



## 2SB1037/2SD1459

### Color TV Vertical Output, Sound Output Applications

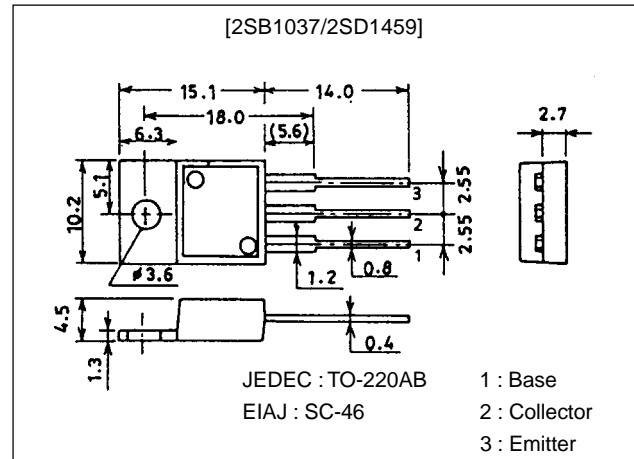
#### Features

- High allowable collector dissipation ( $P_C=2W$ ).
- Wide ASO.

#### Package Dimensions

unit:mm

2010C



() : 2SB1037

#### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		(-)150	V
Collector-to-Emitter Voltage	$V_{CEO}$		(-)150	V
Emitter-to-Base Voltage	$V_{EBO}$		(-)5	V
Collector Current	$I_C$		(-)1.5	A
Collector Current (Pulse)	$I_{CP}$		(-)3	A
Collector Dissipation	$P_C$		2.0	W
		$T_c=25^\circ\text{C}$	30	W
Junction Temperature	$T_j$		175	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +175	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=(-)120V$			(-)10	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)5V$			(-)10	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=(-)5V, I_C=(-)0.3A$	70*		200*	
Gain Bandwidth Product	$f_T$	$V_{CE}=(-)5V, I_C=(-)100mA$		(15)8		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$			(-)1.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$			(-)1.2	V

\* : The 2SB1037/2SD1459 are classified by 0.3A  $h_{FE}$  as follows :

