

**2SC4821**

## High-Definition CRT Display Video Output Driver Applications

### Applications

- High definition CRT display video output driver, wide band amplifier applications and high frequency driver applications

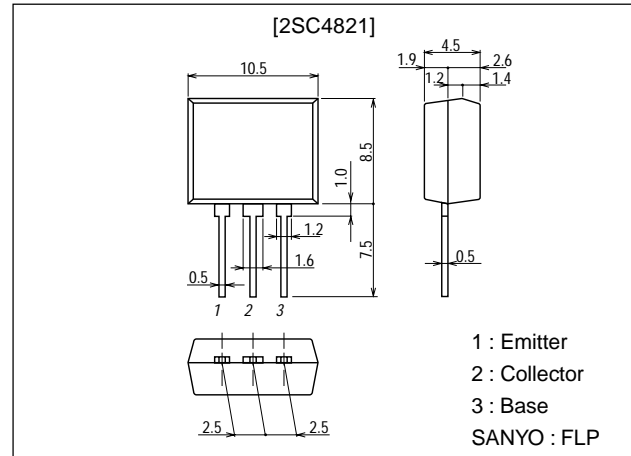
### Features

- 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.

### Package Dimensions

unit:mm

2084B



### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		30	V
Collector-to-Emitter Voltage	$V_{CEO}$		20	V
Emitter-to-Base Voltage	$V_{EBO}$		3	V
Collector Current	$I_C$		500	mA
Collector Current (Pulse)	$I_{CP}$		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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=20\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=2\text{V}, I_C=0$			5.0	$\mu\text{A}$
DC Current Gain	$h_{FE1}$	$V_{CE}=5\text{V}, I_C=50\text{mA}$	40*		200*	
	$h_{FE2}$	$V_{CE}=5\text{V}, I_C=500\text{mA}$	20			
Gain-Bandwidth Product	$f_T$	$V_{CE}=5\text{V}, I_C=100\text{mA}$		2.0		GHz

\* : The 2SC4821 is classified by 50mA  $h_{FE}$  as follows :

