

<b>SANYO</b>	No.2439A	<b>2SA1540/2SC3955</b>
		PNP/NPN Epitaxial Planar Silicon Transistors High-Definition CRT Display Video Output Applications

**Applications**

- High-definition CRT display video output, wide-band amp

**Features**

- High gain-bandwidth product ( $f_T=300\text{MHz}$ )
- High breakdown voltage ( $V_{CEO}=200\text{Vmin}$ )
- Small reverse transfer capacitance and excellent high frequency characteristics ( $c_{re}=1.5\text{pF/NPN}$ ,  $1.8\text{pF/PNP}$ )
- Complementary PNP and NPN types
- Adoption of FBET process
- Micaless type (T0126 plastic package)

( ): PNP

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

			unit
Collector-to-Base Voltage	$V_{CB0}$	(-)200	V
Collector-to-Emitter Voltage	$V_{CEO}$	(-)200	V
Emitter-to-Base Voltage	$V_{EBO}$	(-)3	V
Collector Current	$I_C$	(-)100	mA
Peak Collector Current	$i_{cp}$	(-)200	mA
Collector Dissipation	$P_C$	1.3	W
		$T_c=25^\circ\text{C}$	7
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	$I_{CBO}$	$V_{CB}=(-)150\text{V}, I_E=0$			(-)0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)2\text{V}, I_C=0$			(-)1.0	$\mu\text{A}$
DC Current Gain	$h_{FE1}$	$V_{CE}=(-)10\text{V}, I_C=(-)10\text{mA}$	40*		320*	
	$h_{FE2}$	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$	20			
Gain-Bandwidth Product	$f_T$	$V_{CE}=(-)30\text{V}, I_C=(-)30\text{mA}$		300		MHz
Output Capacitance	$c_{ob}$	$V_{CB}=(-)30\text{V}, f=1\text{MHz}$		1.9		pF
				(2.4)		pF
Reverse Transfer Capacitance	$c_{re}$	$V_{CB}=(-)30\text{V}, f=1\text{MHz}$		1.5		pF
				(1.8)		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)20\text{mA}, I_B=(-)2\text{mA}$			(-)1.0	V
E-B Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)20\text{mA}, I_B=(-)2\text{mA}$			(-)1.0	V

\* $h_{FE1}$ : The 2SA1540/2SC3955 are classified by 10mA  $h_{FE}$  as follows:

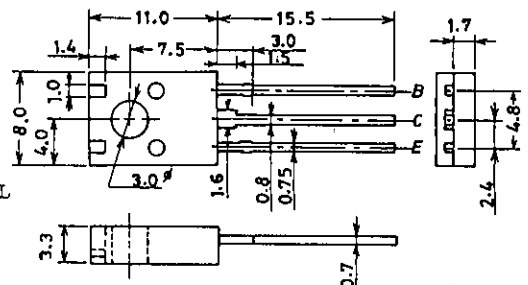
40	C	80	60	D	120	100	E	200	160	F	320
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**Package Dimensions 2042A**

(unit: mm)

