

**SANYO**

No.2254

2SA1480/2SC3790

PNP/NPN Epitaxial Planar Type  
Silicon Transistors

HIGH-DEFINITION CRT DISPLAY  
VIDEO OUTPUT APPLICATIONS

**Features**

- . High breakdown voltage ( $V_{CEO} \geq 300V$ )
- . Small reverse transfer capacitance and excellent high frequency characteristic  
 $c_{re} = 1.8pF$  (NPN),  $2.3pF$  (PNP)
- . Adoption of MBIT process

( ): 2SA1480

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

			unit
Collector-to-Base Voltage	$V_{CB0}$	(-)300	V
Collector-to-Emitter Voltage	$V_{CEO}$	(-)300	V
Emitter-to-Base Voltage	$V_{EB0}$	(-)5	V
Collector Current	$I_C$	(-)100	mA
Peak Collector Current	$i_{cp}$	(-)200	mA
Collector Dissipation	$P_C$	1.5	W
		7	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

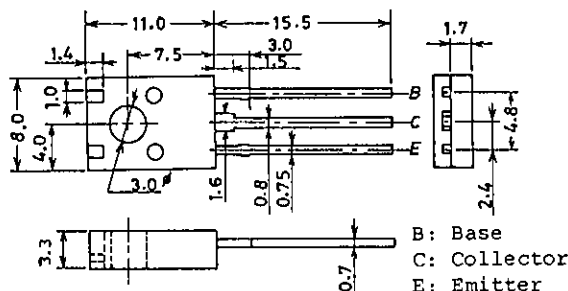
**Electrical Characteristics at  $T_a = 25^\circ C$**

			min	typ	max	unit
Collector Cutoff Current	$I_{CB0}$	$V_{CB} = (-)200V, I_E = 0$			(-)0.1	$\mu A$
Emitter Cutoff Current	$I_{EB0}$	$V_{EB} = (-)4V, I_C = 0$			(-)0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = (-)10V, I_C = (-)10mA$	40*		320*	
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-)30V, I_C = (-)10mA$		150		MHz
Output Capacitance	$c_{ob}$	$V_{CB} = (-)30V, f = 1MHz$		2.6		pF
				(3.1)		
Reverse Transfer Capacitance	$c_{re}$	$V_{CB} = (-)30V, f = 1MHz$		1.8		pF
				(2.3)		
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)20mA, I_B = (-)2mA$			(-)0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)20mA, I_B = (-)2mA$			(-)1.0	V

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**Package Dimensions 2042A**

(unit:mm)



