

SANYO	No.3643	<h1 style="margin: 0;">2SA1749/2SC4564</h1> <p style="margin: 0;">PNP/NPN Epitaxial Planar Silicon Transistors Ultrahigh-Definition CRT Display Video Output Applications</p>
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Features

- High f_T [$f_T = 400\text{MHz}$ (typ)]
- High breakdown voltage [$V_{CEO} \geq 200\text{V}$ (min)]
- High current
- Small reverse transfer capacitance and excellent high frequency characteristics [$C_{re} = 3.4\text{pF}$ (NPN), 4.2pF (PNP)]
- Complementary 2SA1749 and 2SC4564 types
- Adoption of FBET process

() : 2SA1749

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

Collector-to-Base Voltage	V_{CB0}	(-)200	V	unit
Collector-to-Emitter Voltage	V_{CEO}	(-)200	V	
Emitter-to-Base Voltage	V_{EBO}	(-)3	V	
Collector Current	I_C	(-)300	mA	
Collector Current (Pulse)	I_{CP}	(-)600	mA	
Collector Dissipation	P_C	1.3	W	
$T_c = 25^\circ\text{C}$				
Junction Temperature	T_j	10	$^\circ\text{C}$	
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

Electrical Characteristics at $T_a = 25^\circ\text{C}$

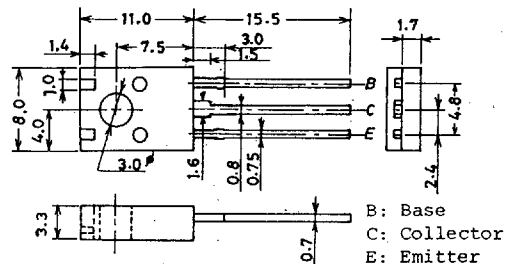
		min	typ	max	unit
Collector Cutoff Current	I_{CBO}			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	40*		320*	
	$h_{FE}(2)$	20			
Gain Bandwidth Product	f_T		400		MHz
Output Capacitance	C_{ob}		(5.0)4.2		pF
Reverse Transfer Capacitance	C_{re}		(4.2)3.4		pF

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* : The 2SA1749/2SC4564 are classified by 50mA h_{FE} as follows :

