

SANYO

No.2528A

2SA1476/2SC3782

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=400MHz)
- . High breakdown voltage ($V_{CEO} \geq 200V$)
- . Small reverse transfer capacitance and excellent high frequency characteristic ($c_{re} = 2.1pF$ (NPN), $2.6pF$ (PNP))
- . Complementary PNP and NPN types
- . Adoption of FBET process

(): 2SA1476

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

			unit
Collector-to-Base Voltage	V_{CBO}	(-)200	V
Collector-to-Emitter Voltage	V_{CEO}	(-)200	V
Emitter-to-Base Voltage	V_{EBO}	(-)4	V
Collector Current	I_C	(-)200	mA
Peak Collector Current	i_{cp}	(-)300	mA
Collector Dissipation	P_C	1.5	W
	$T_c = 50^\circ C$	15	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

Electrical Characteristics at $T_a = 25^\circ C$

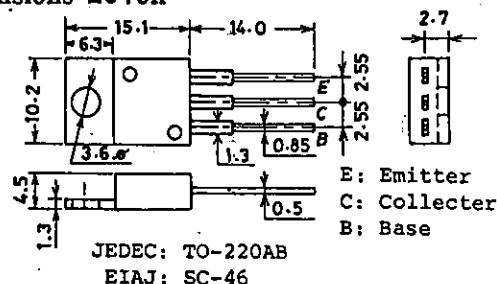
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)150V, I_E = 0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)2V, I_C = 0$			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = (-)10V, I_C = (-)10mA$	40*		320*	
	$h_{FE}(2)$	$V_{CE} = (-)10V, I_C = (-)100mA$	20			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)30V, I_C = (-)50mA$		400		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)50mA, I_E = (-)5mA$			0.6	V
					(-0.8)	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)50mA, I_E = (-)5mA$			(-)1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	(-)200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)200			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)100\mu A, I_C = 0$	(-)4			V
Output Capacitance	c_{ob}	$V_{CB} = (-)30V, f = 1MHz$		2.6(3.1)		pF
Reverse Transfer Capacitance	c_{re}	$V_{CB} = (-)30V, f = 1MHz$		2.1(2.6)		pF

*: The 2SA1476/2SC3782 are classified by 10mA h_{FE} as follows:

