

Ordering number:EN2553A

PNP/NPN Epitaxial Planar Silicon Transistors



2SB1234/2SD1851

Driver Applications

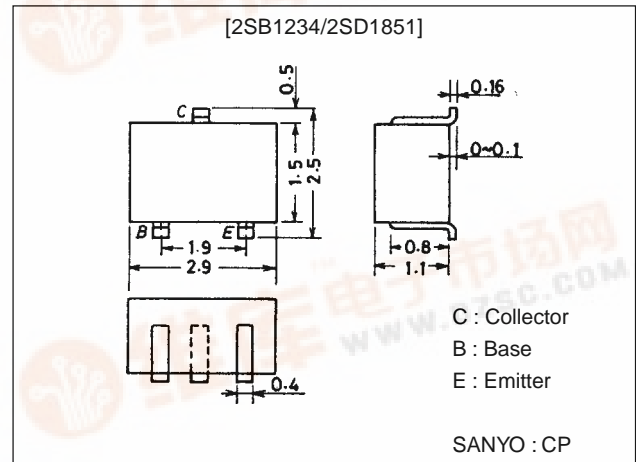
Features

- AF amplifier, solenoid drivers, LED drivers.
- Darlington connection.
- High DC current gain.
- Very small-sized package permitting sets to be made smaller and slimer.

Package Dimensions

unit:mm

2018A



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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 _{CE0}		(-)50	V
Emitter-to-Base Voltage	V _{EB0}		(-)10	V
Collector Current	I _C		(-)200	mA
Collector Current (Pulse)	I _{CP}		(-)400	mA
Collector Dissipation	P _C		200	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 _{CB0}	V _{CB} =(-)60V, I _E =0			(-)100	nA
Emitter Cutoff Current	I _{EB0}	V _{EB} =(-)8V, I _C =0			(-)100	nA
DC Current Gain	h _{FE1} h _{FE2}	V _{CE} =(-)2V, I _C =(-)10mA	5000			
			4000			
			(3000)			
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)100mA, I _B =(-)100μA	(-)0.9		(-)1.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)100mA, I _B =(-)100μA	(-)1.5		(-)2.0	V

