

<b>SANYO</b>	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	$^\circ C$

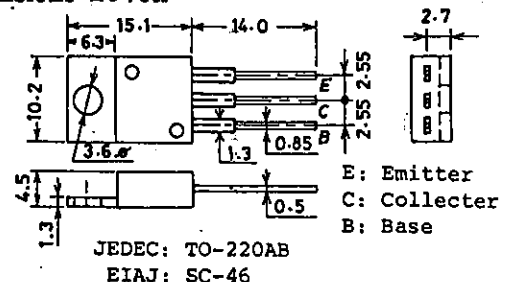
**Electrical Characteristics at  $T_a = 25^\circ C$**

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-)150V, I_B = 0$			(-)0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)2V, I_C = 0$			(-)1.0	$\mu A$
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	$V_{CE(sat)}$	$I_C = (-)50mA, I_B = (-)5mA$			0.6	V
					(-0.8)	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)50mA, I_B = (-)5mA$			(-)1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	(-)200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BF} = \infty$	(-)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

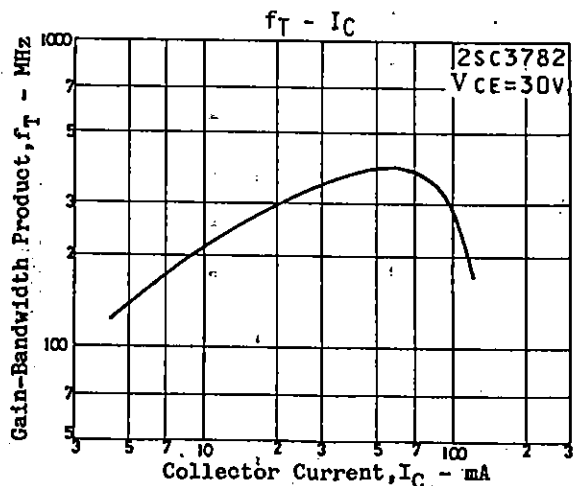
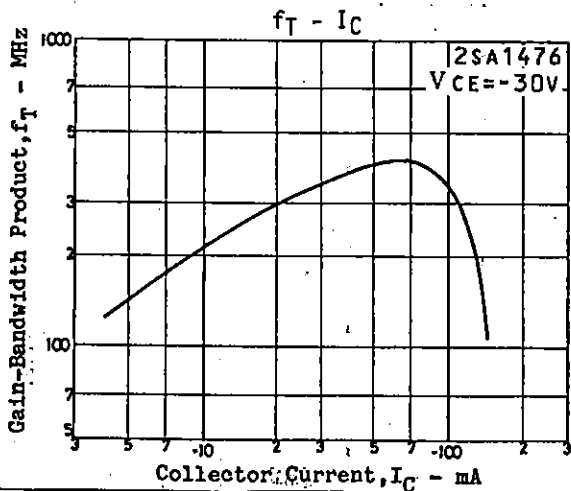
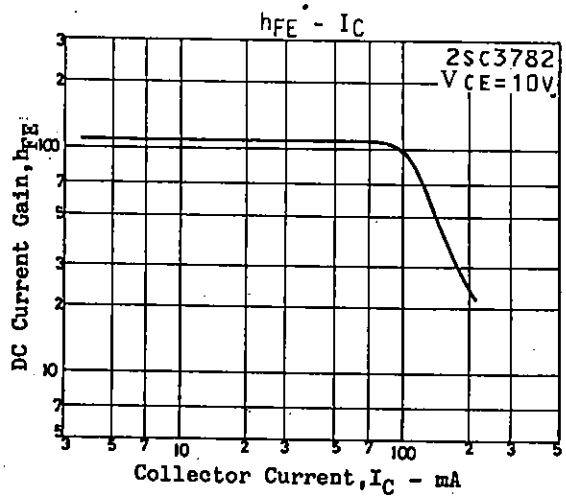
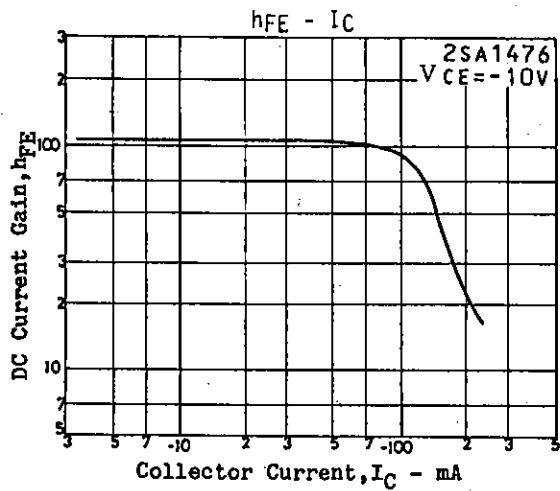
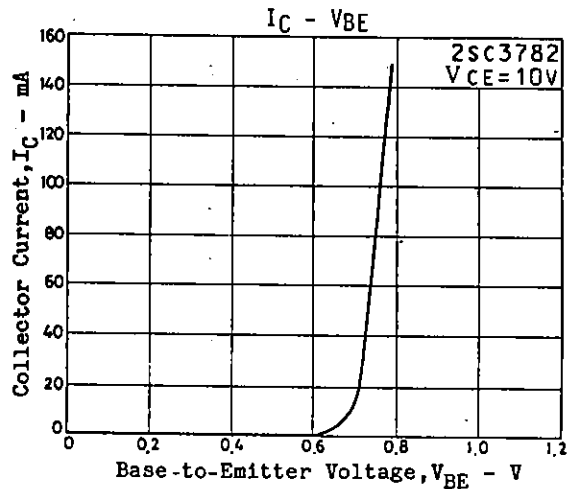
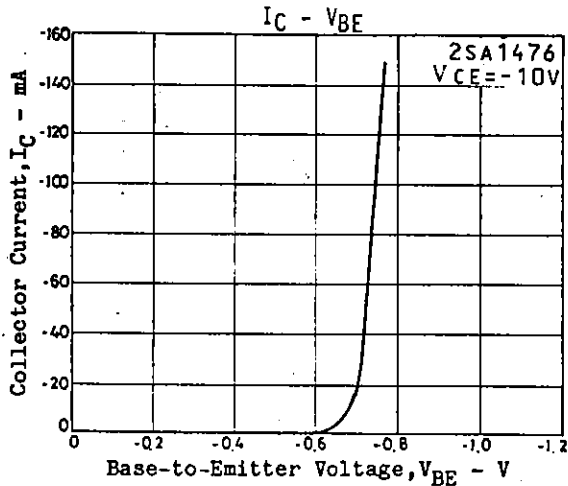
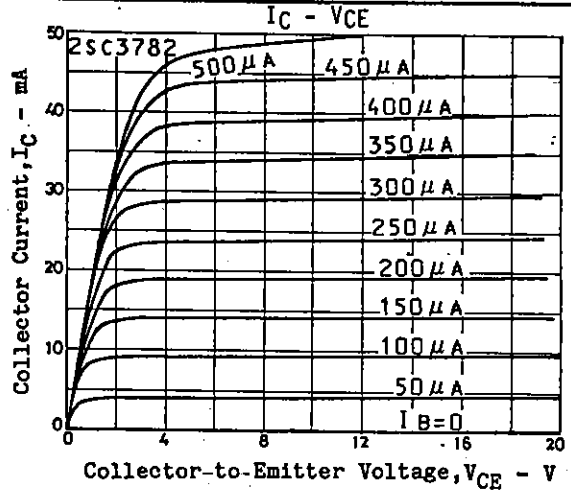
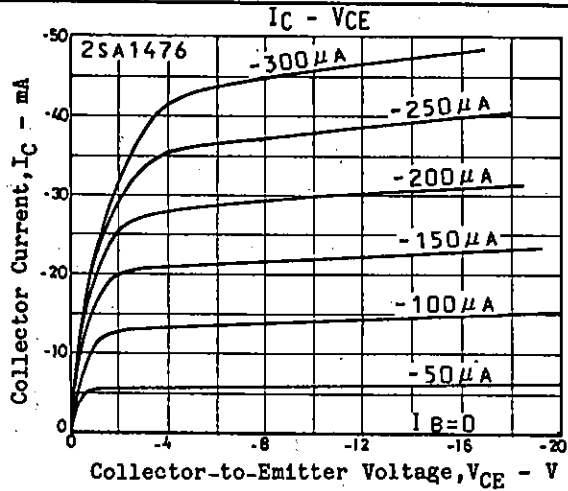
\*: The 2SA1476/2SC3782 are classified by 10mA  $h_{FE}$  as follows:

