



2SB1037/2SD1459

Color TV Vertical Output, Sound Output Applications

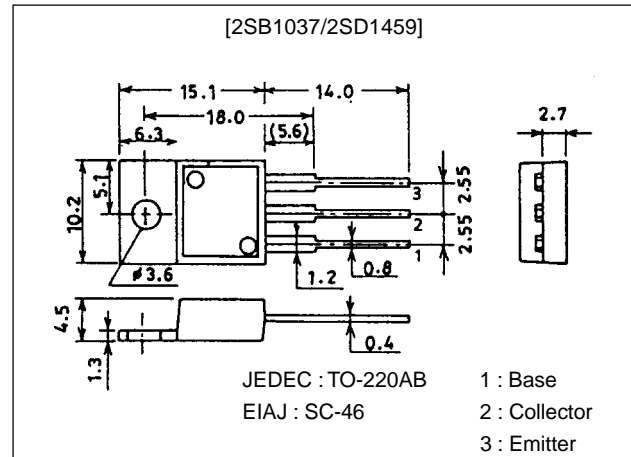
Features

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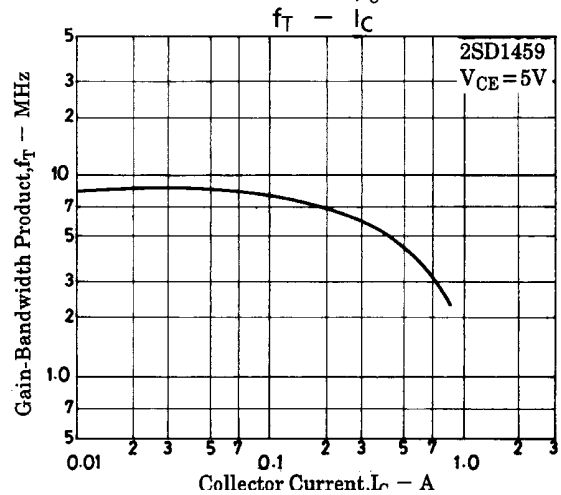