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

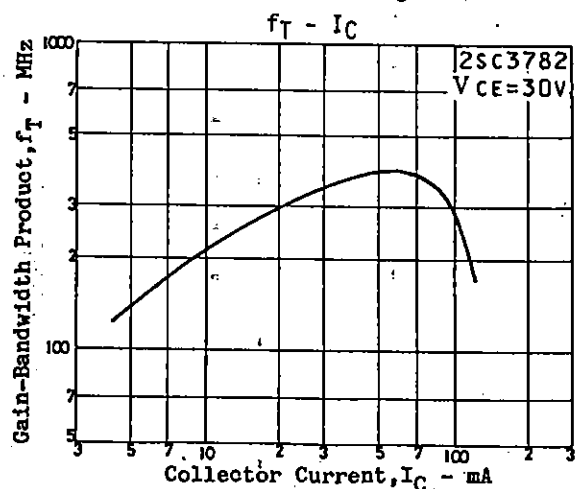
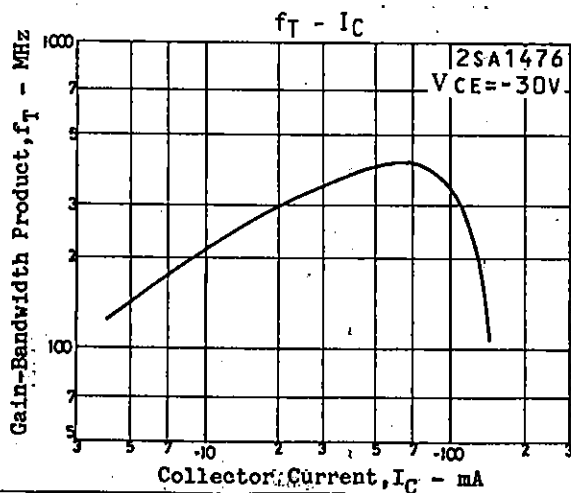
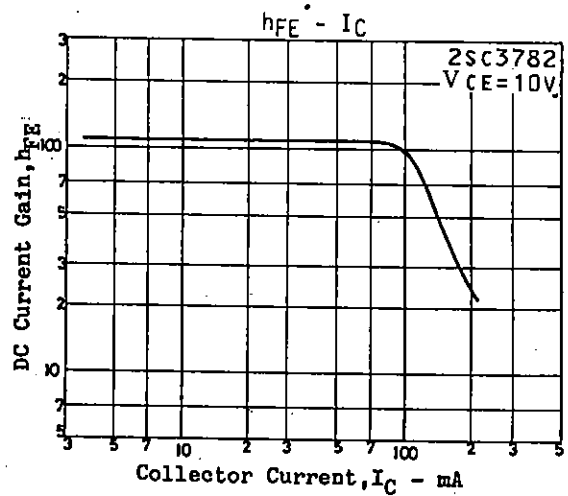
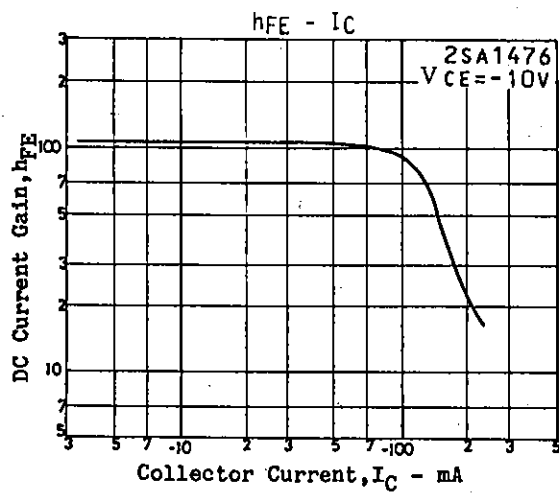
