

<b>SANYO</b>	No.2093	2 S A 1 4 7 9 / 2 S C 3 7 8 9
		PNP/NPN Epitaxial Planar Type Silicon Transistors HIGH-DEFINITION CRT DISPLAY VIDEO OUTPUT APPLICATIONS

**Applications**

- High-definition CRT display
- Color TV chroma output, high breakdown voltage drivers

**Features**

- High breakdown voltage ( $V_{CE0} \geq 300V$ )
- Excellent high frequency characteristic ( $c_{re} = 1.8pF(\text{typ})$ )
- Adoption of MBIT process
- No insulator required for mounting, which contributes to reducing the cost and the number of manufacturing processes.
- Plastic-covered heat sink facilitating high-density mounting
- Directly interchangeable with TO-126 because the package is designed based on the conventional package dimensions

( ): 2SA1479

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

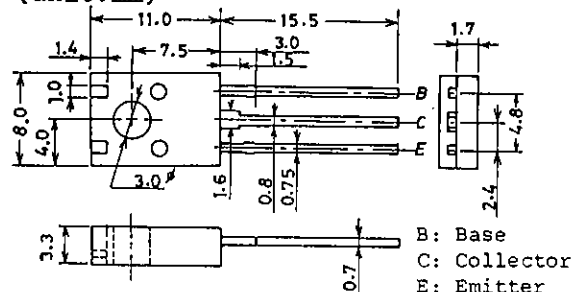
			unit
Collector-to-Base Voltage	$V_{CB0}$	(-)300	V
Collector-to-Emitter Voltage	$V_{CE0}$	(-)300	V
Emitter-to-Base Voltage	$V_{EB0}$	(-)5	V
Collector Current	$I_C$	(-)100	mA
Peak Collector Current	$i_{cp}$	(-)200	mA
Collector Dissipation	$P_C$	1.5	W
		$T_c = 25^\circ C$	7
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

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

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-)200V, I_E = 0$			(-)0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)4V, I_C = 0$			(-)0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = (-)10V, I_C = (-)10mA$	40*		320*	
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-)30V, I_C = (-)10mA$		70		MHz
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)



