

SANYO

No. 4131

2SC4821

NPN Epitaxial Planar Silicon Transistor
 High Definition CRT Display
 Video Output Driver Applications

Applications

- High Definition CRT Display Video Output Driver, Wide Band Amp Applications and High Frequency Driver Applications.

Features

- High Gain Bandwidth Product ($f_T = 2.0\text{GHz}$).
- Large current capacity ($I_C = 500\text{mA}$).
- Usage of radial taping to meet automatic mounting.

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

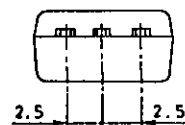
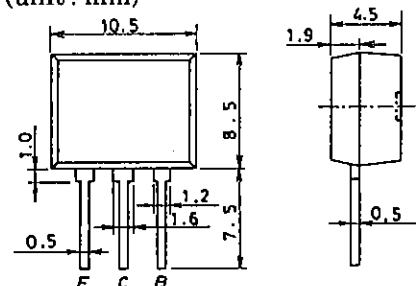
			unit
Collector-to-Base Voltage	V_{CB0}	30	V
Collector-to-Emitter Voltage	V_{CE0}	20	V
Emitter-to-Base Voltage	V_{EB0}	3	V
Collector Current	I_C	500	mA
Peak Collector Current	i_{cp}	1	A
Collector Dissipation	P_C	1.3	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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※	
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 500\text{mA}$	20			
Gain Bandwidth Product	f_T	$V_{CE} = 5\text{V}, I_C = 100\text{mA}$		2.0		GHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		6.0		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		4.6		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 300\text{mA}, I_B = 30\text{mA}$	0.3	0.8		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 300\text{mA}, I_B = 30\text{mA}$	0.9	1.2		V

※ : The 2SC4821 is classified by 50mA h_{FE} as follows :

