


Ordering number: EN 2528A

	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 Ta=25°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
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 to +150	°C

**Electrical Characteristics at Ta=25°C**

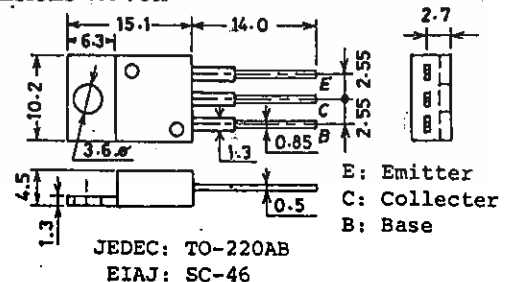
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=(-)150V, I_E=0$			(-)0.1	µA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)2V, I_C=0$			(-)1.0	µA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)10V, I_C=(-)10mA$	40*		320*	
	$h_{FE}(2)$	$V_{CE}=(-)10V, I_C=(-)100mA$	20			
Gain-Bandwidth Product	$f_T$	$V_{CE}=(-)30V, I_C=(-)50mA$		400		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)50mA, I_B=(-)5mA$			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	$V_{(BR)CBO}$	$I_C=(-)10µA, I_E=0$	(-)200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-)200			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)100µA, I_C=0$	(-)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:

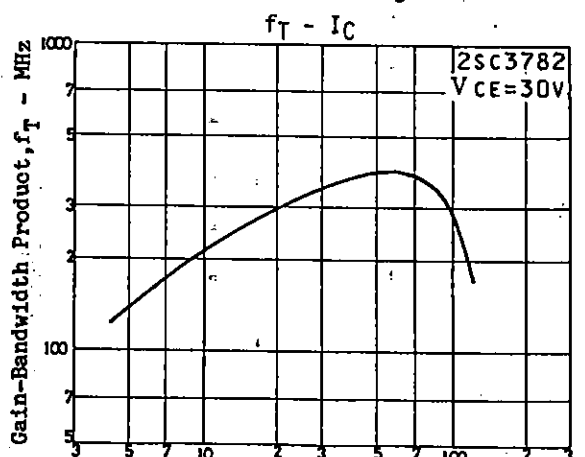
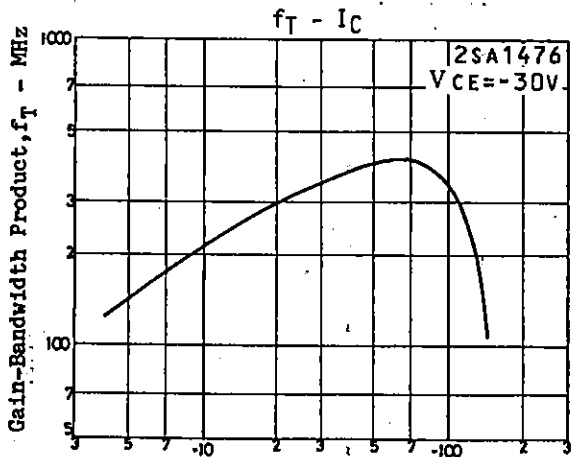
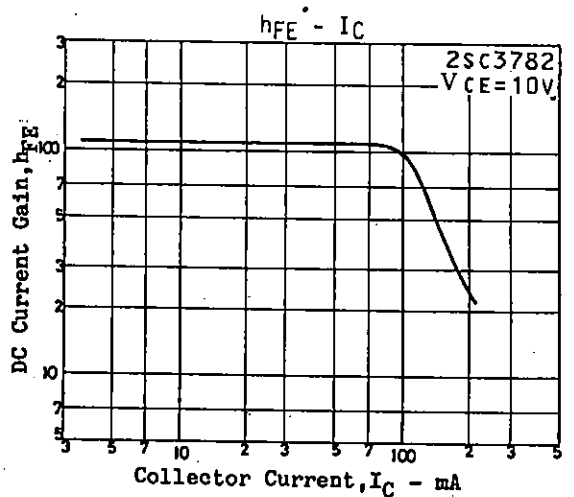
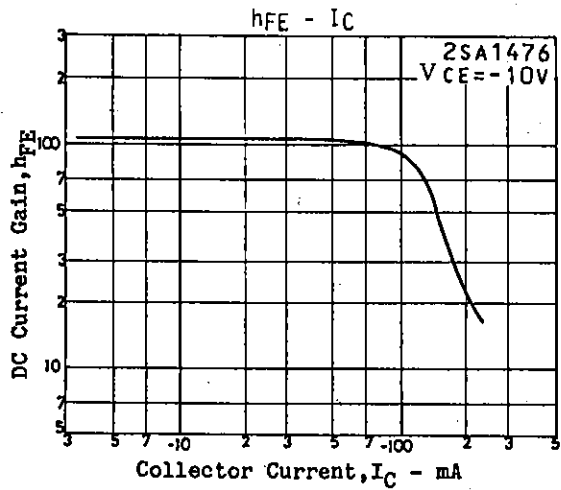
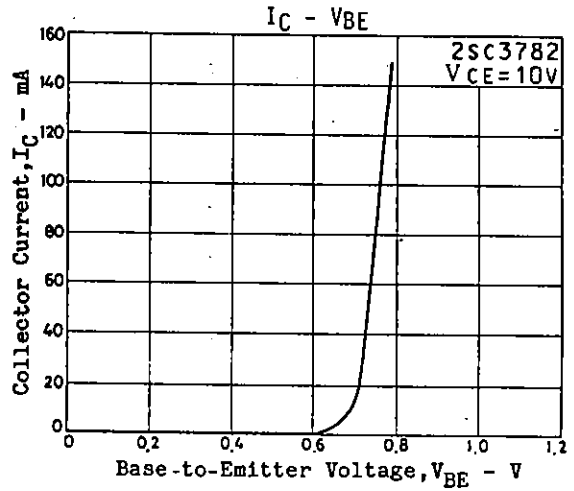
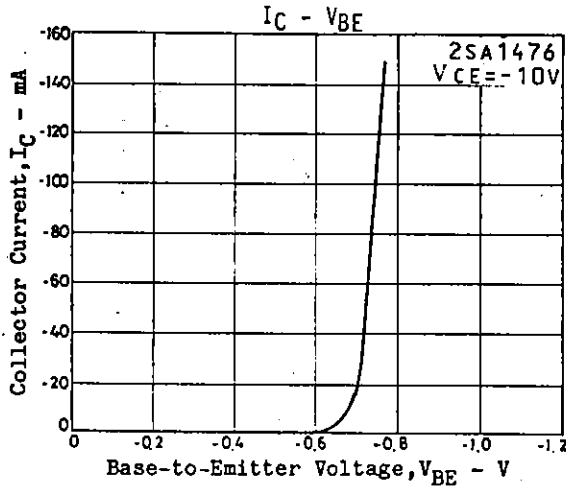
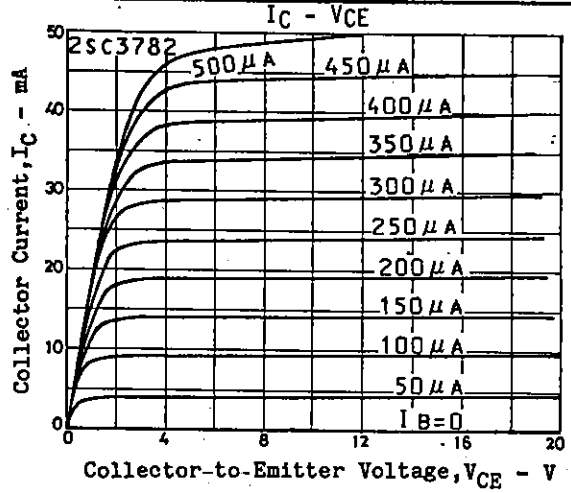
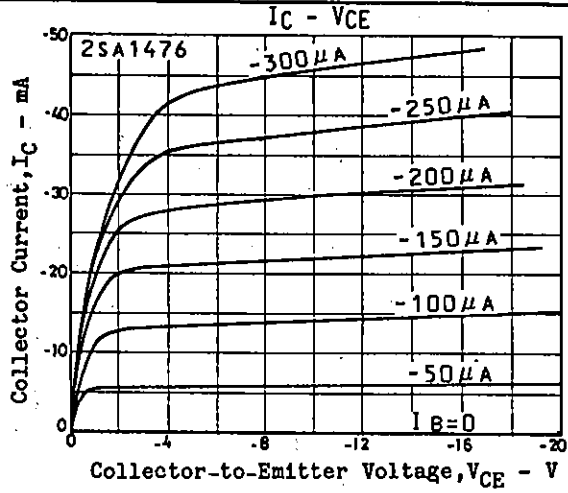
40	C	80	60	D	120
100	E	200	160	F	320