B: Base  
C: Collector  
E: Emitter

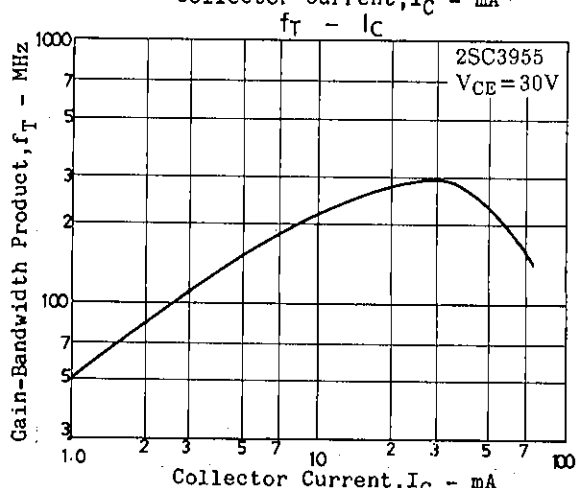
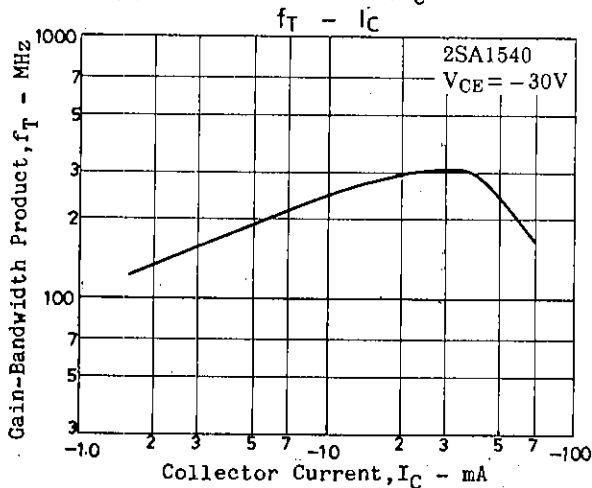
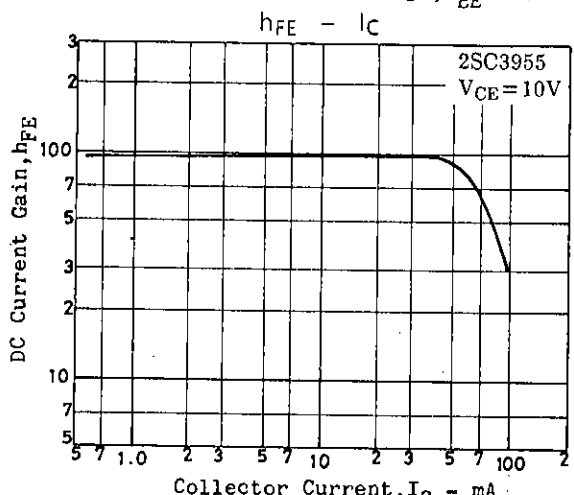
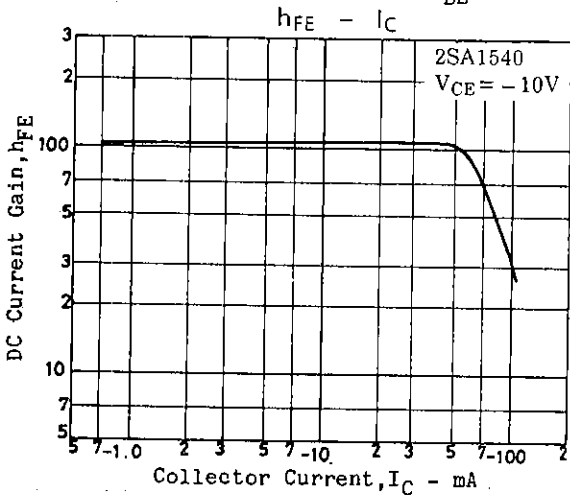
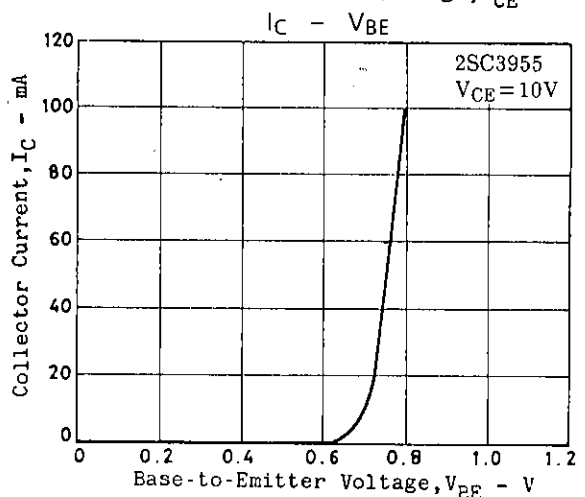
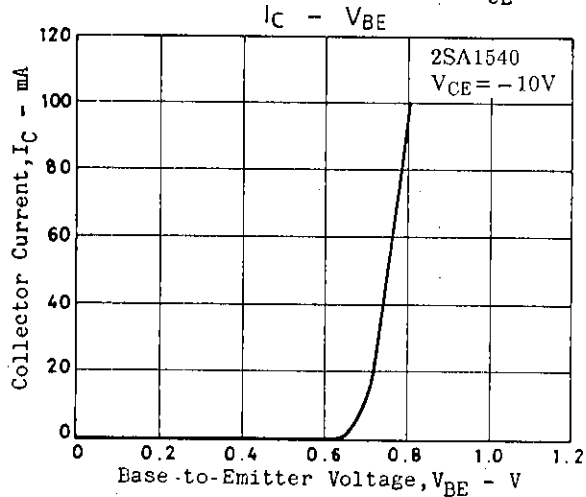
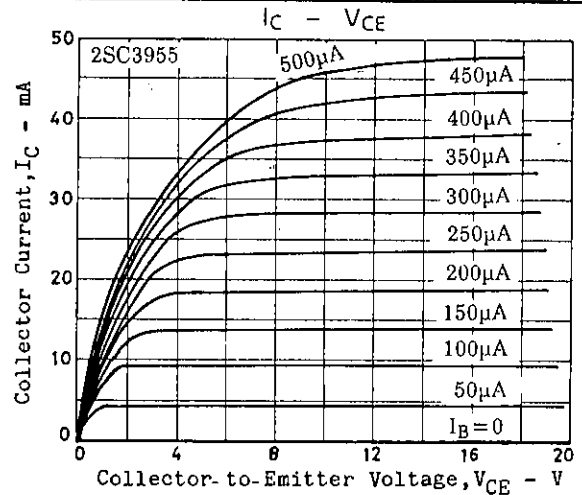
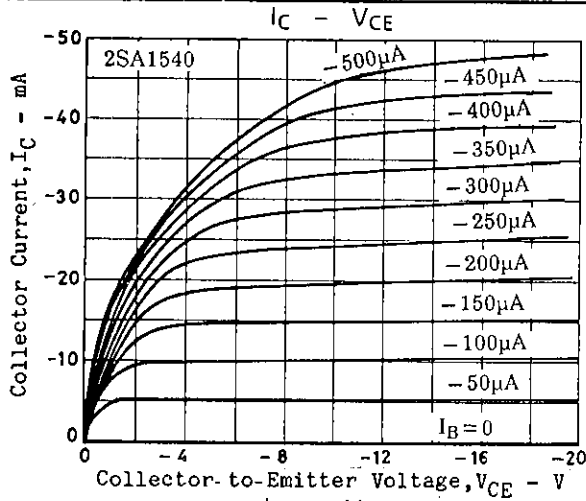
SANYO: T0126ML