SANYO: TO126ML

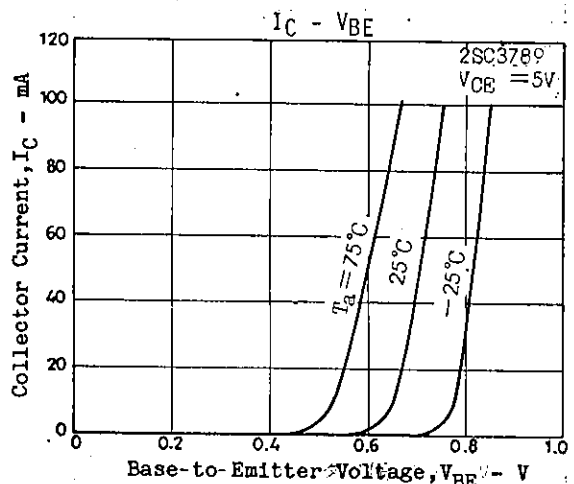
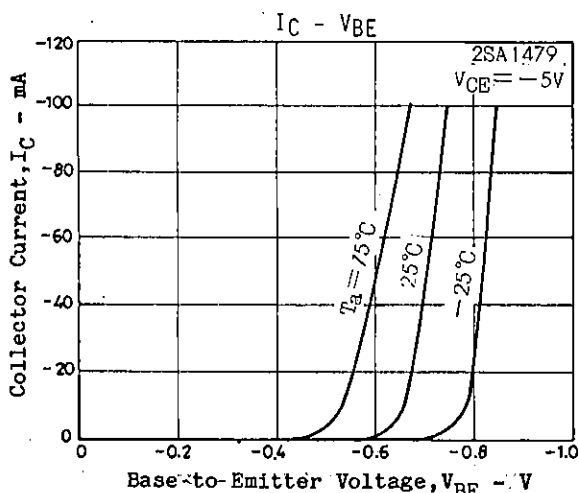
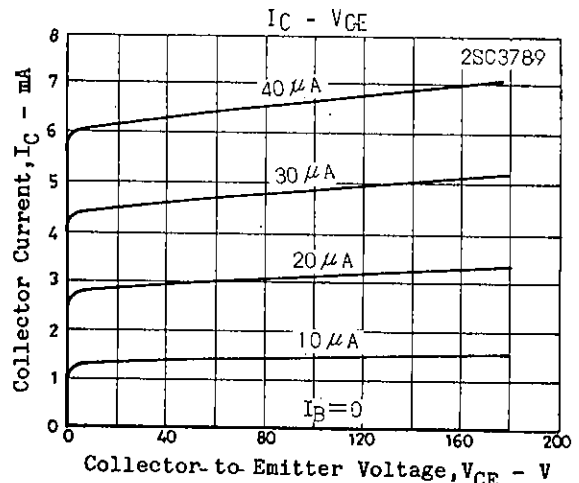
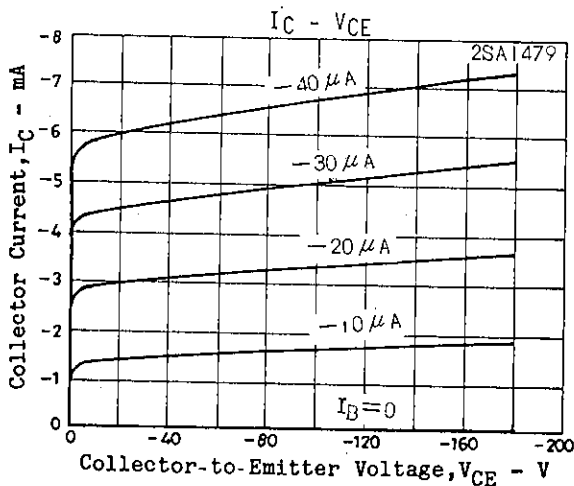
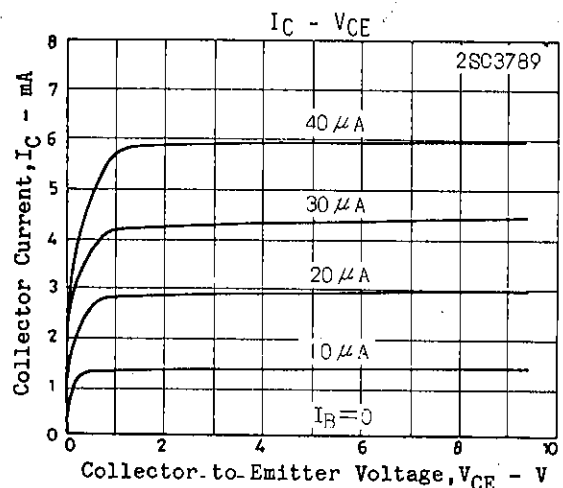
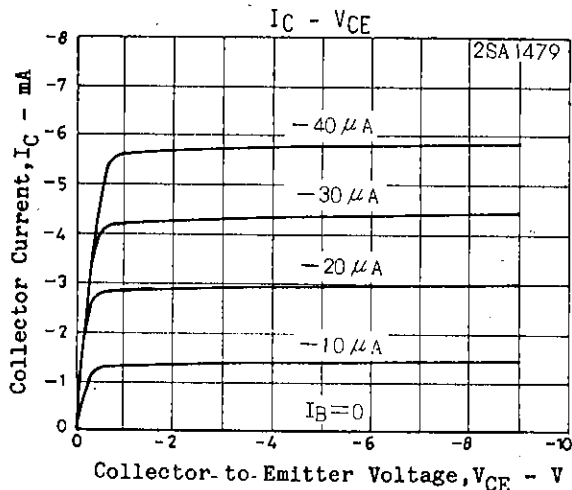
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TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