40 C 80	60 D 120	100 E 200	160 F 320
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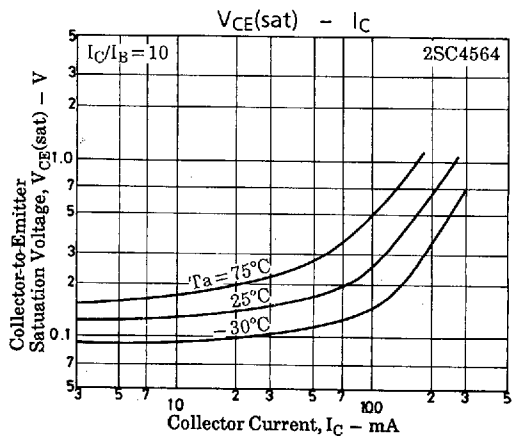
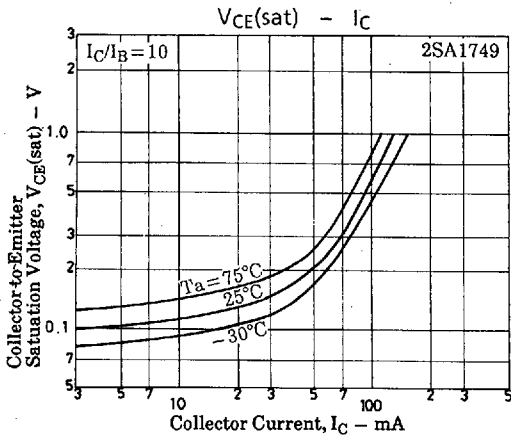
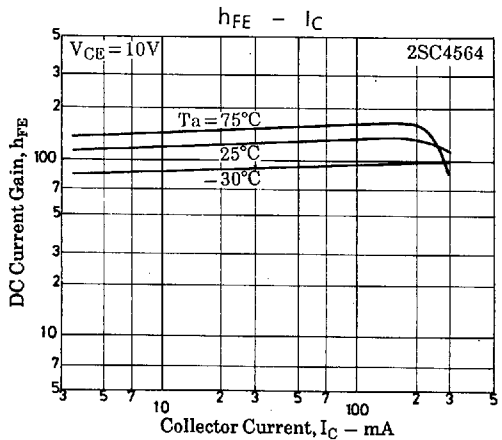
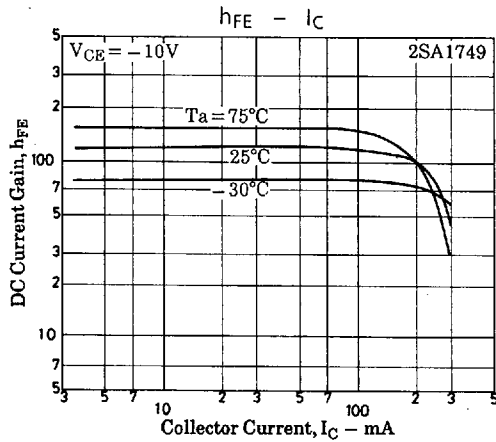
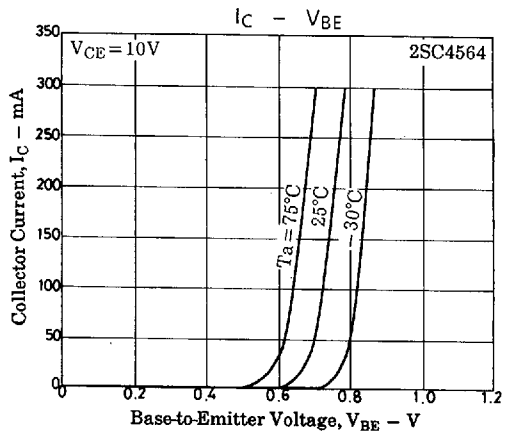
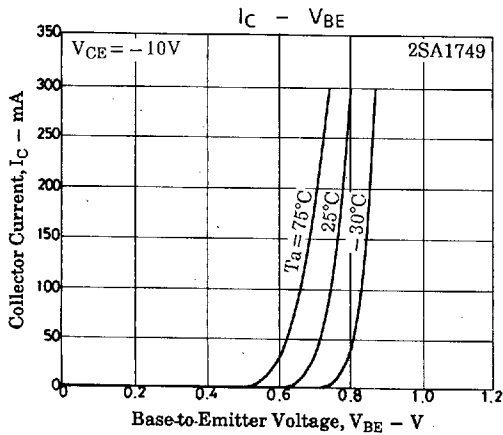
Package Dimensions 2042A
(unit : mm)