70	Q	140	100	R	200
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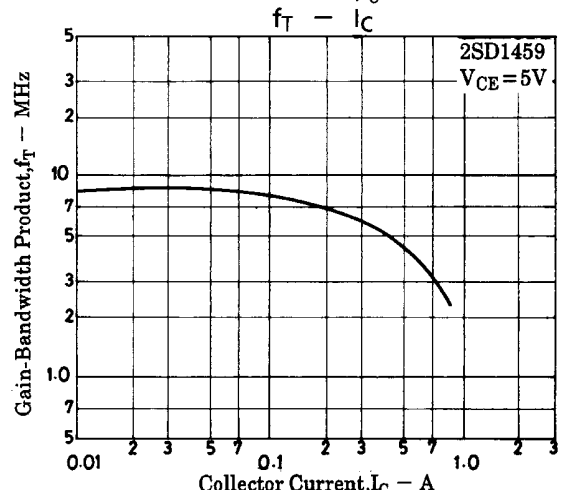
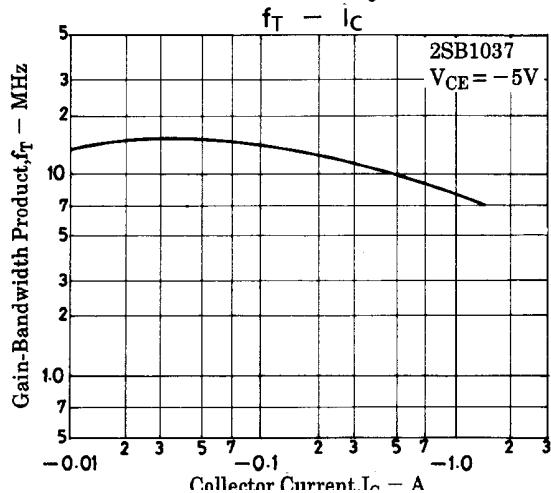
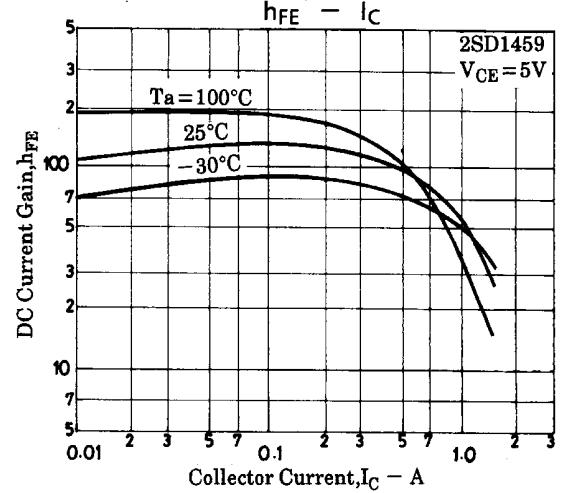
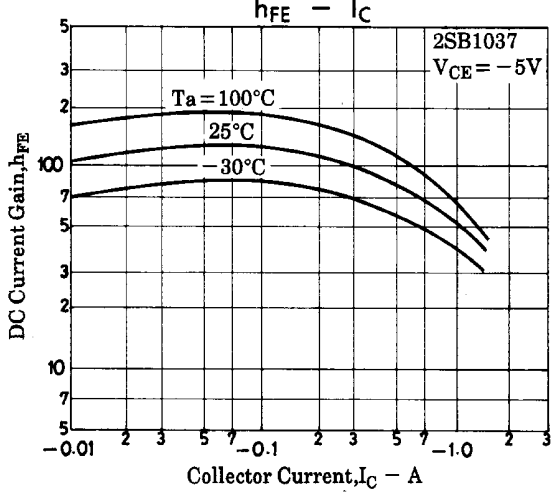
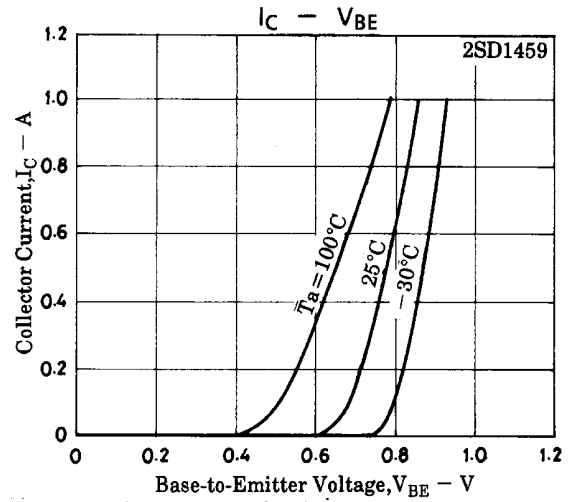