40	C	80	60	D	120	100	E	200
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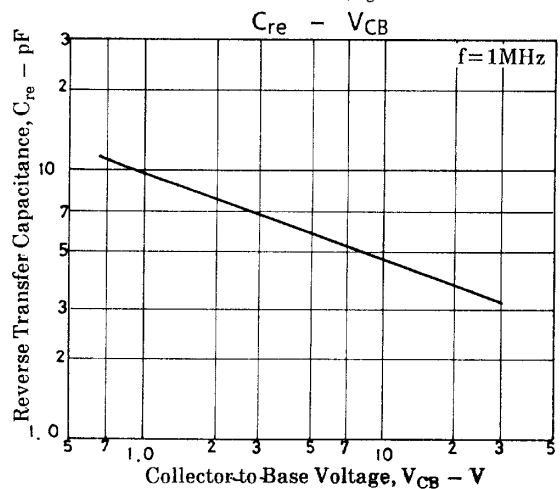
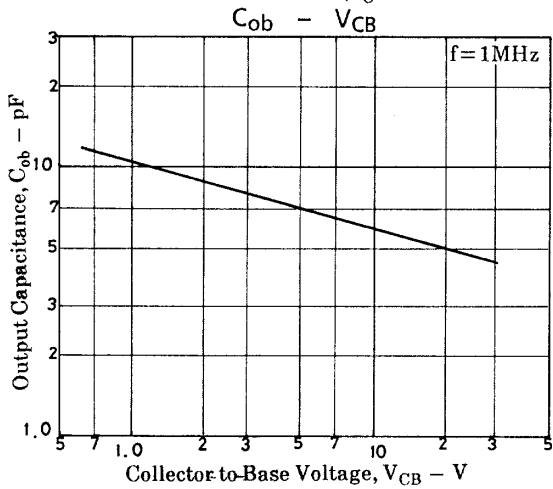
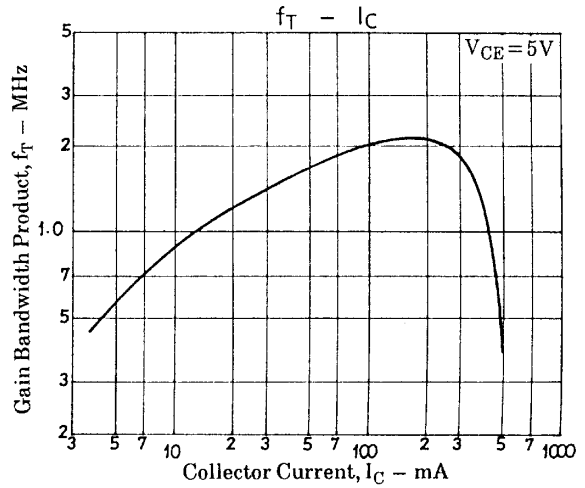
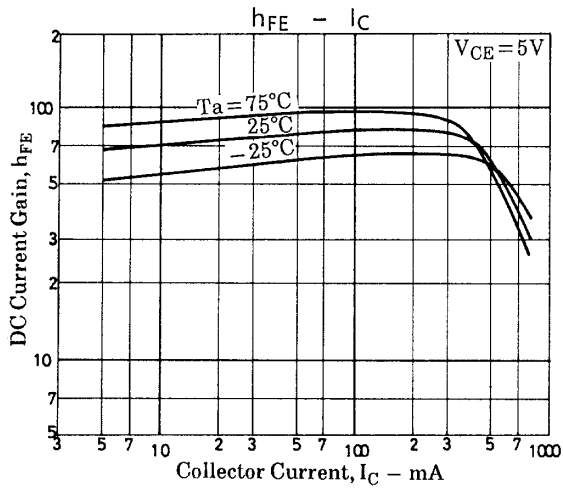
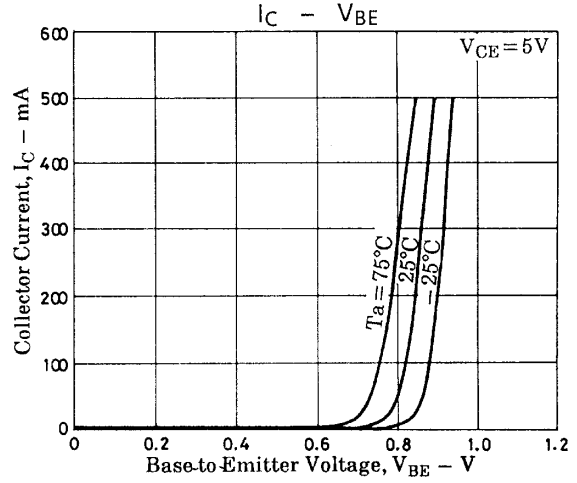
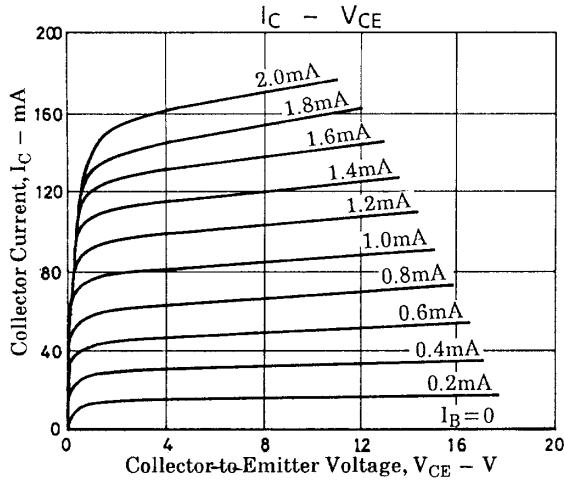
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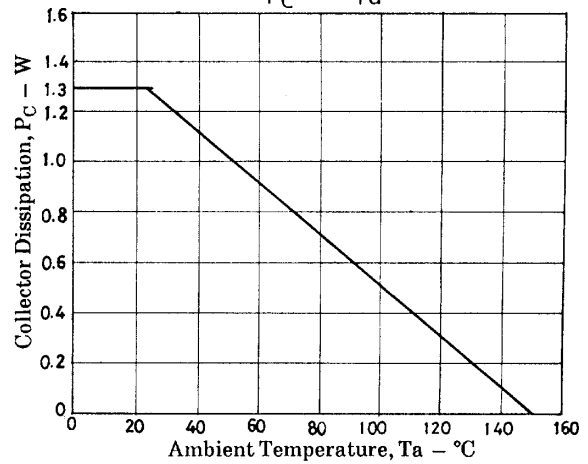
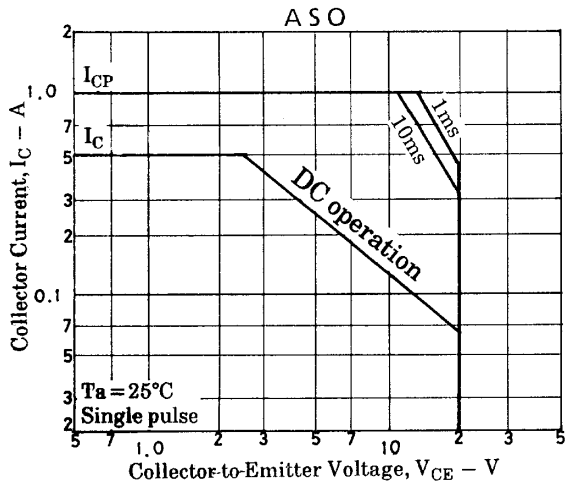