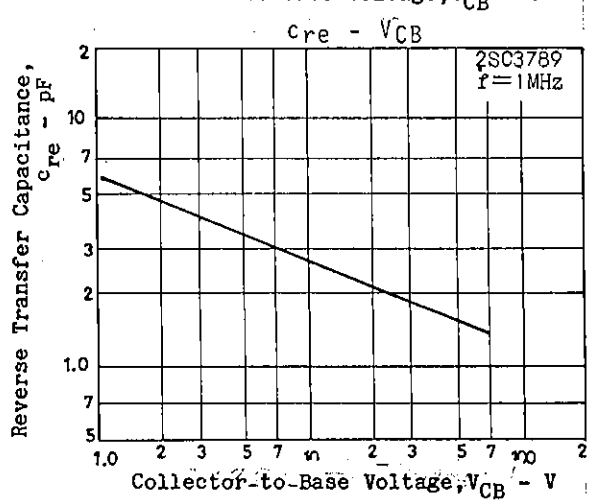
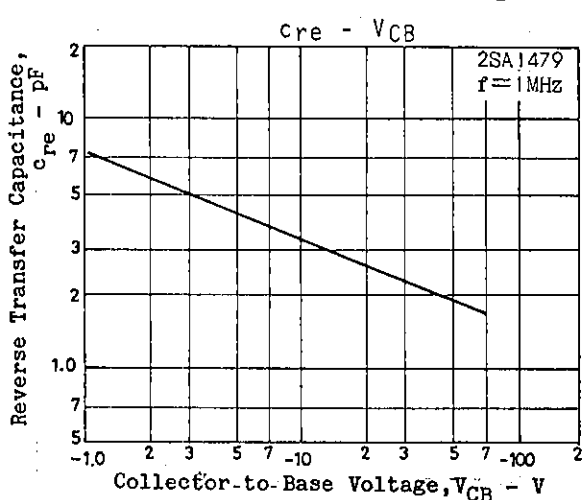
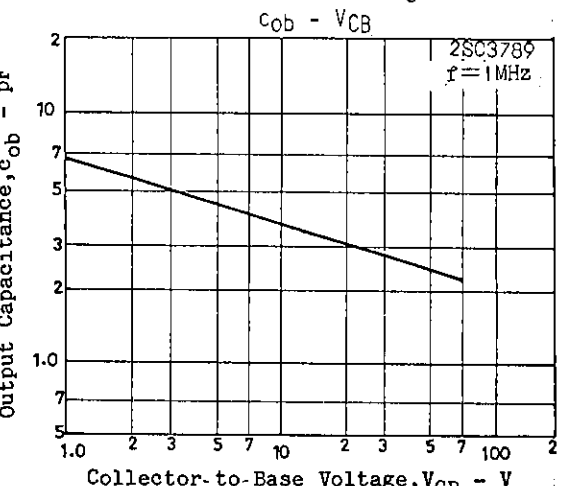
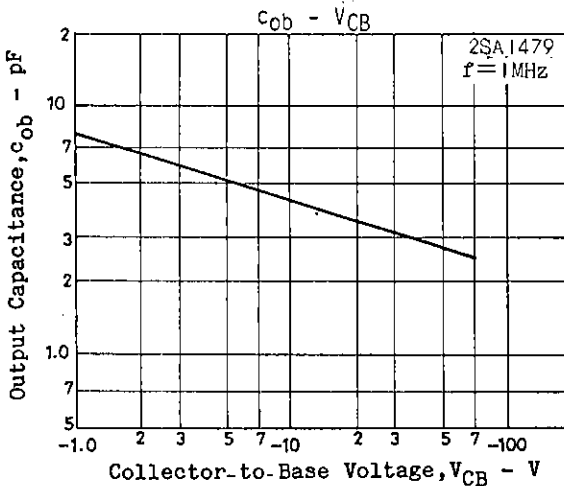
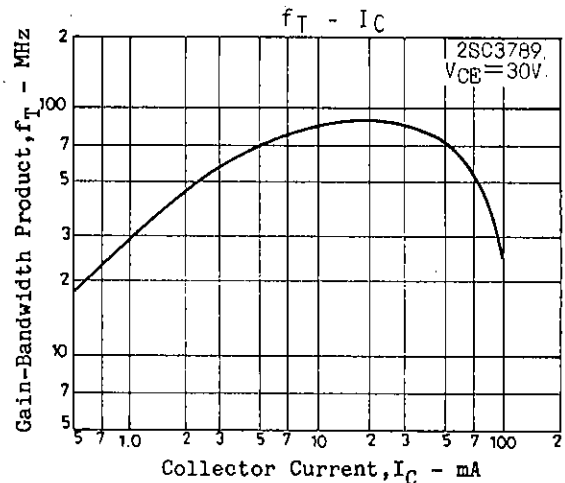
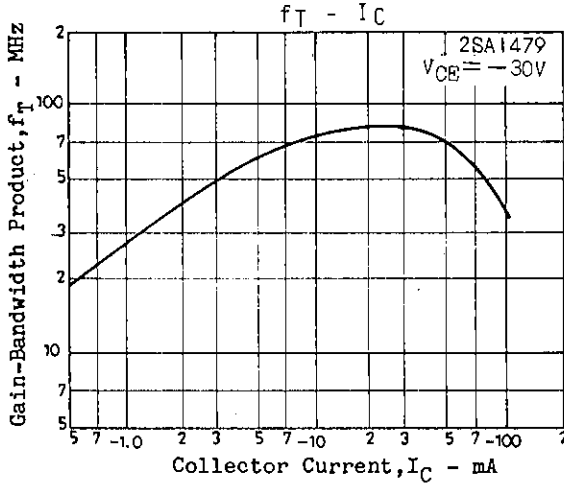
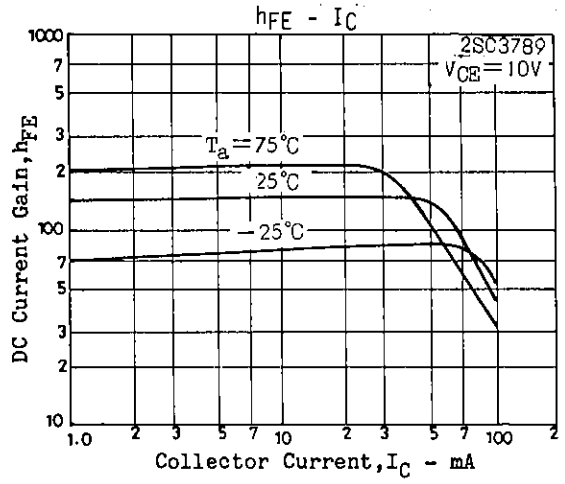
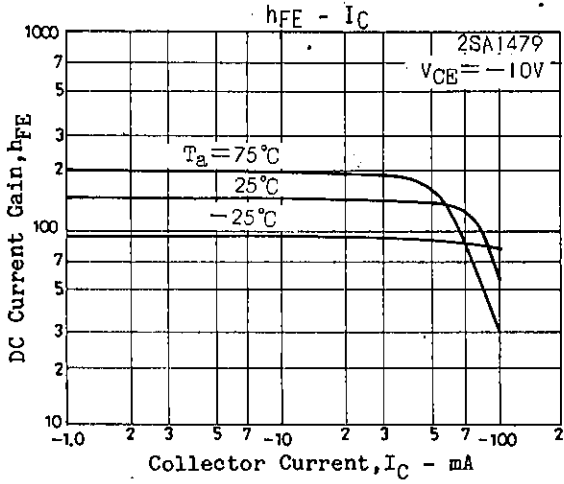
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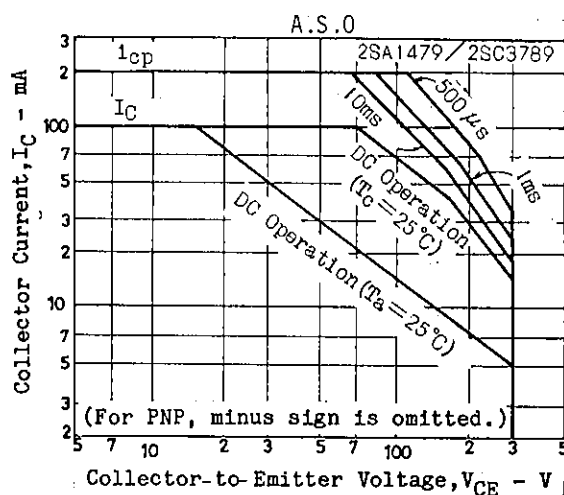
