

SANYO	No.2710A	<h1 style="margin: 0;">2SC4271</h1> <p style="margin: 0;">NPN Epitaxial Planar Silicon Transistor</p> <p style="margin: 0;">High-Definition CRT Display Video Output Driver Applications</p>
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Applications

- . Wide-band amplifiers
- . High frequency drivers

Features

- . High f_T ($f_T=2.2\text{GHz typ}$)
- . High current ($I_C=300\text{mA}$)
- . Adoption of FBET process

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

			unit
Collector-to-Base Voltage	V_{CBO}	30	V
Collector-to-Emitter Voltage	V_{CEO}	20	V
Emitter-to-Base Voltage	V_{EBO}	3	V
Collector Current	I_C	300	mA
Peak Collector Current	i_{cp}	600	mA
Collector Dissipation	P_C ($T_a=25^\circ\text{C}$)	1.2	W
	P_C ($T_c=25^\circ\text{C}$)	5	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

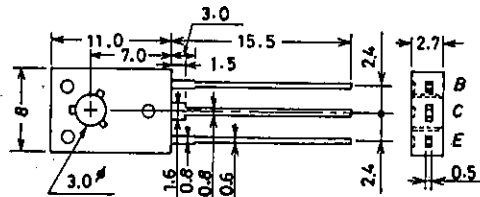
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=2\text{V}, I_C=0$			5.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5\text{V}, I_C=50\text{mA}$	40		200	
	$h_{FE}(2)$	$V_{CE}=5\text{V}, I_C=300\text{mA}$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=5\text{V}, I_C=50\text{mA}$		2.2		GHz
Output Capacitance	c_{ob}	$V_{CB}=10\text{V}, f=1\text{MHz}$		3.9		pF
Reverse Transfer Capacitance	c_{re}	$V_{CB}=10\text{V}, f=1\text{MHz}$		3.2		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	0.2		0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	0.9		1.2	V

*:The 2SC4271 is classified by 50mA h_{FE} as follows:

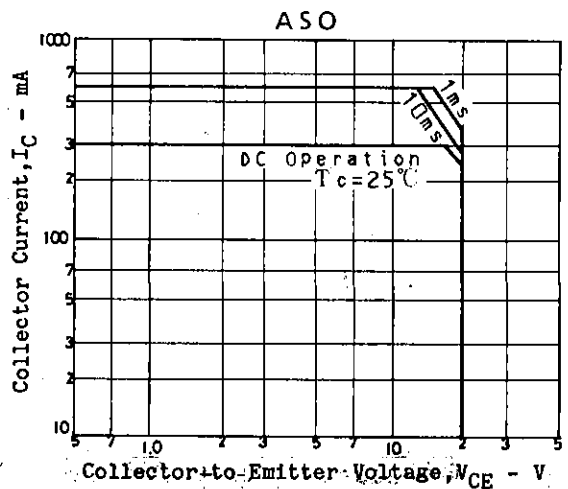
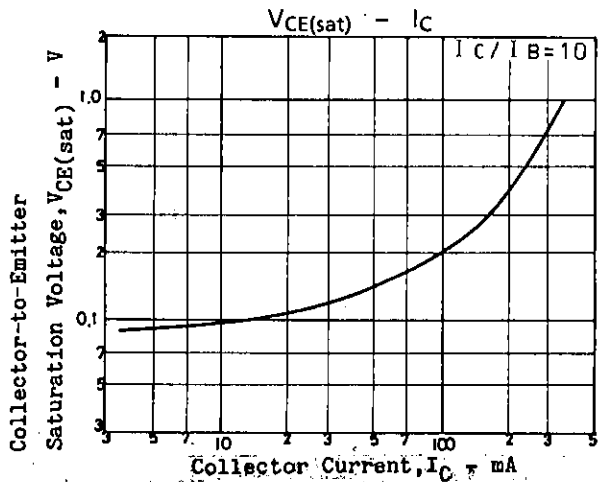
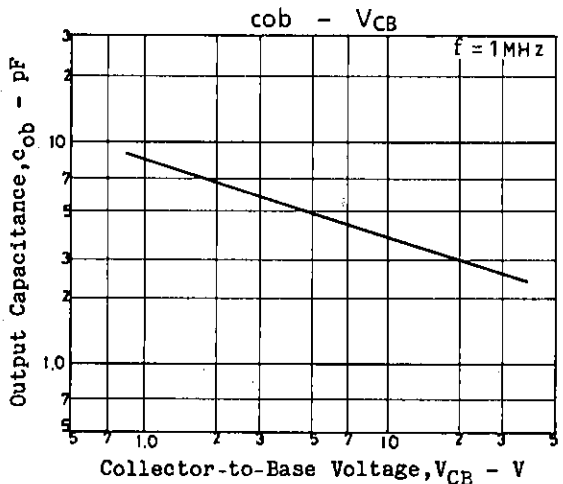
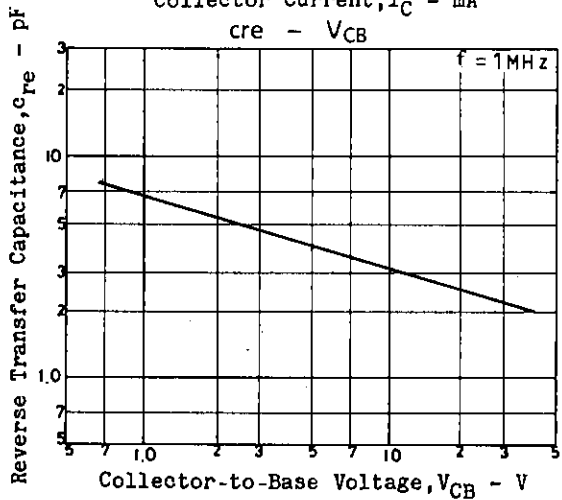
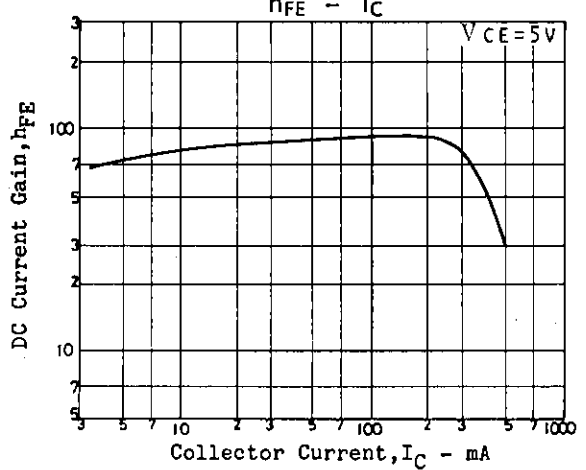
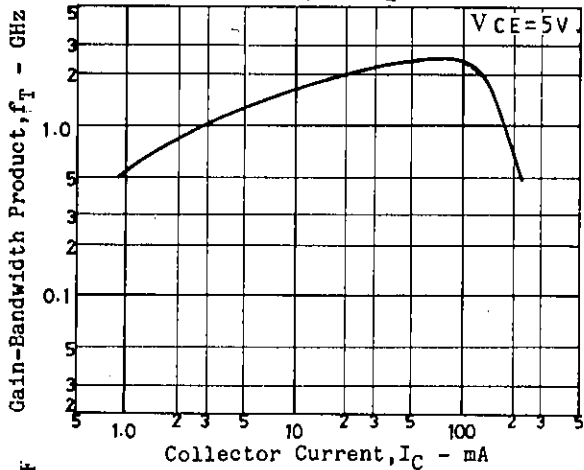
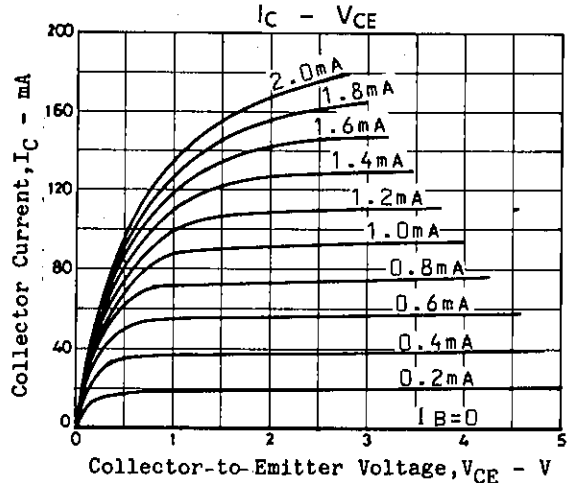
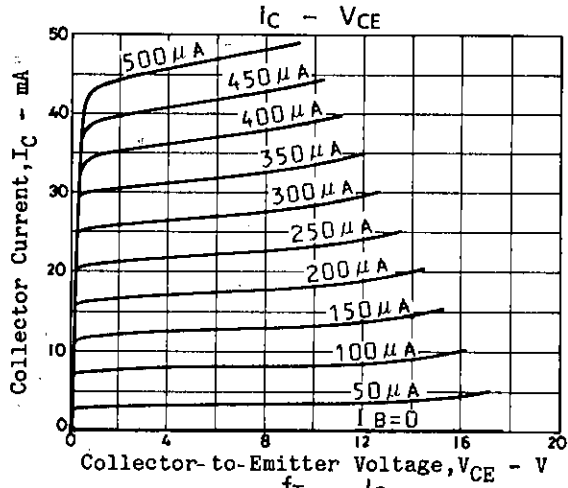
40	C	80	60	D	120	100	E	200
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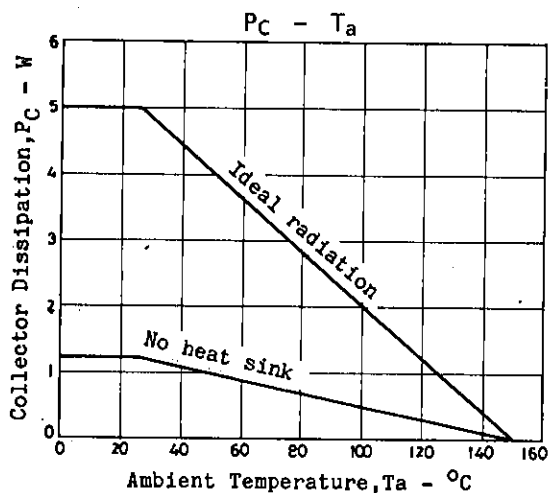
Package Dimensions 2009A
(unit: mm)



JEDEC: TO-126

B: Base
C: Collector
E: Emitter





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