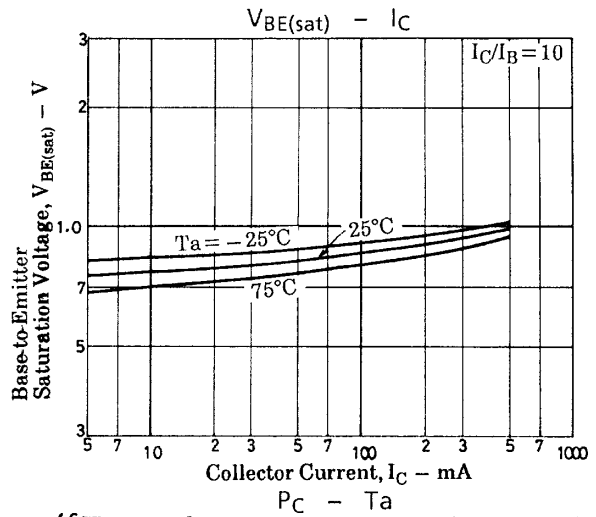
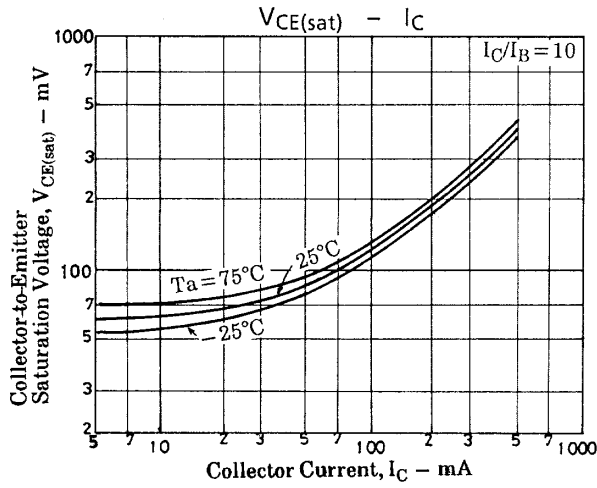
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz$		6.0		pF
Reverse Transfer Capacitance	$C_{re}$	$V_{CB}=10V, f=1MHz$		4.6		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=300mA, I_B=30mA$		0.3	0.8	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=300mA, I_B=30mA$		0.9	1.2	V



## 2SC4821



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