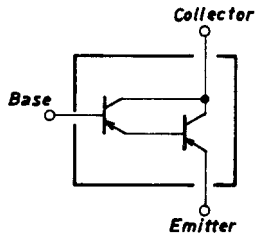
Marking : 2SB1234 : PL
2SD1851 : XY

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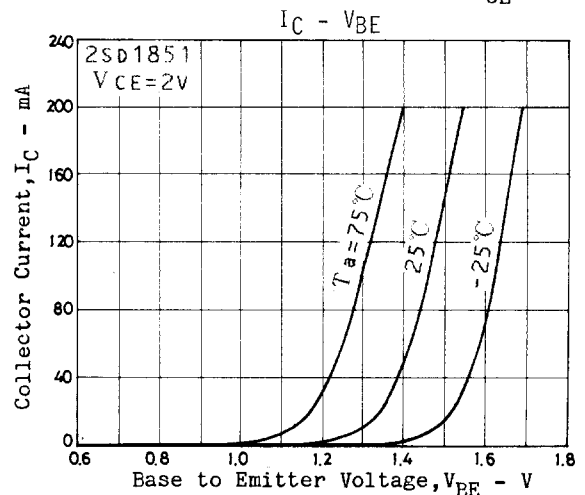
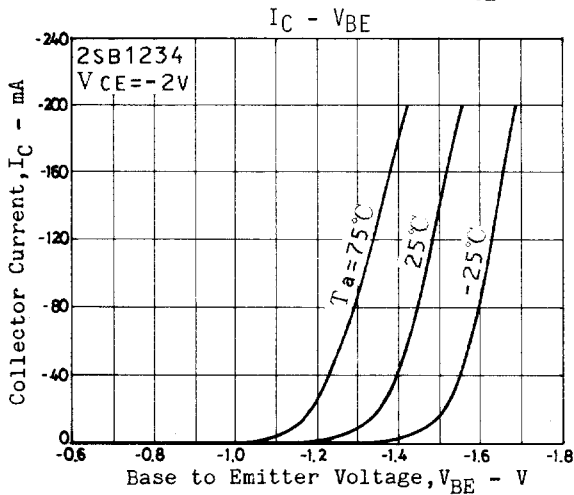
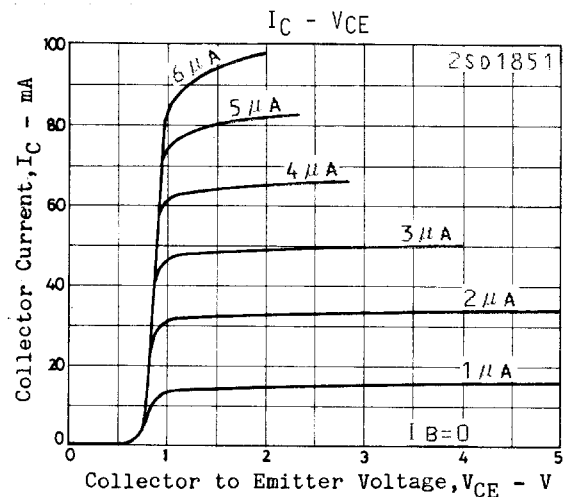
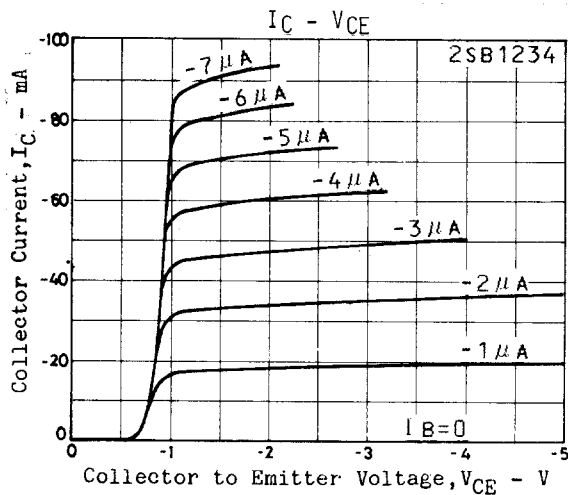
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	(-)80			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C = (-)10\mu A, I_C = 0$	(-)10			V