B: Base  
C: Collector  
E: Emitter

SANYO: TO126ML

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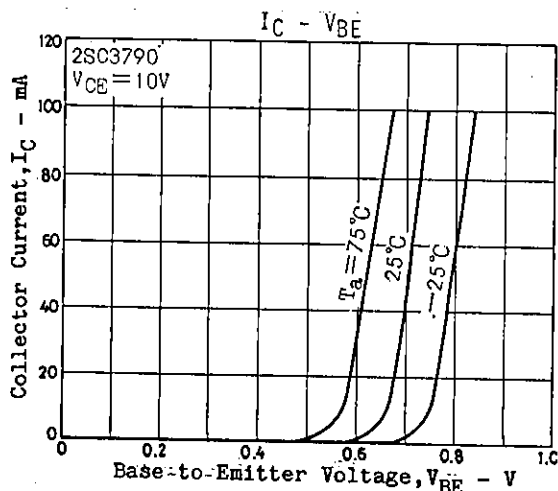
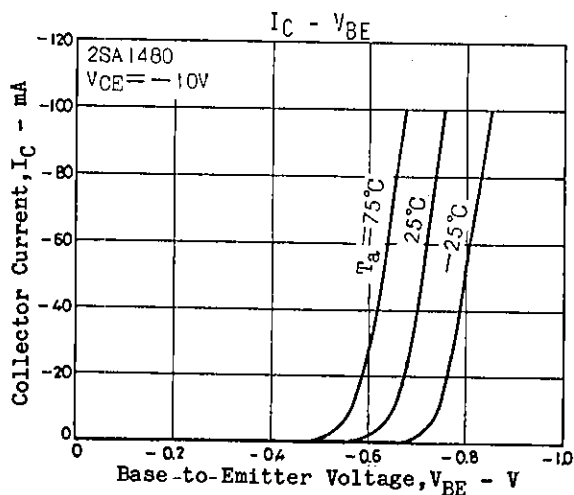
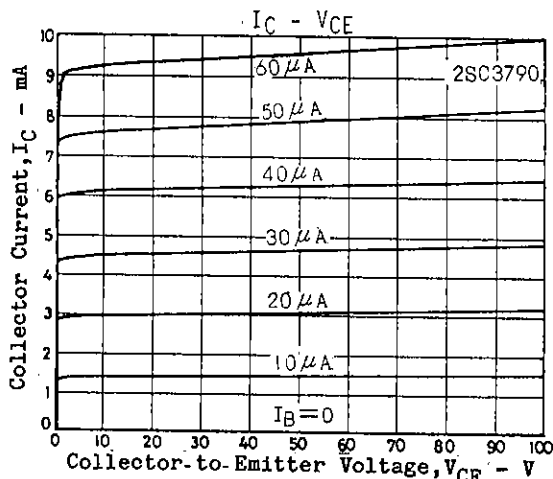
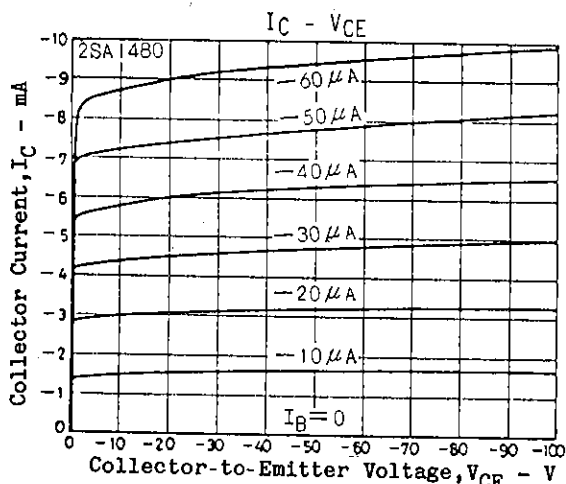
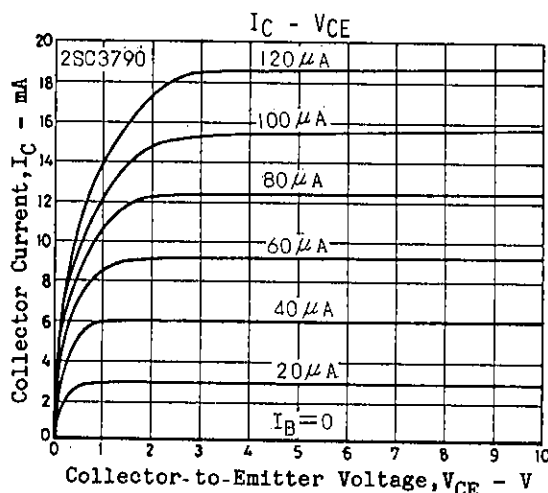
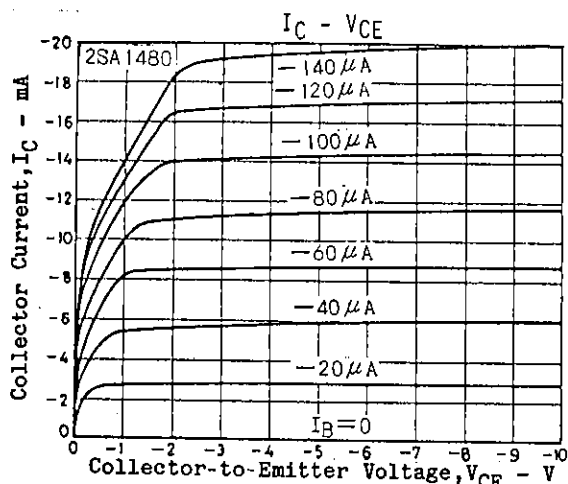