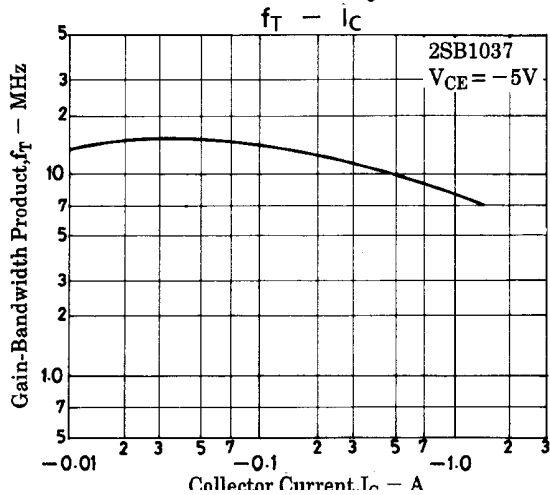
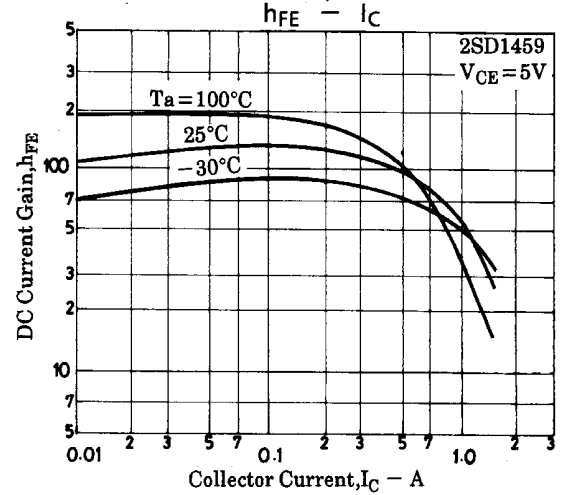
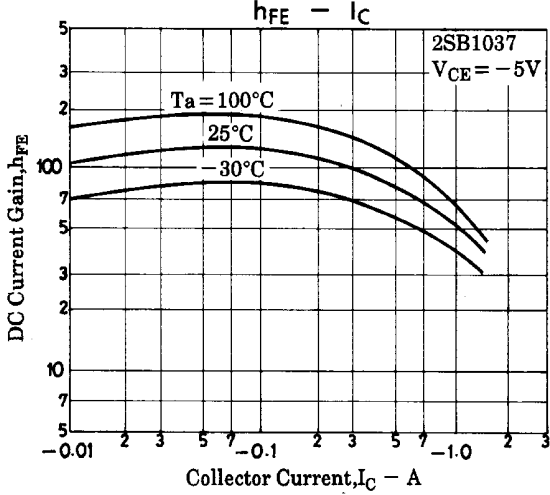
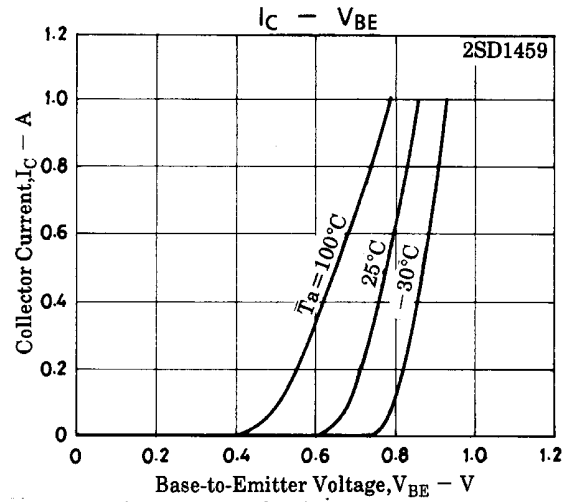
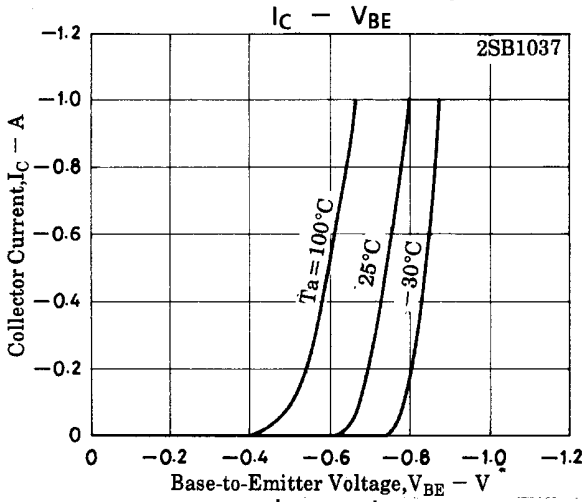
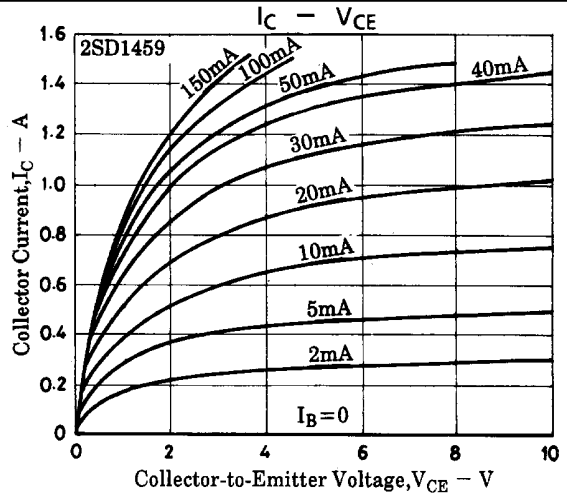