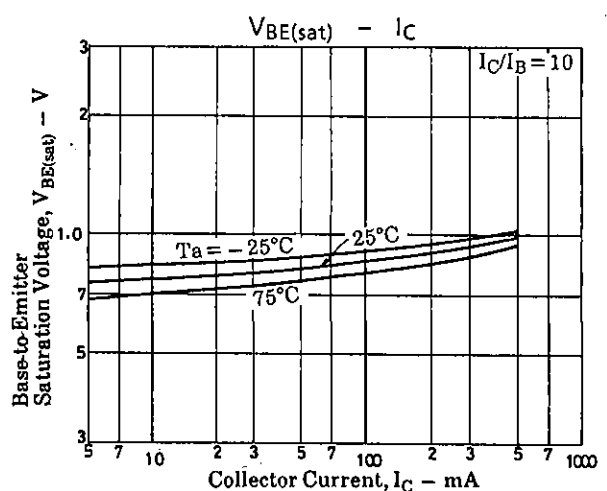
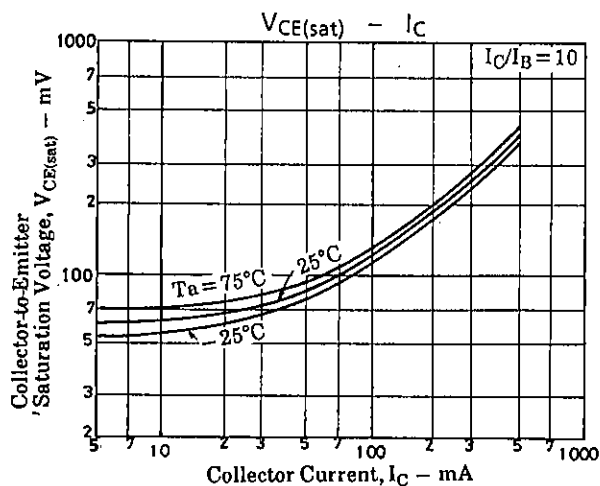
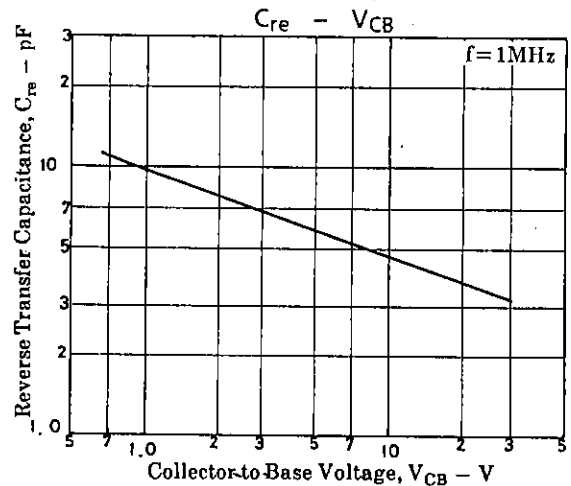
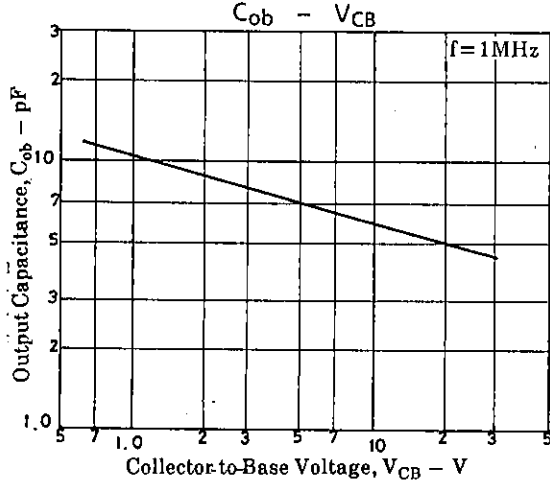
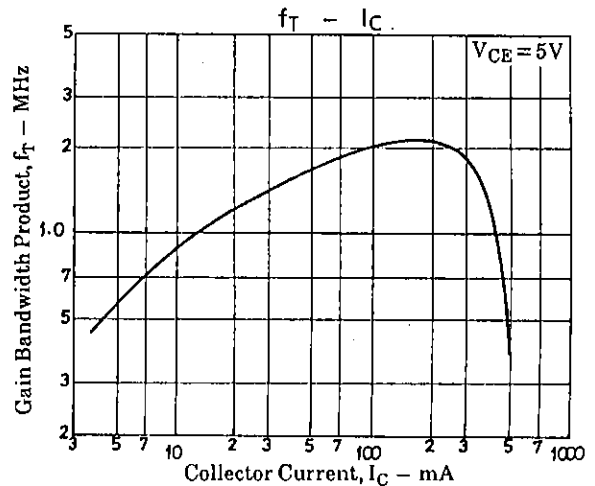
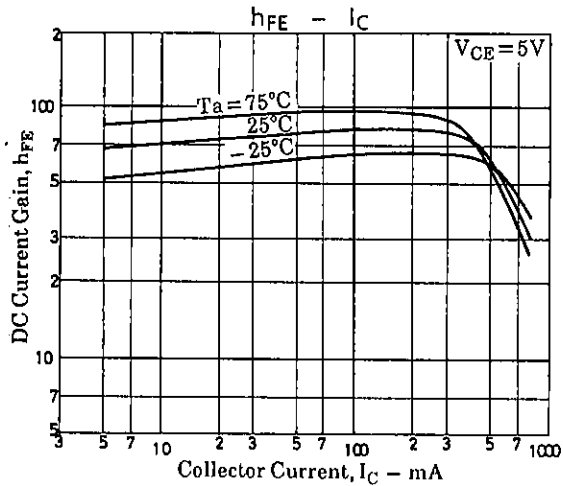
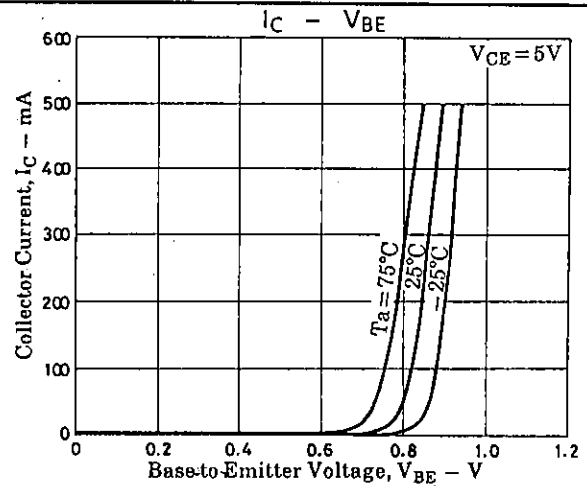
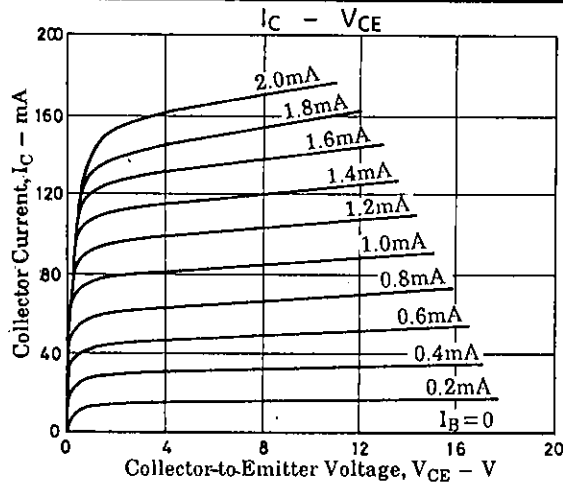