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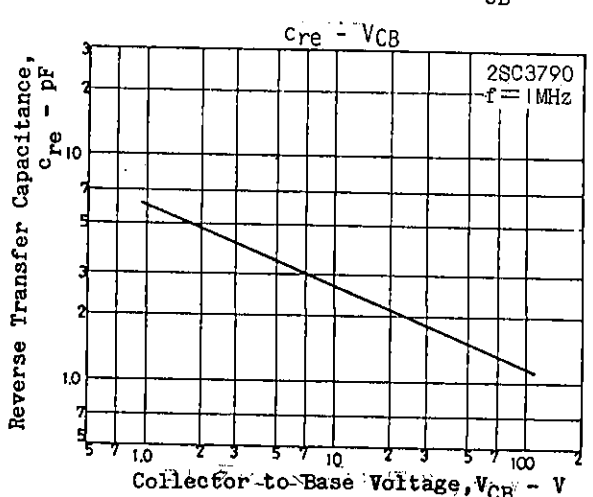
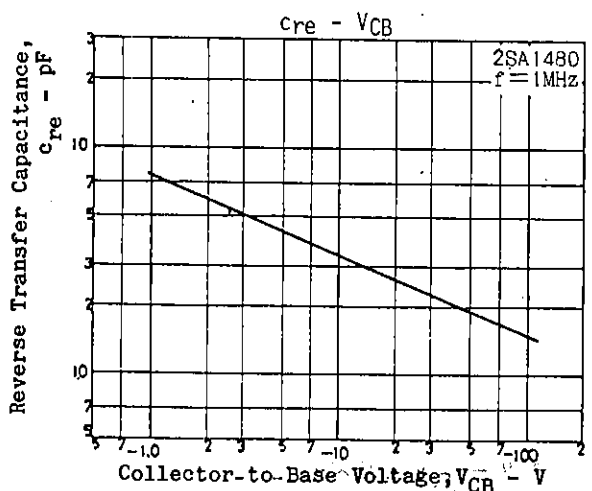
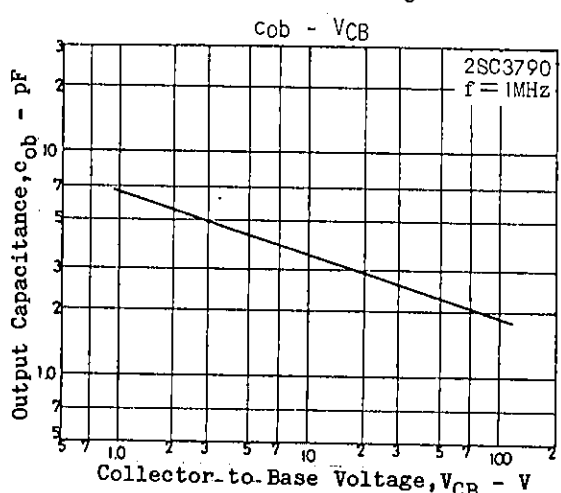
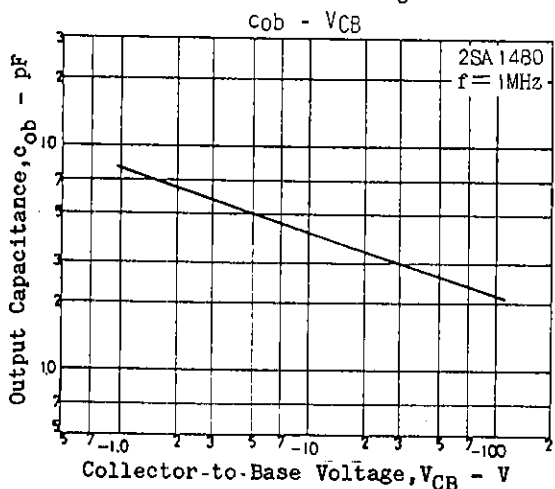
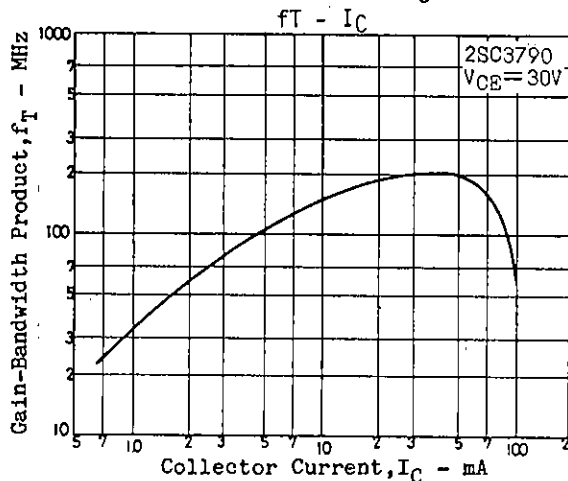
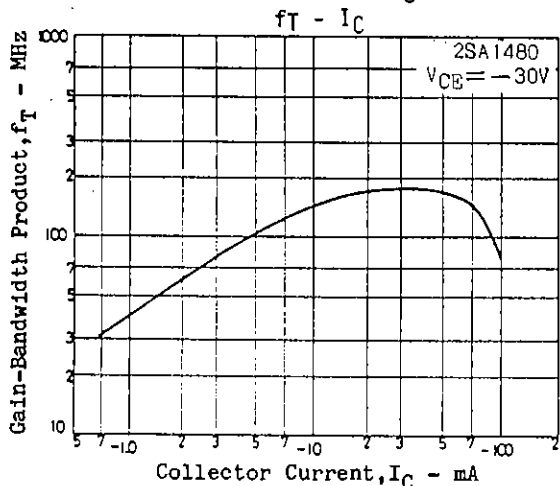
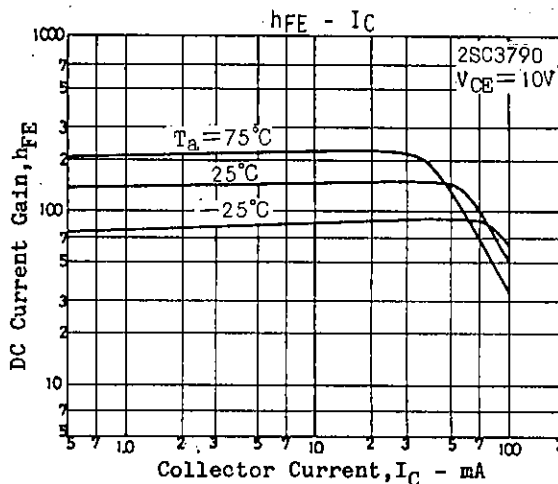
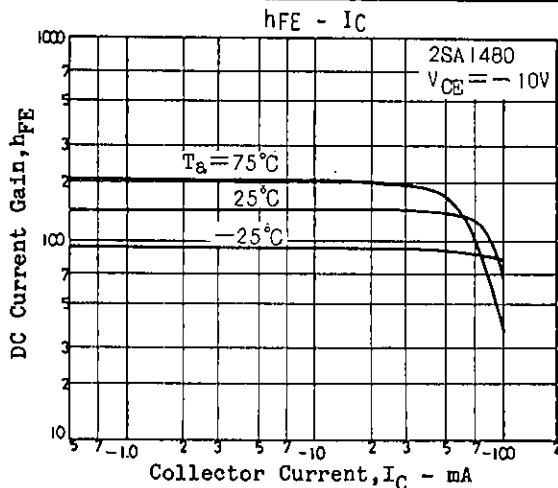
			min	typ	max	unit
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-) 10\mu A, I_E = 0$	(-)	300		V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-) 1mA, R_{BE} = \infty$	(-)	300		V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-) 10\mu A, I_C = 0$	(-)	5		V

