



## 2SB1235/2SD1852

### Driver Applications

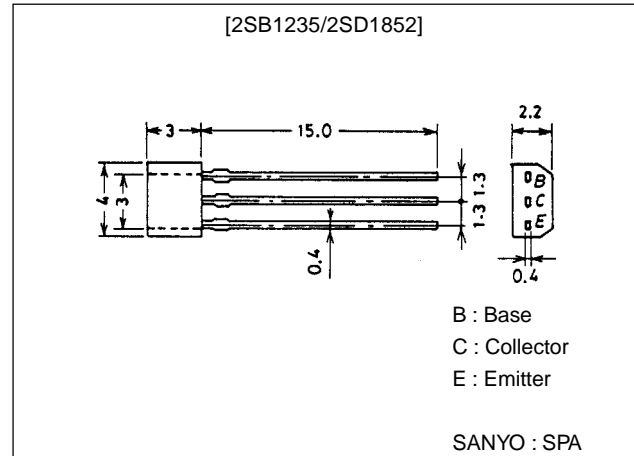
#### Features

- AF amplifier, solenoid drivers, LED drivers.
- Darlington connection.
- High DC current gain.

#### Package Dimensions

unit:mm

2033



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#### Specifications

##### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		(-)80	V
Collector-to-Emitter Voltage	$V_{CEO}$		(-)50	V
Emitter-to-Base Voltage	$V_{EBO}$		(-)10	V
Collector Current	$I_C$		(-)200	mA
Collector Current (Pulse)	$I_{CP}$		(-)400	mA
Collector Dissipation	$P_C$		300	mW
Junction Temperature	$T_J$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

##### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-)60V, I_E = 0$			(-)100	nA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)8V, I_C = 0$			(-)100	nA
DC Current Gain	$h_{FE1}$	$V_{CE} = (-)2V, I_C = (-)10mA$	5000			
			4000			
			(3000)			
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)100mA, I_B = (-)100\mu A$		(-)0.9	(-)1.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)100mA, I_B = (-)100\mu A$		(-)1.5	(-)2.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	(-)80			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C = (-)10\mu A, I_C = 0$	(-)10			V