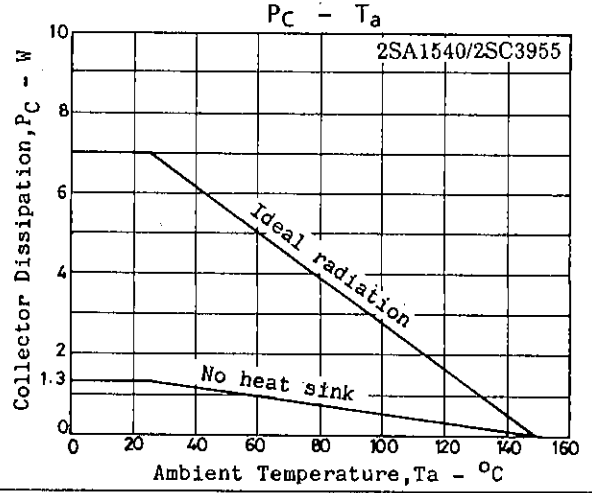
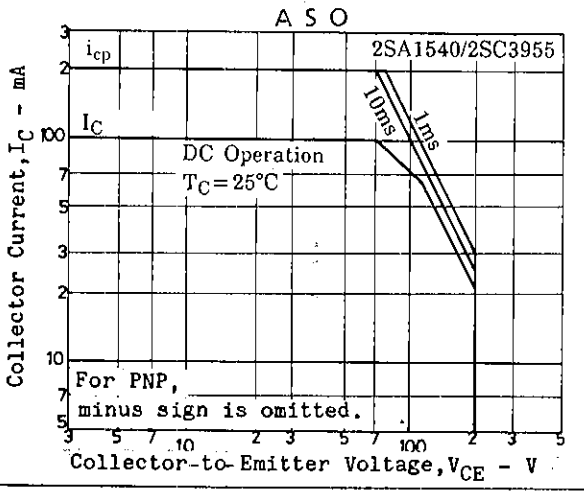
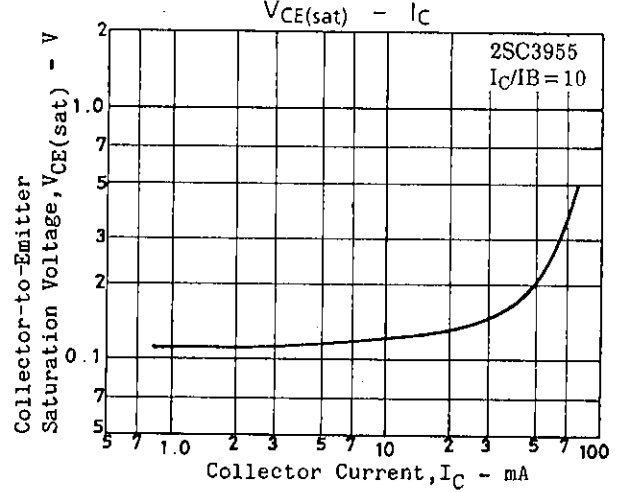
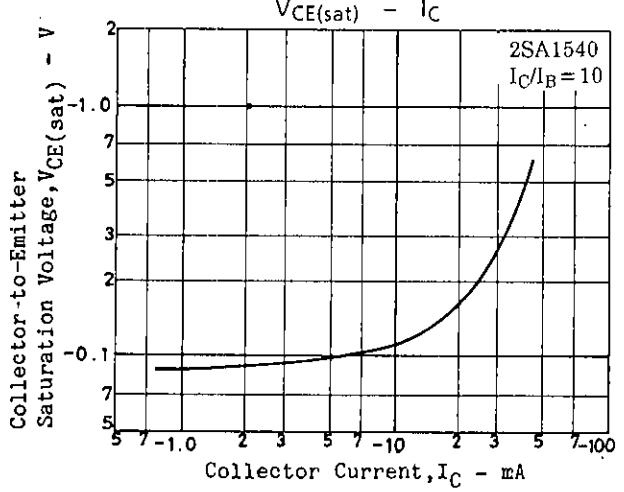
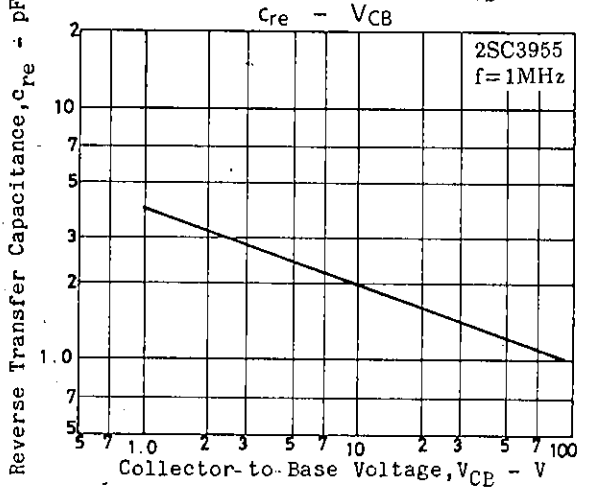
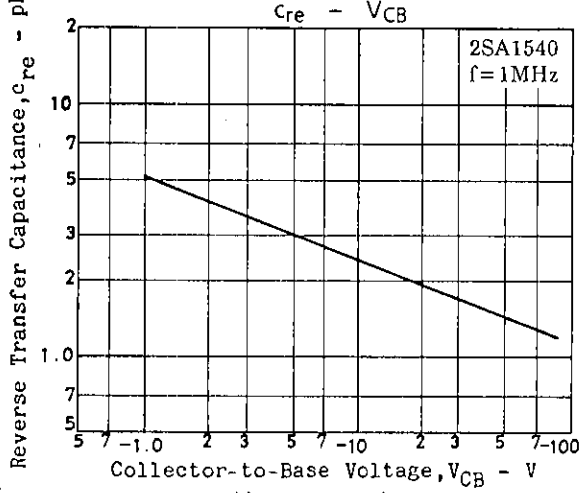