\*: The 2SA1480/2SC3790 are classified by 10mA  $h_{FE}$  as follows:

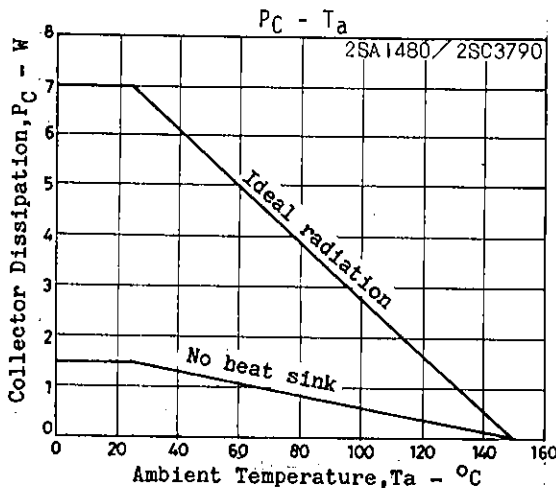
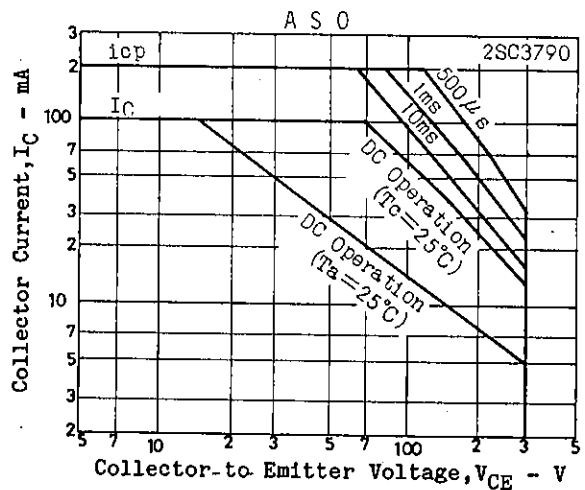
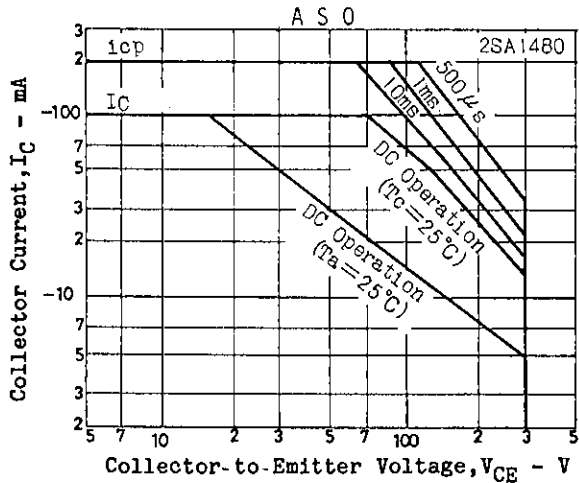
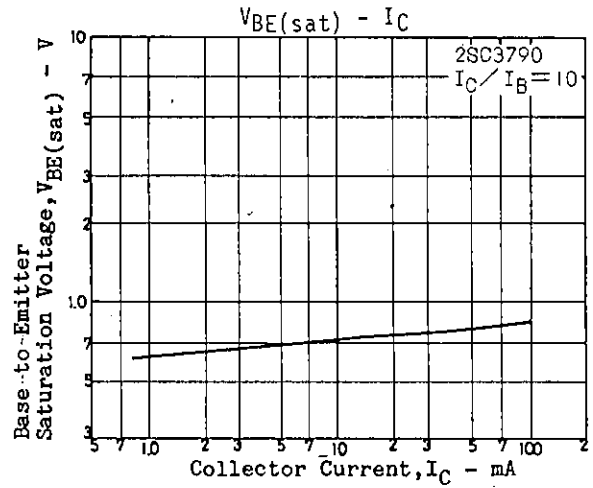
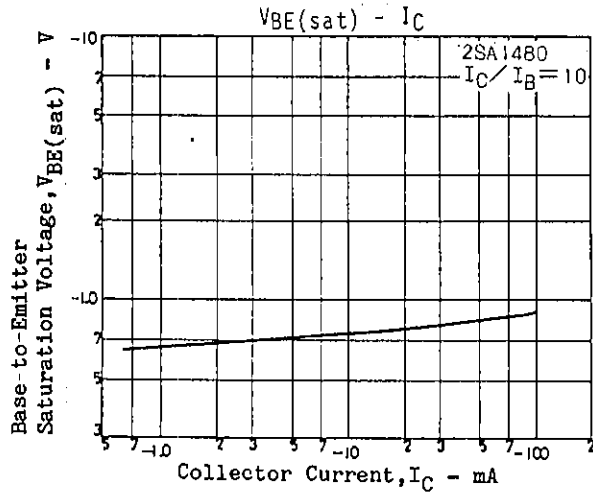
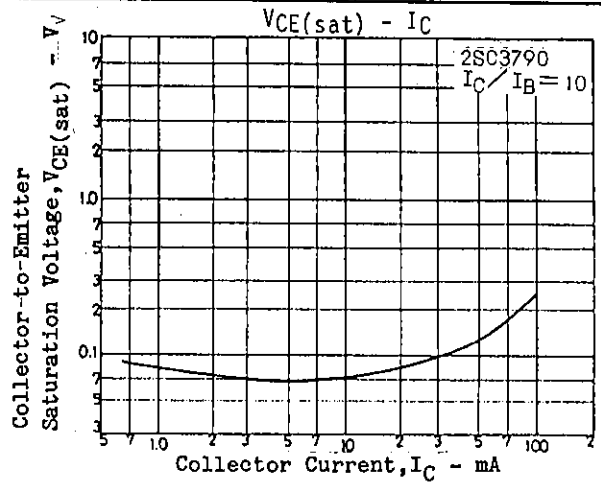
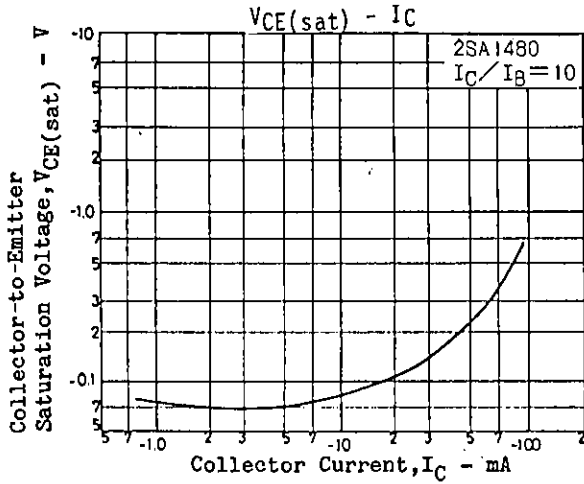
40	C	80	60	D	120	100	E	200	160	F	320
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2SA1480/2SC3790



2SA1480/2SC3790



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