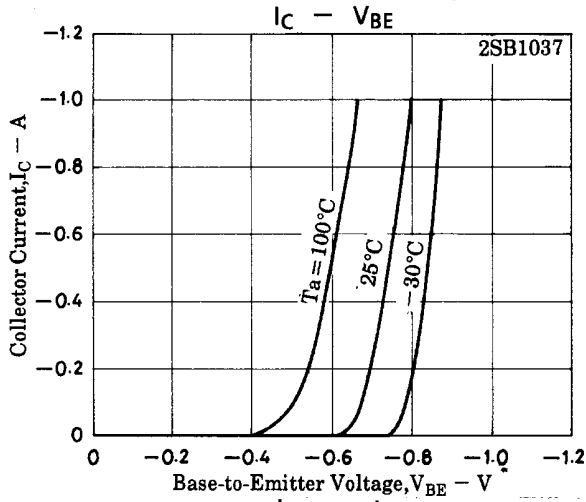
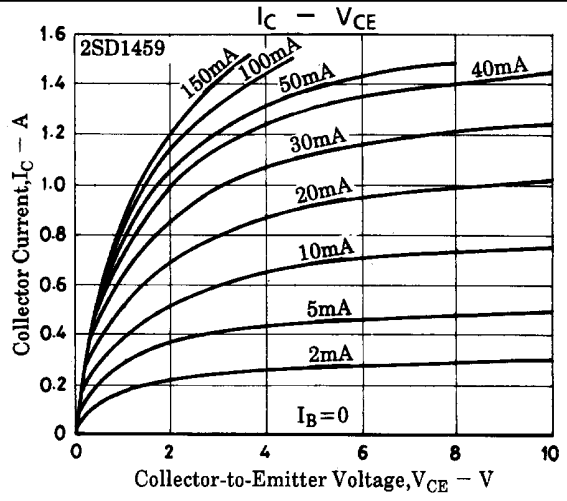
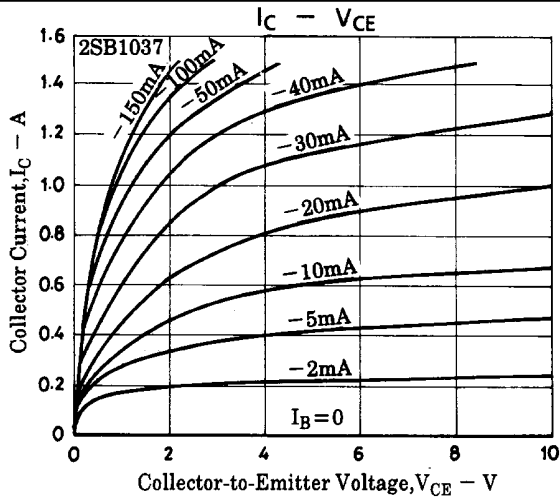
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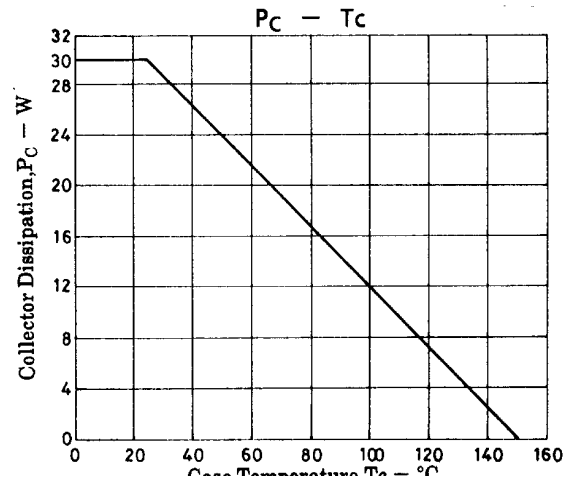
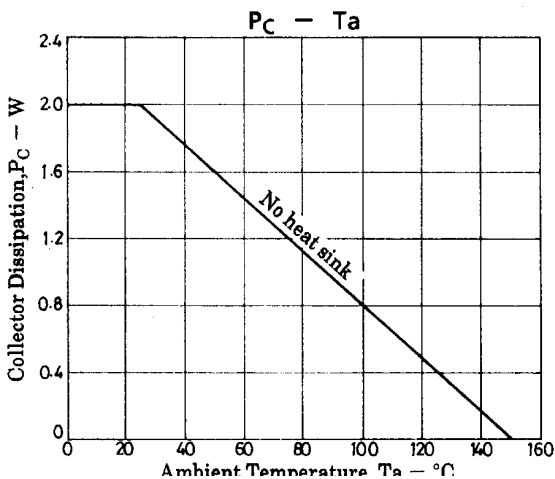
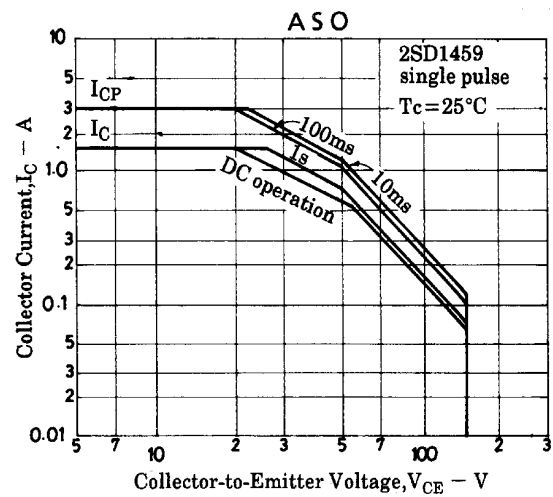