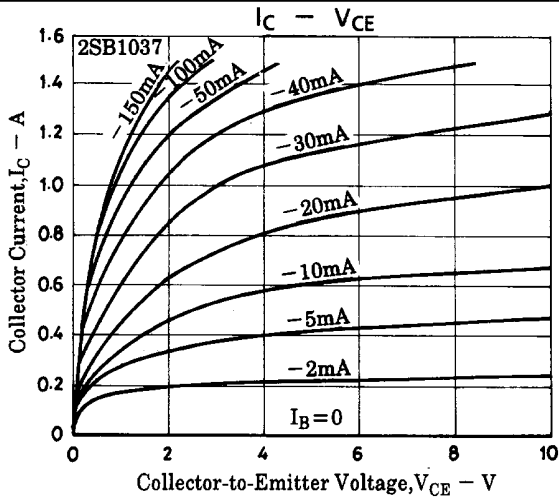
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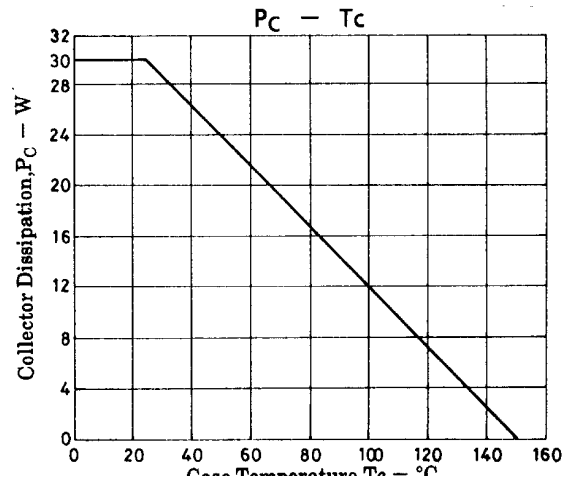
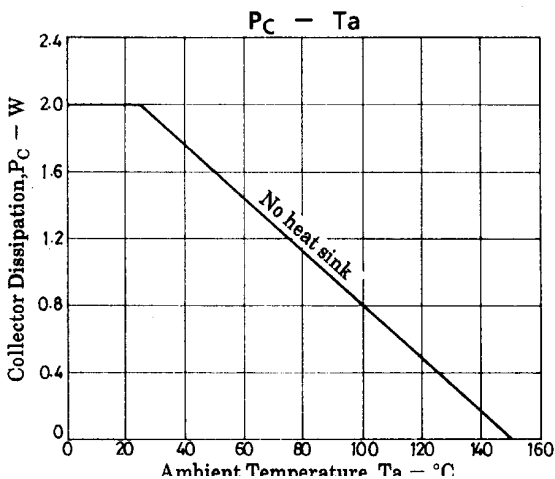
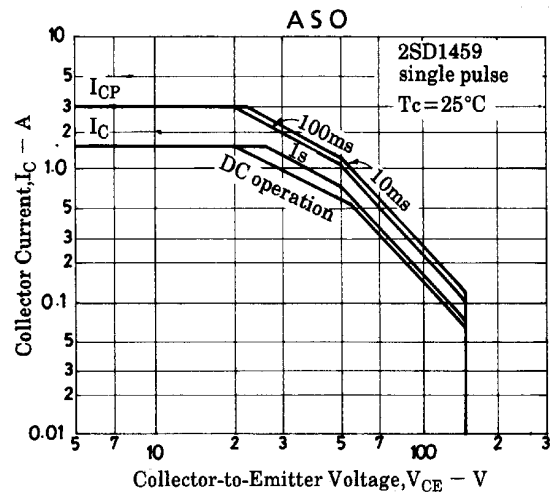
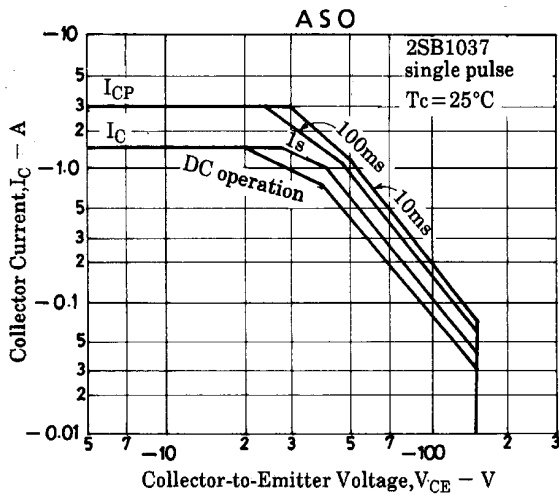