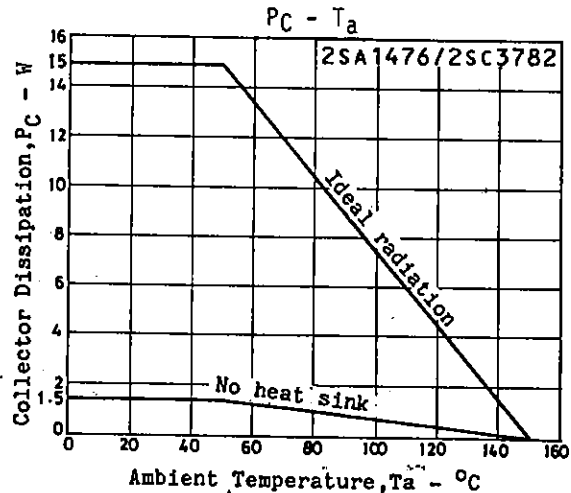
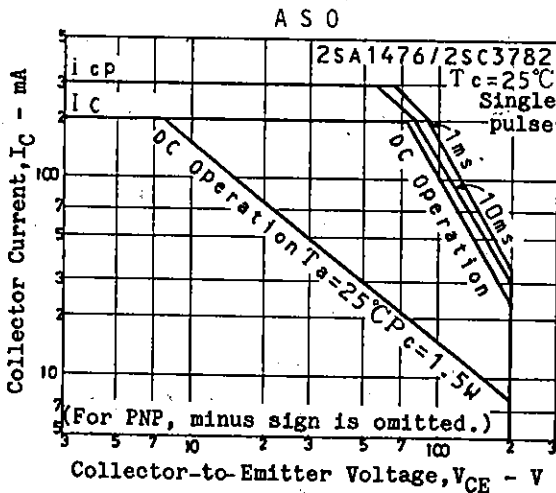
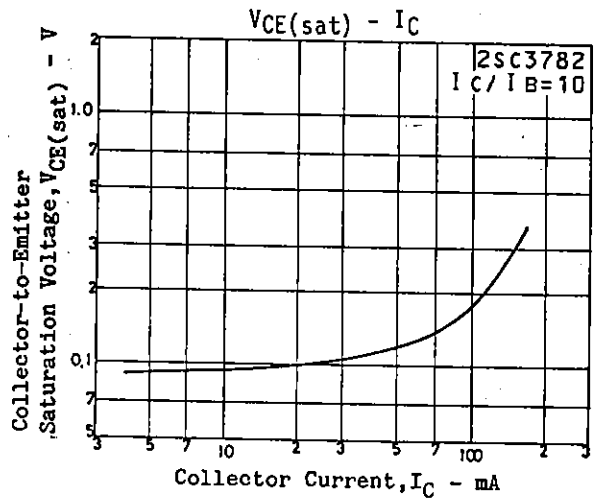
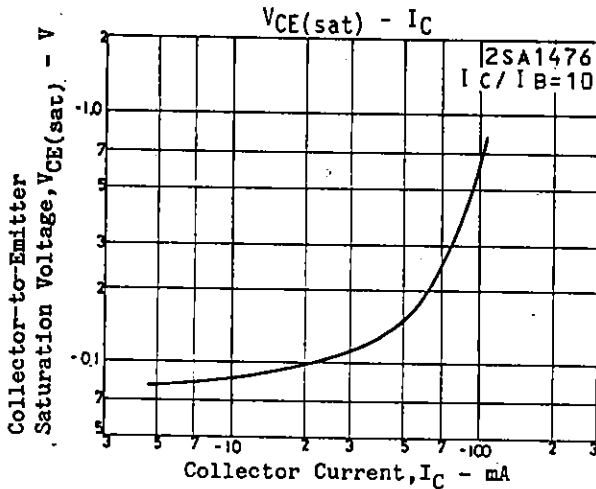
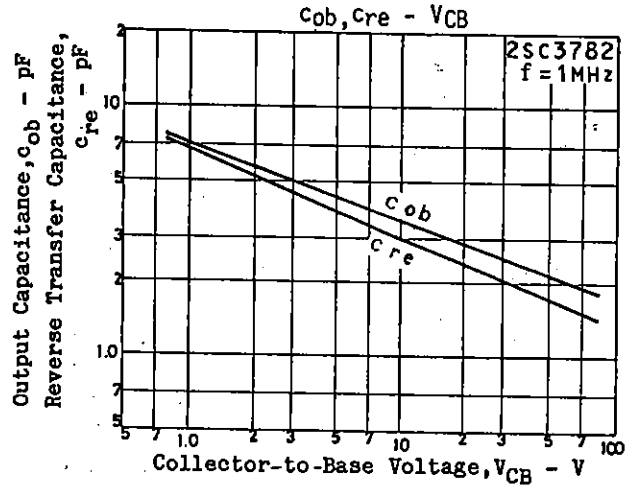
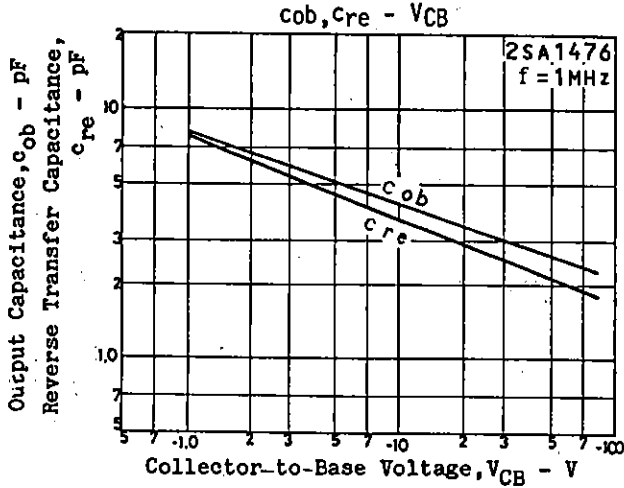
40	C	80	60	D	120
100	E	200	160	F	320

**Package Dimensions 2010A**  
(unit: mm)



2SA1476/2SC3782





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