**Package Dimensions 2010A**

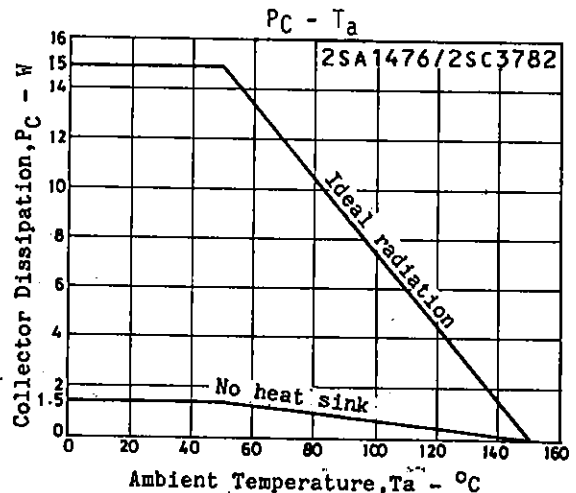
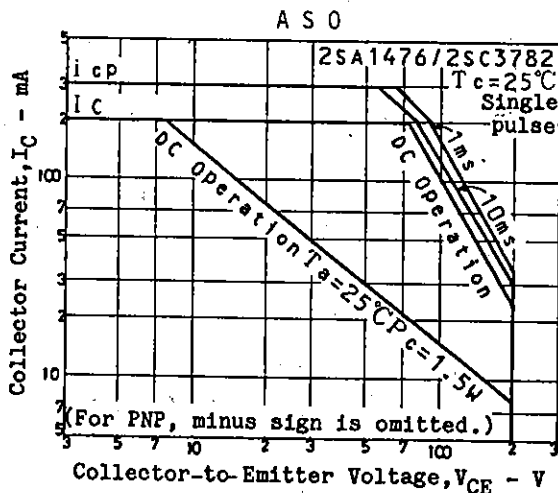
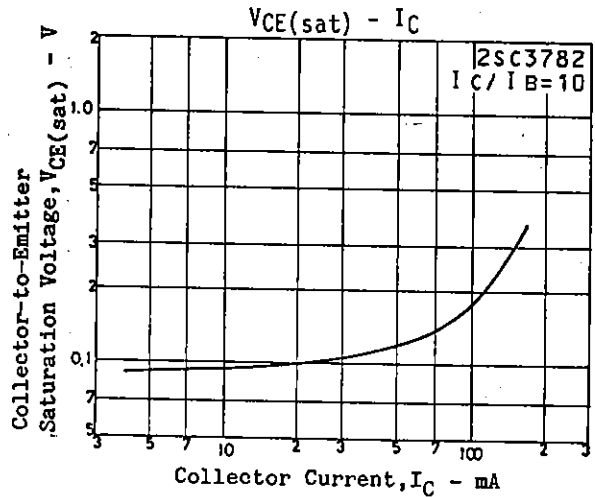
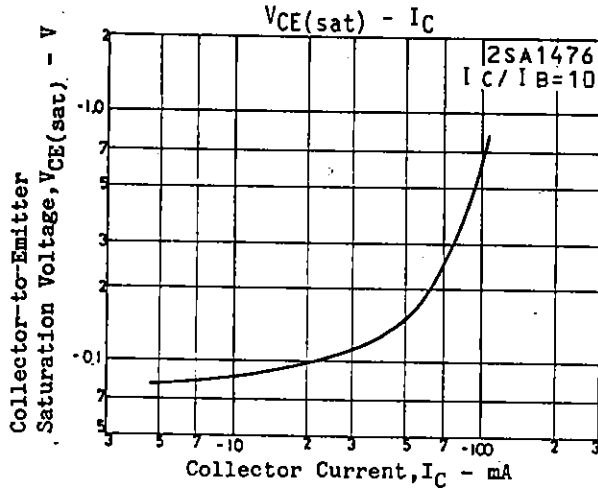
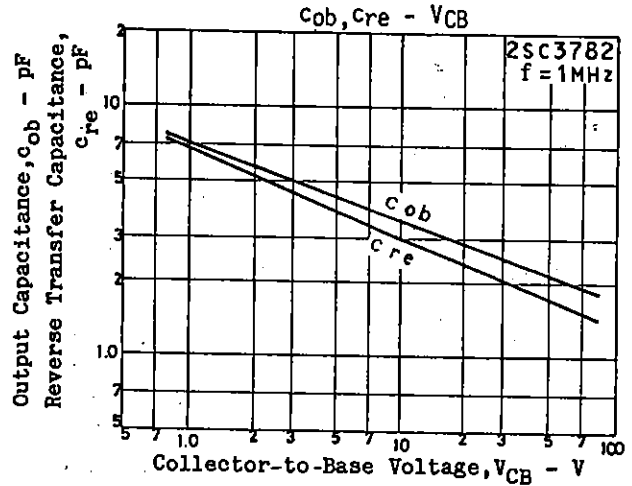
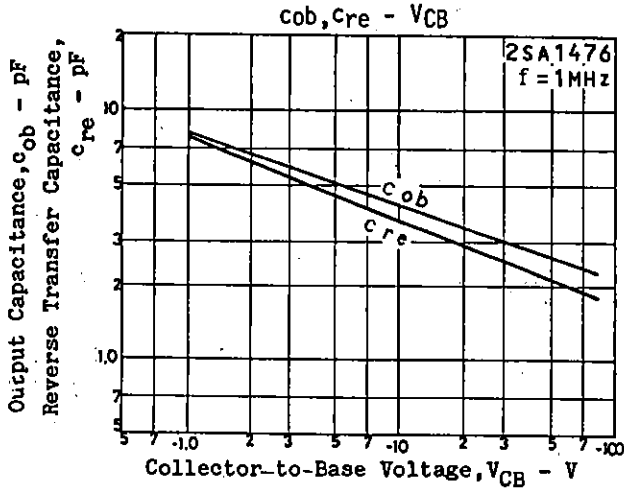
(unit: mm)



2SA1476/2SC3782



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