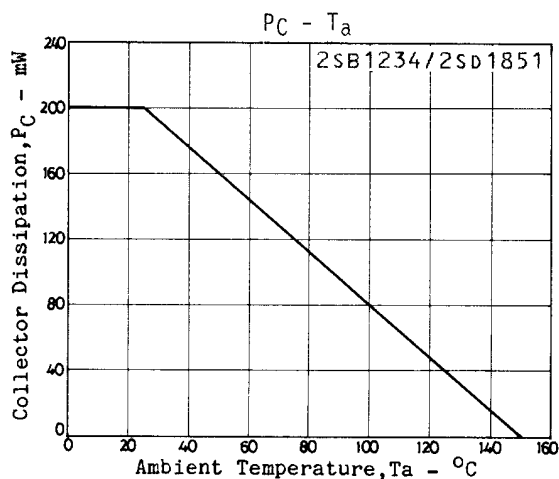
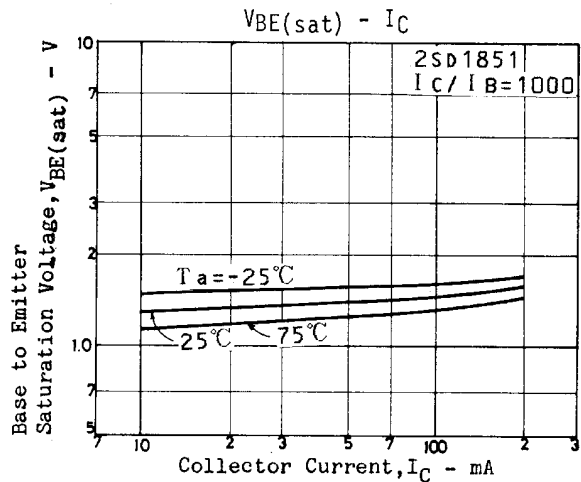
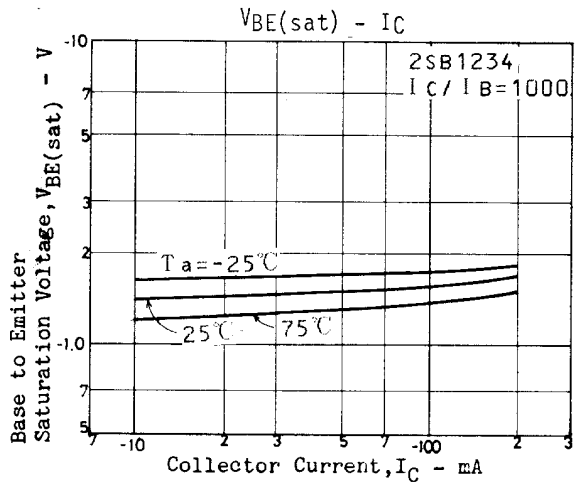
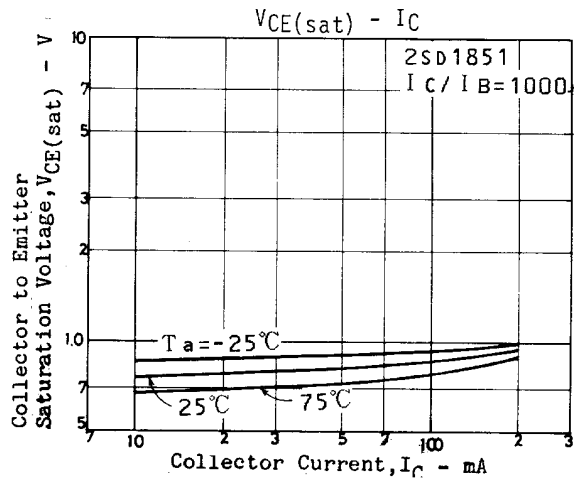
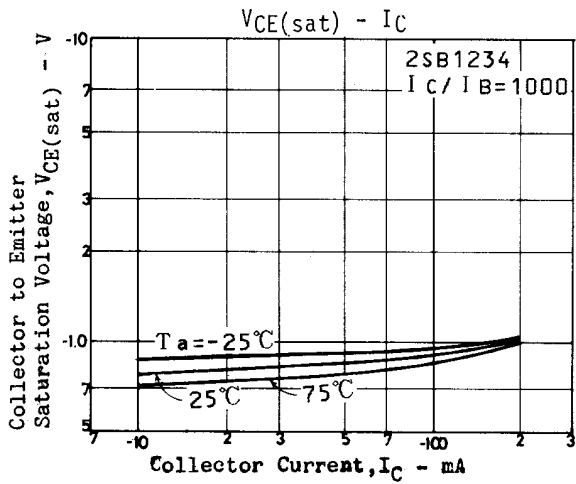
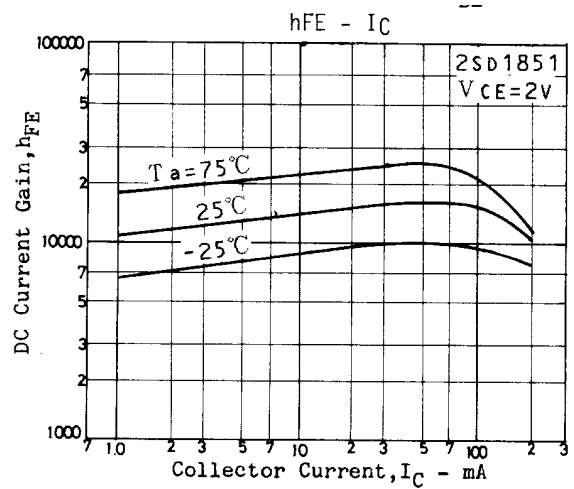
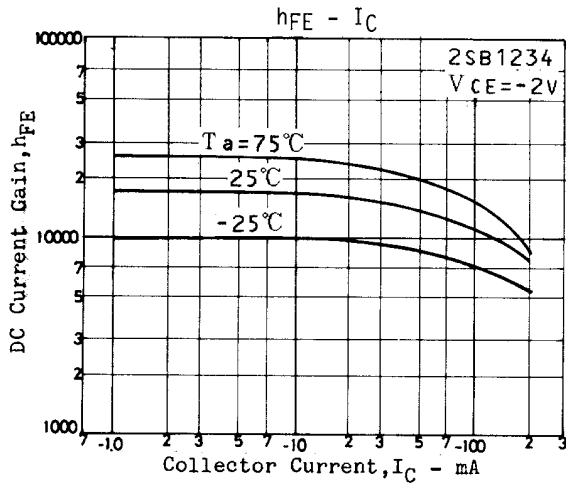
Electrical Connection



(For NPN, the polarity is reversed.)



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