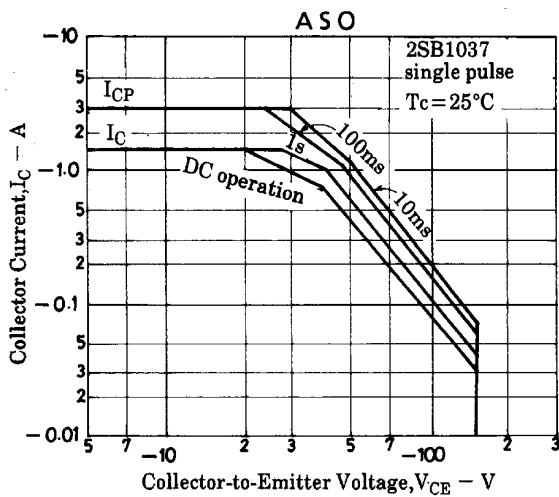
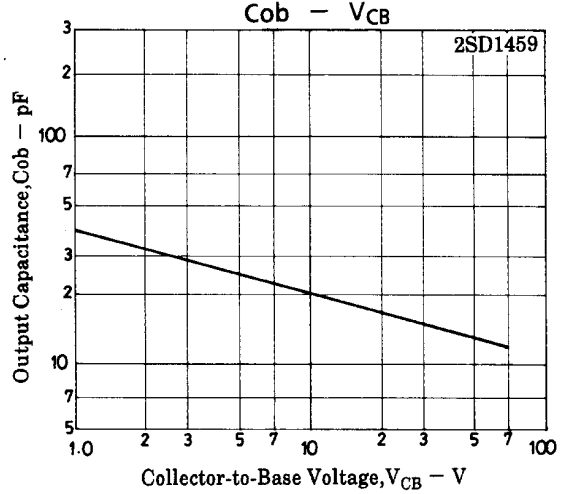
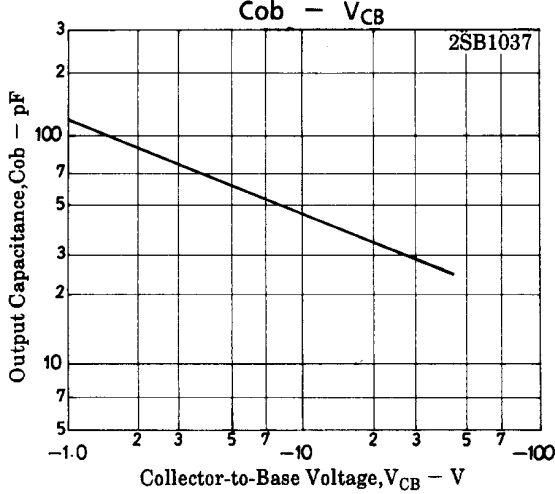
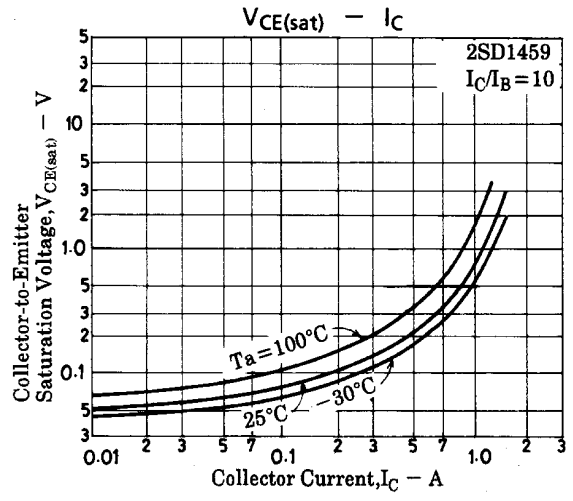
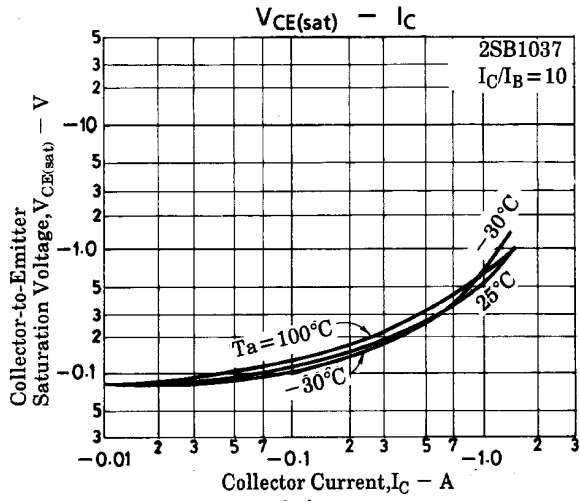
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