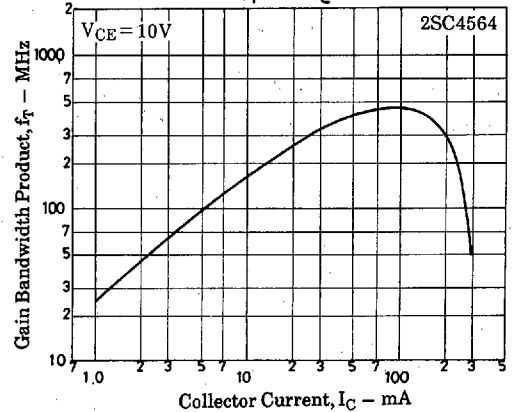
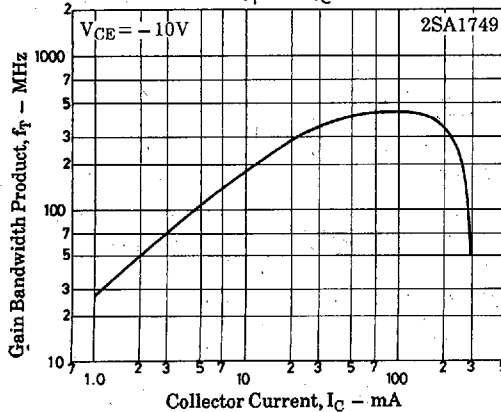
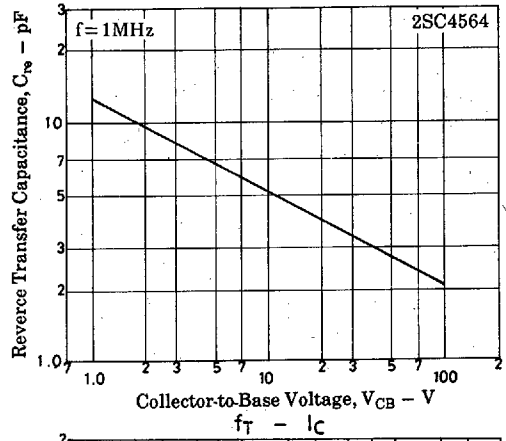
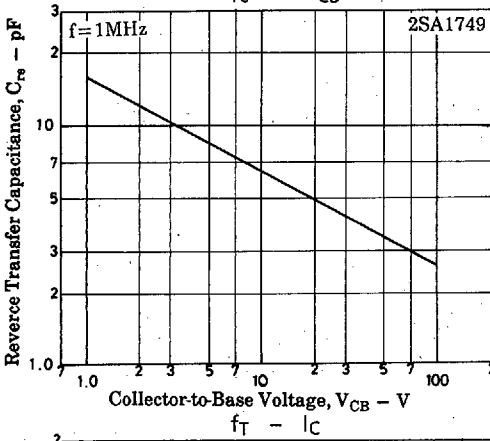
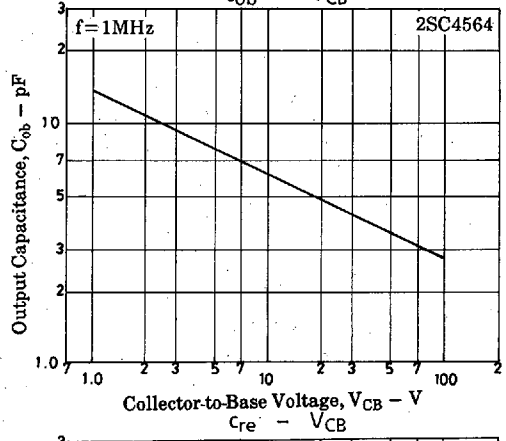
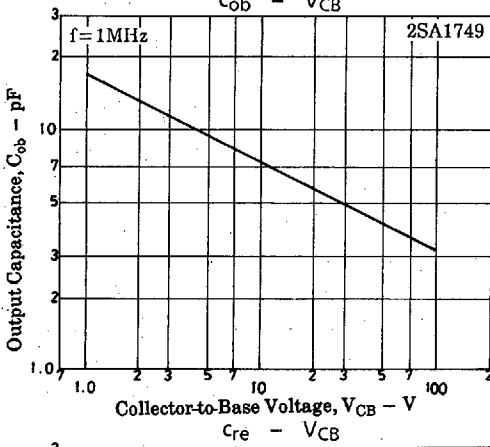
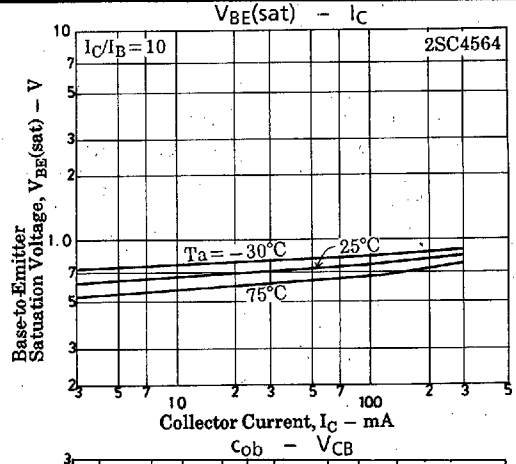
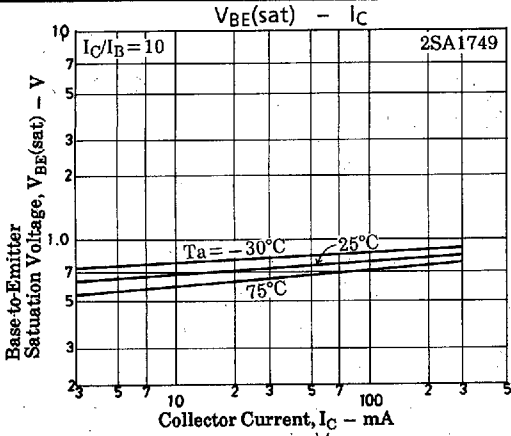


SANYO: TO126ML

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			min	typ	max	unit
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)50\text{mA}, I_B = (-)5\text{mA}$			(-) 1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)50\text{mA}, I_B = (-)5\text{mA}$			(-) 1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu\text{A}, I_E = 0$	(-) 200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1\text{mA}, R_{BE} = \infty$	(-) 200			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)100\mu\text{A}, I_C = 0$	(-) 3			V





2SA1749/2SC4564

