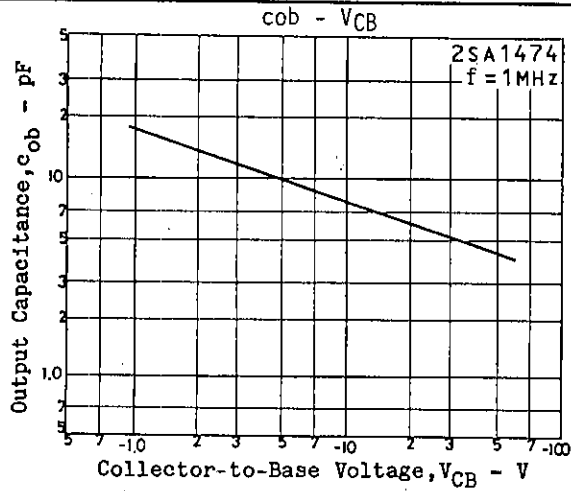
Package Dimensions 2010A
(unit: mm)

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2SA1474/2SC3780



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