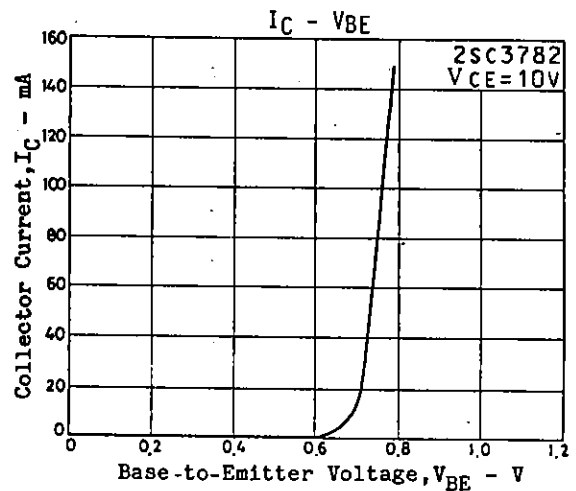
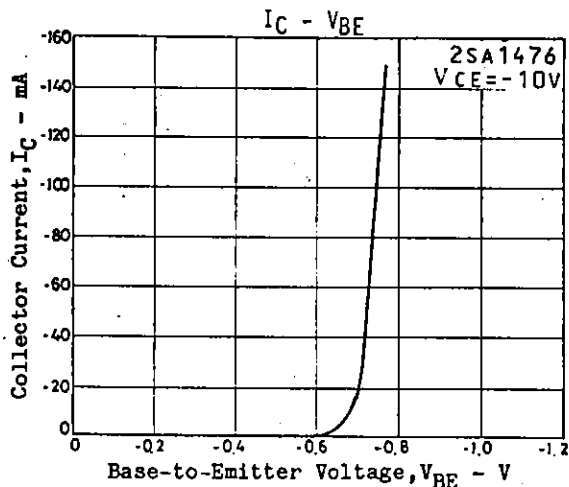
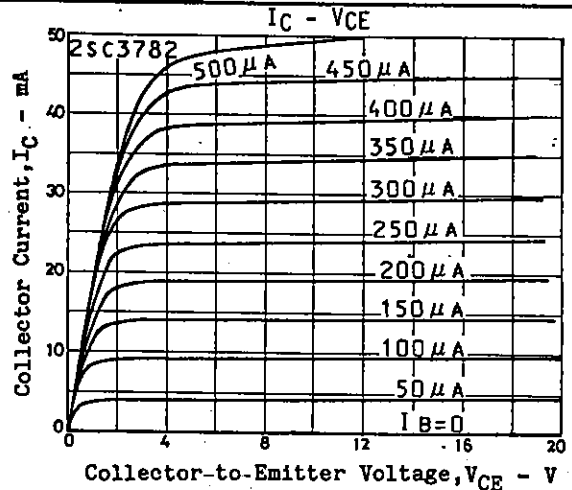
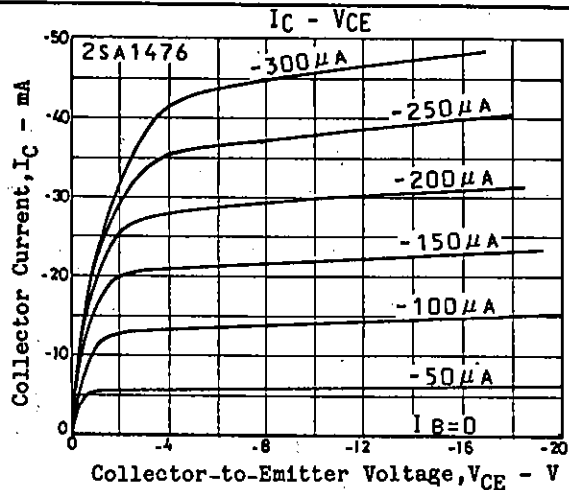
Package Dimensions 2010A