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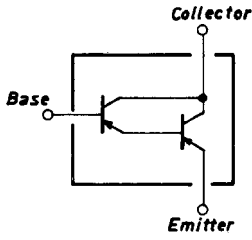
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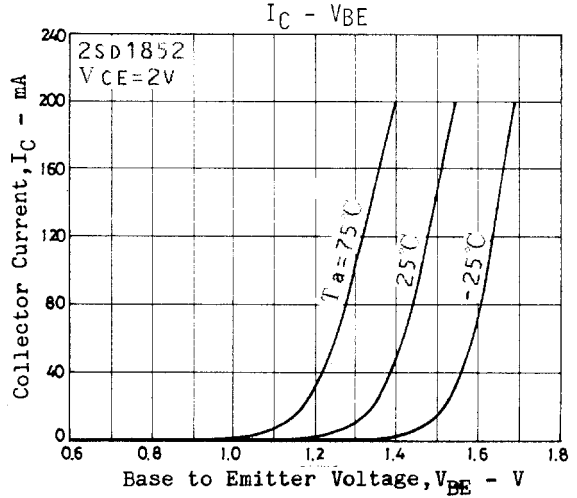
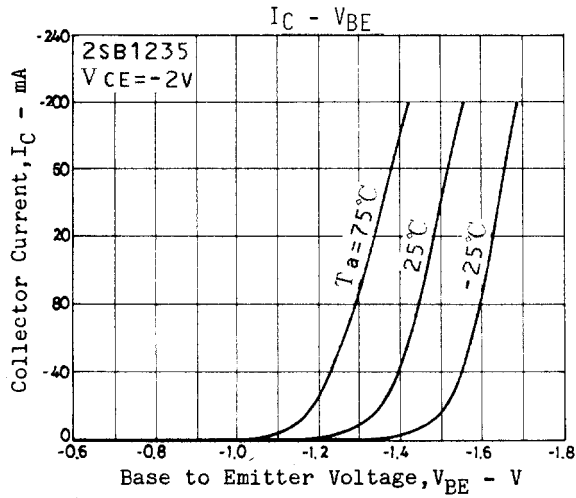
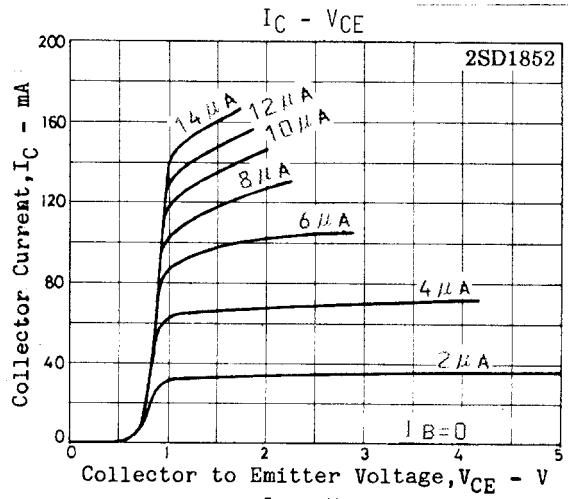
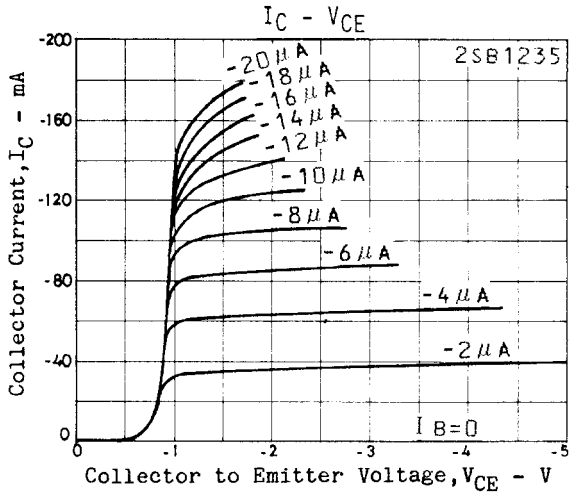
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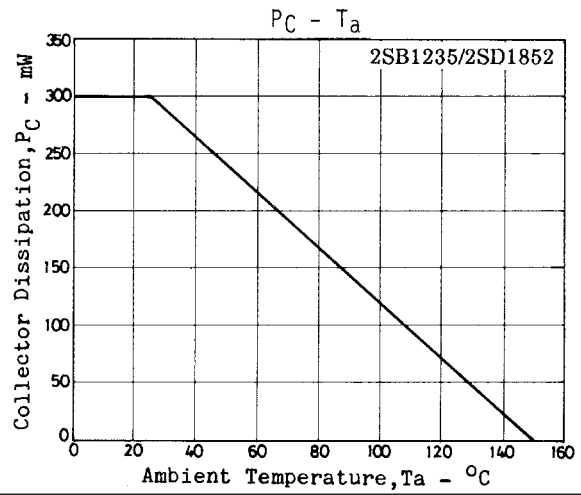