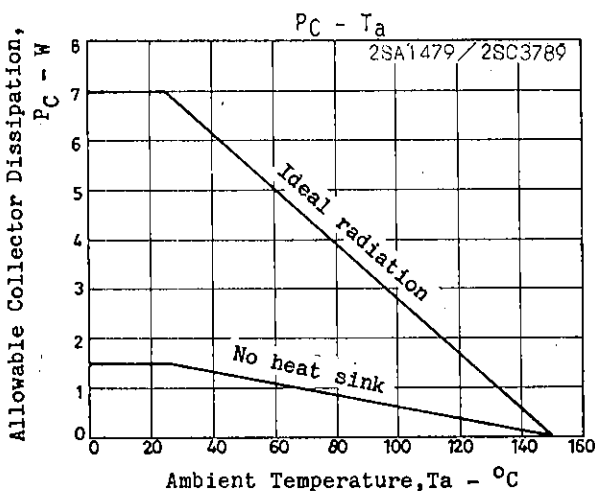
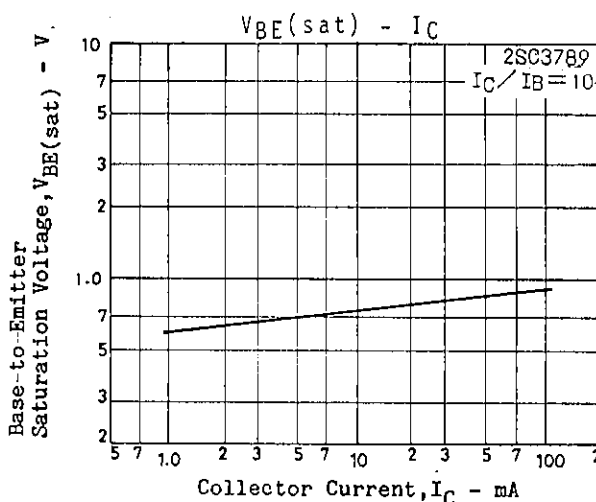
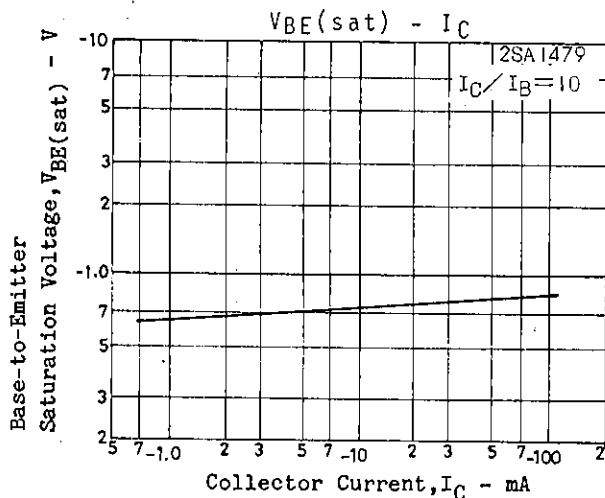
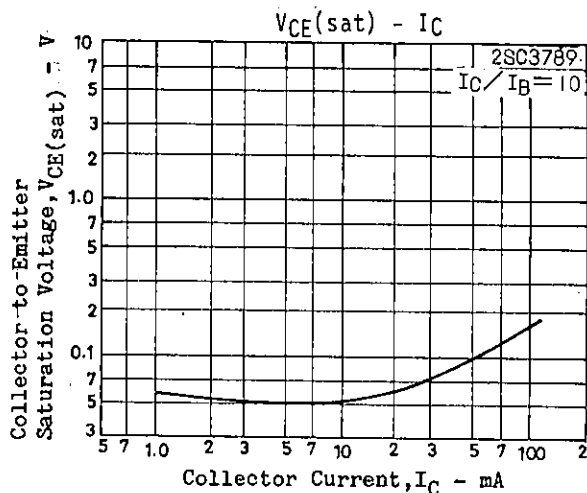
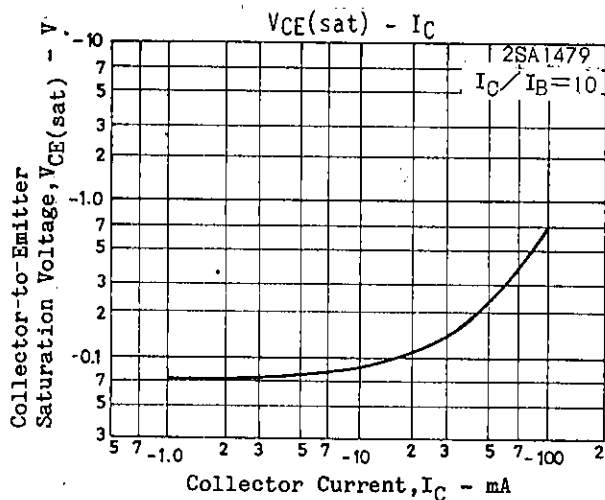
			min	typ	max	unit
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-)300			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_E=(-)1mA, R_{BE}=\infty$	(-)300			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	(-)5			V
Output Capacitance	$c_{ob}$	$V_{CB}=(-)30V, f=1MHz$		2.6 (3.1)		pF
Reverse Transfer Capacitance	$c_{re}$	$V_{CB}=(-)30V, f=1MHz$		1.8 (2.3)		pF

\*: The 2SA1479/2SC3789 are classified by 10mA  $h_{FE}$  as follows:

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