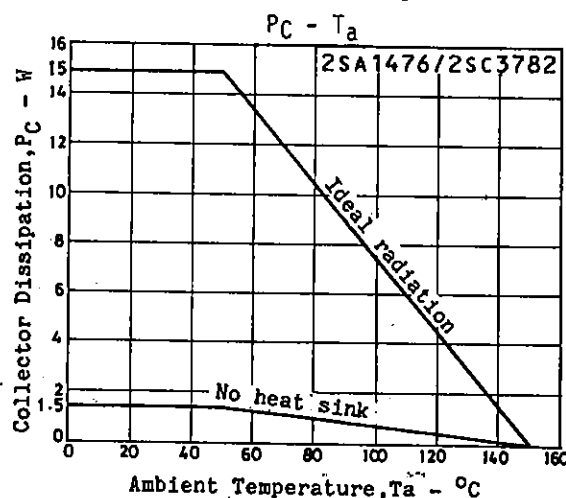
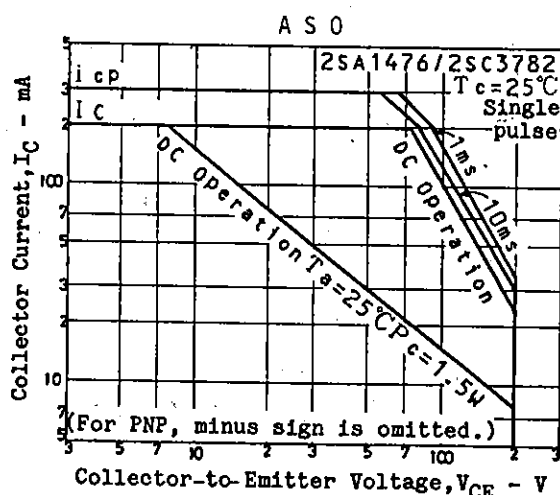
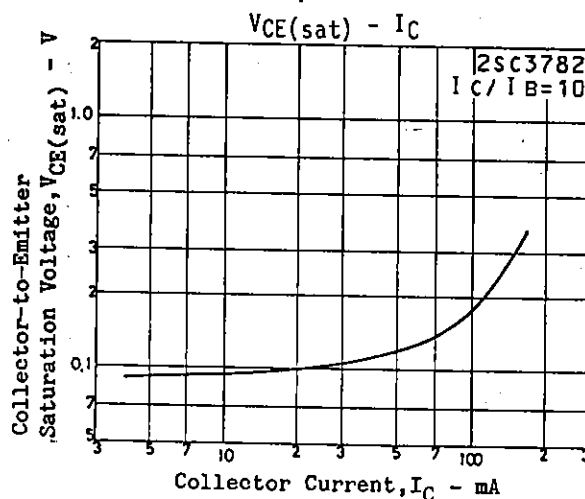
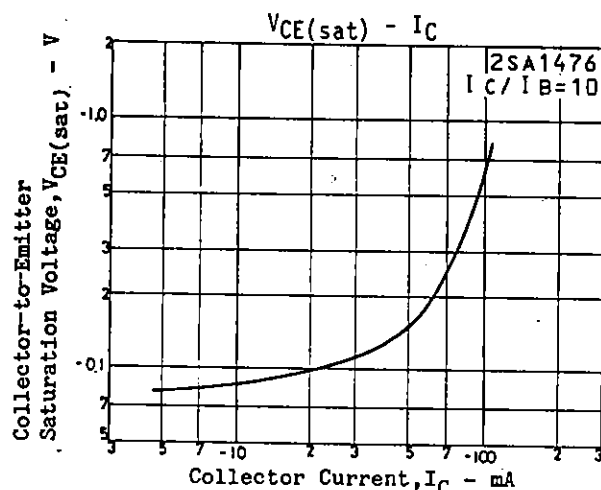
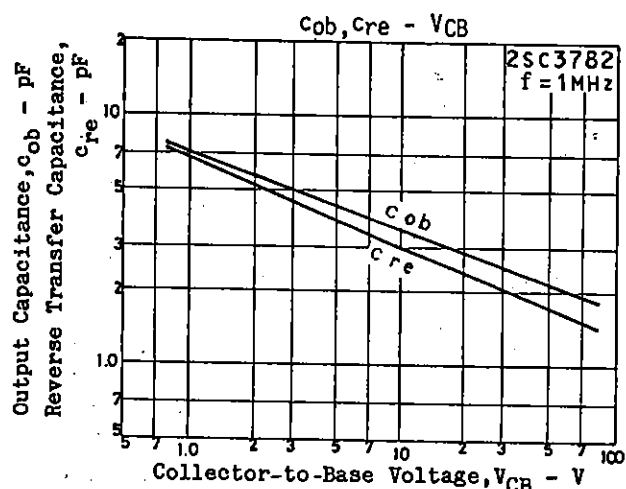
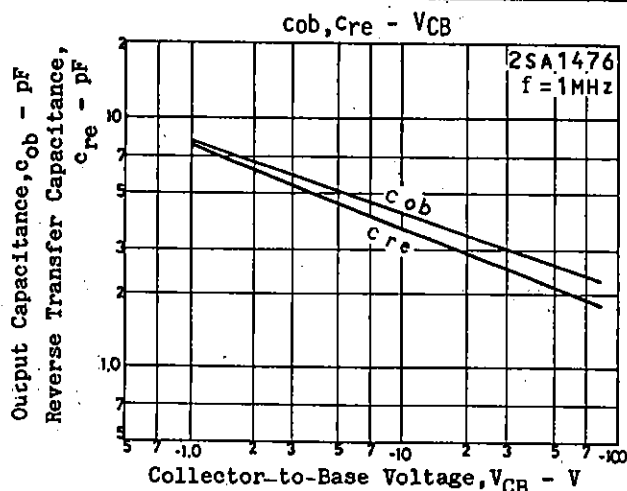
(unit: mm)



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