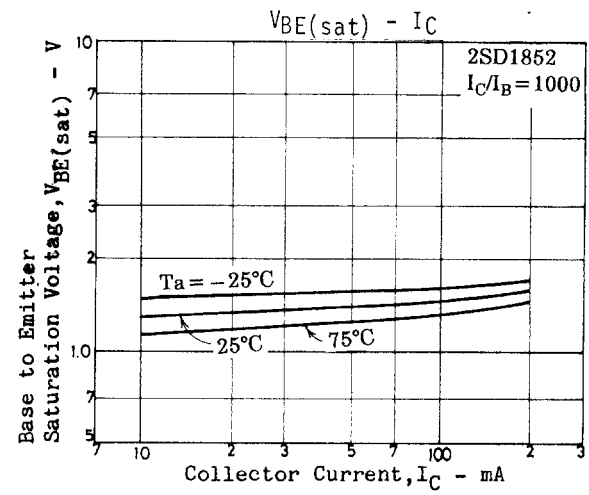
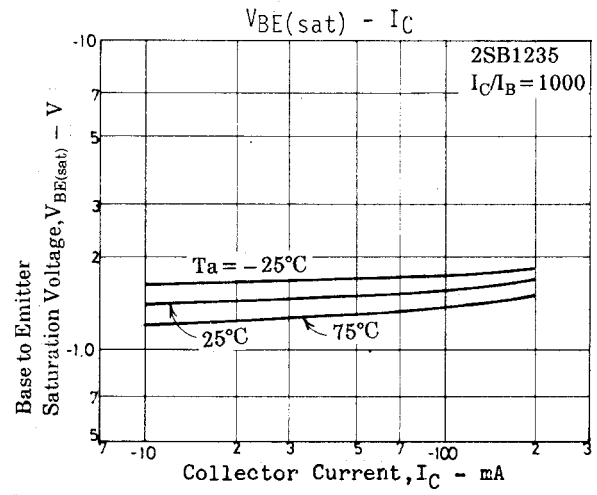
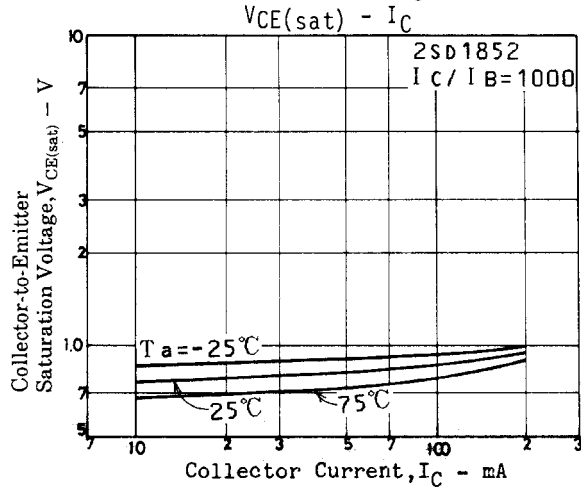
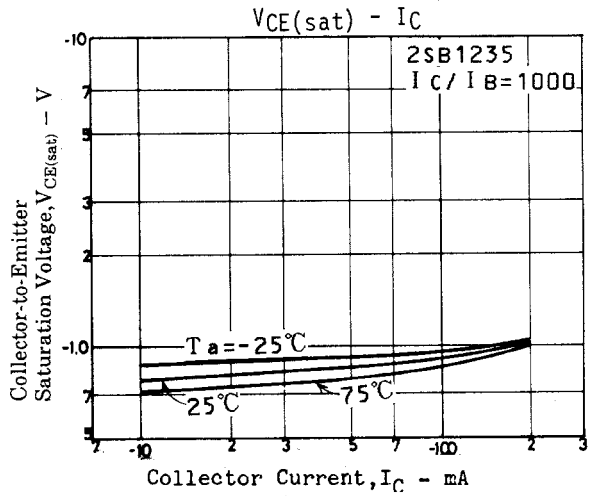
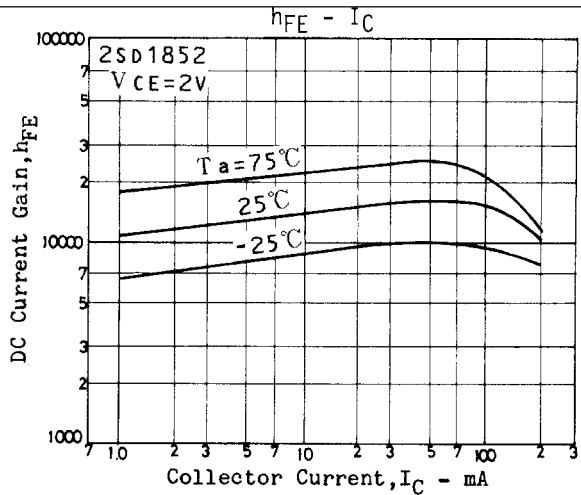
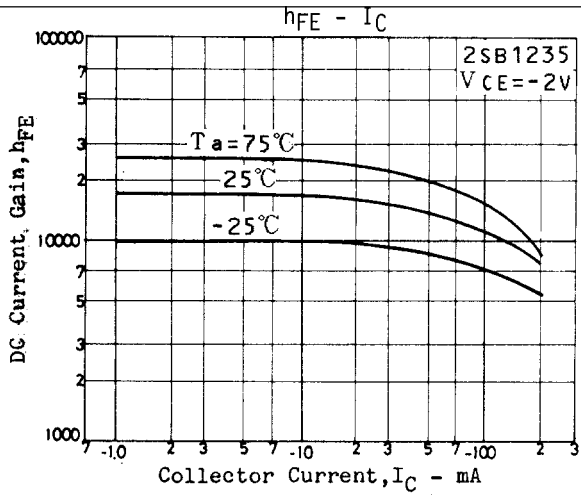
## Electrical Connection



(For NPN, the polarity is reversed.)



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