40	C	80	60	D	120	100	E	200
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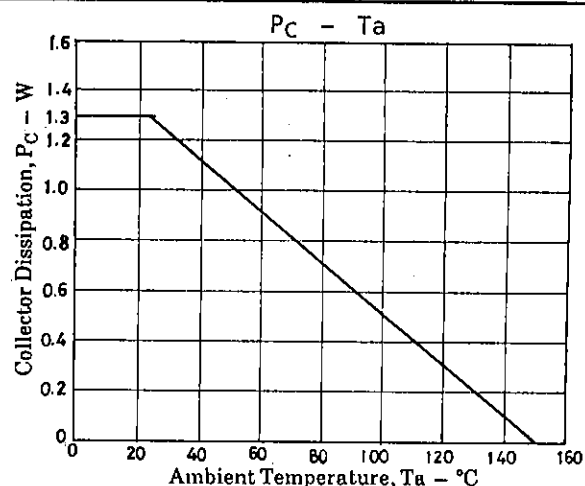
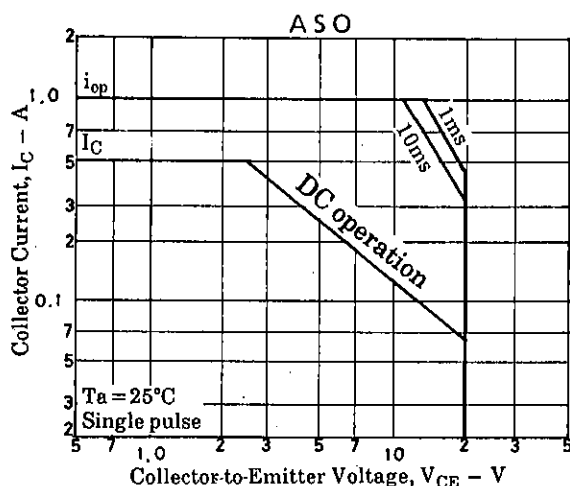
Package Dimensions 2084
(unit : mm)

E : Emitter
 C : Collector
 B : Base

SANYO : FLP

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