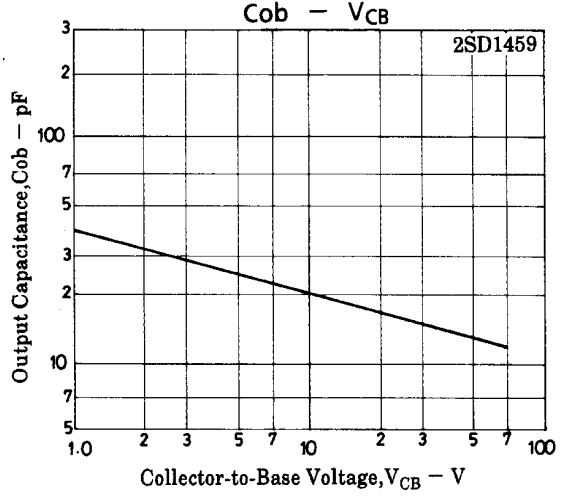
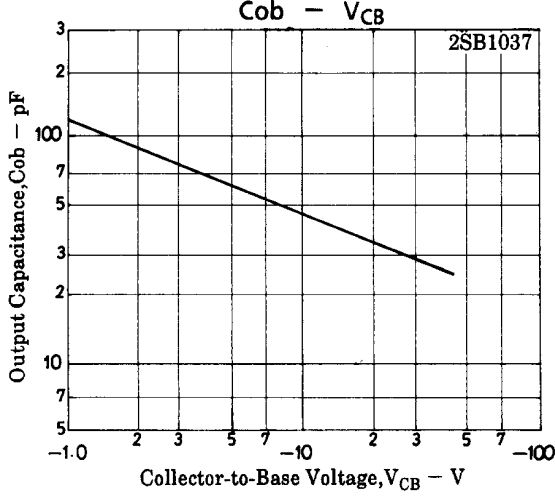
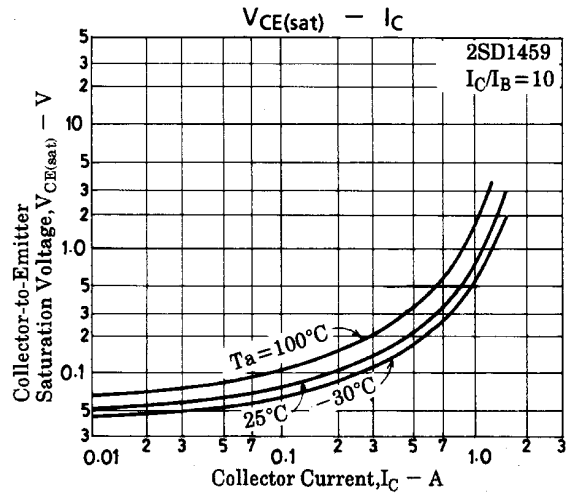
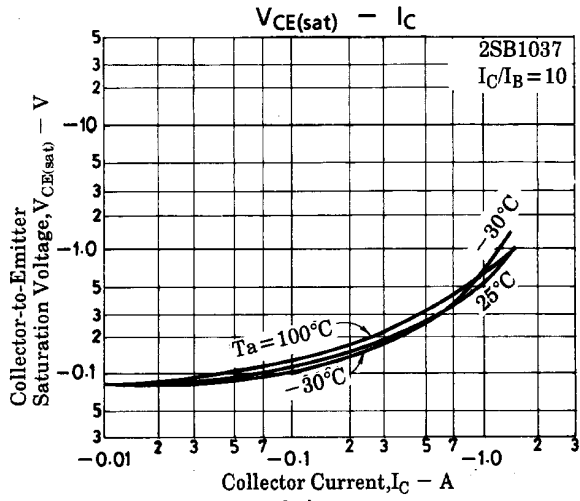
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