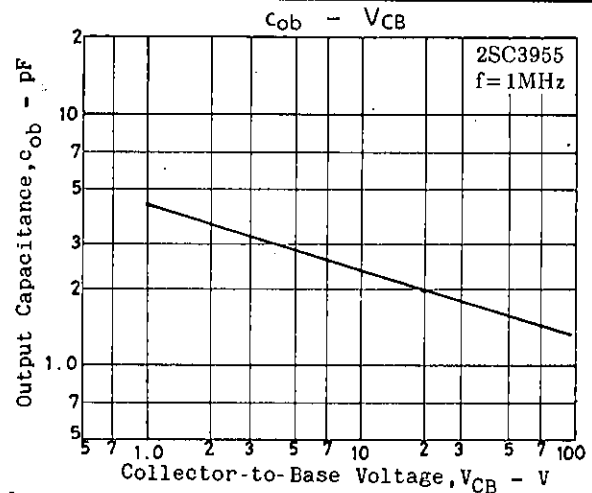
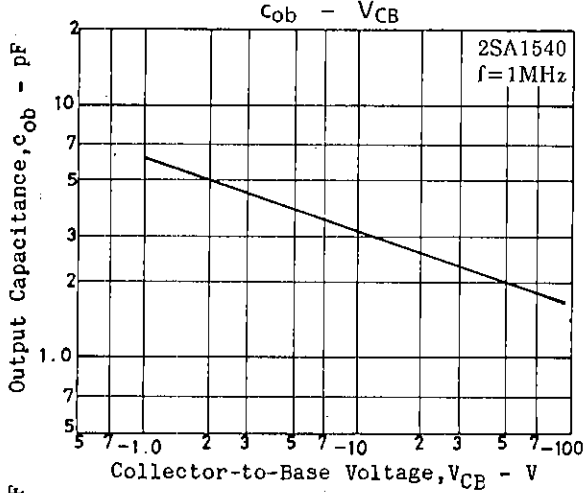
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2SA1540/2SC3955



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