



SANYO Semiconductors

DATA SHEET

2SB1234 / 2SD1851 — PNP / NPN Epitaxial Planar Silicon Transistors

Driver Applications

Features

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

Specifications () : 2SB1234

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 _{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 _{CBO}	V _{CB} =(-)60V, I _E =0A			(-)100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)8V, I _C =0A			(-)100	nA
DC Current Gain	h _{FE1}	V _{CE} =(-)2V, I _C =(-)10mA	5000			
	h _{FE2}	V _{CE} =(-)2V, I _C =(-)100mA	(3000)4000			
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
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0A	(-)80			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)1mA, R _{BE} =∞	(-)50			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10μA, I _C =0A	(-)10			V

Marking 2SB1234: PL

2SD1851: XY

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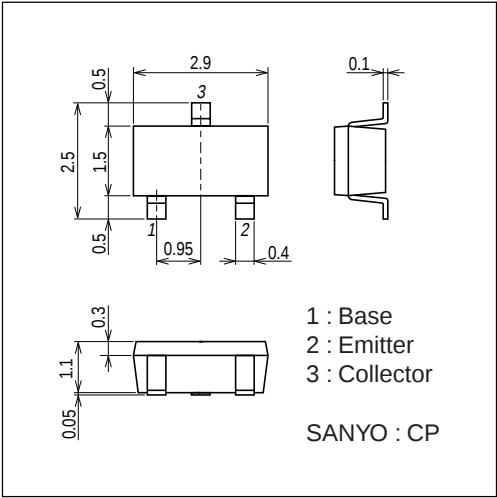
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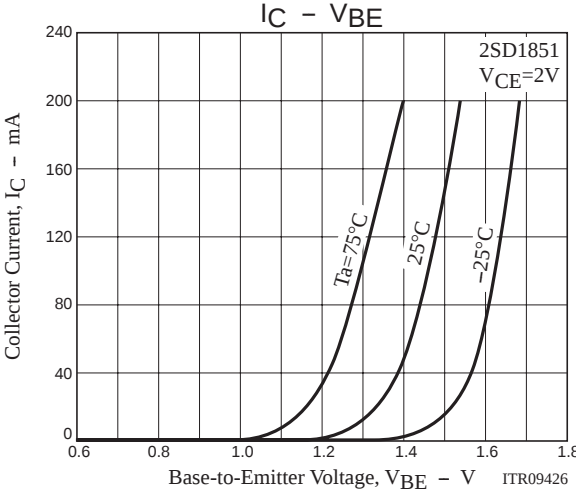
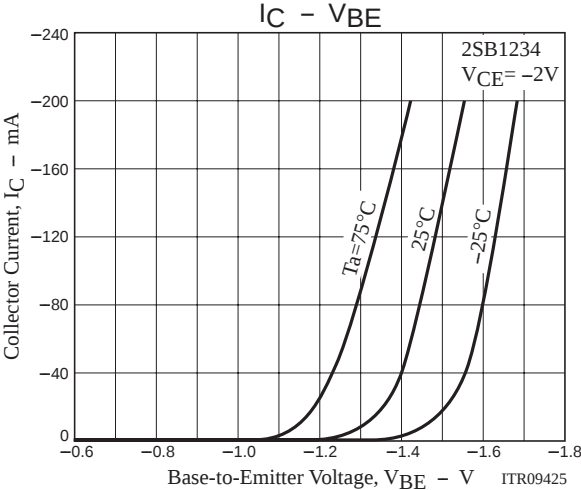
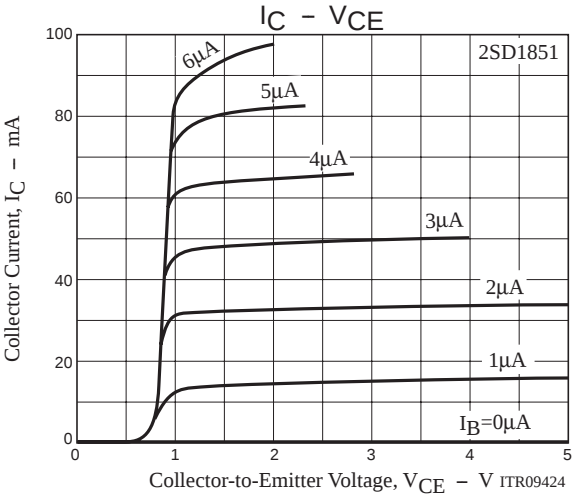
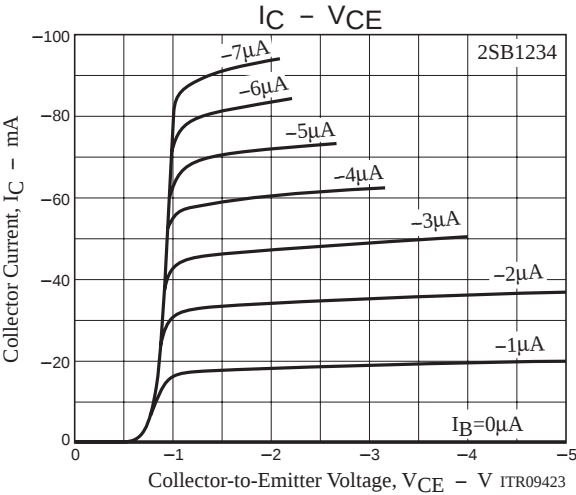
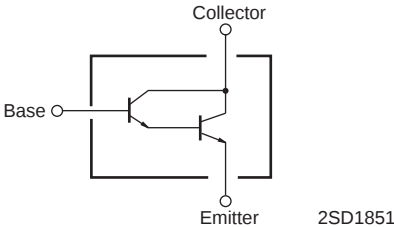
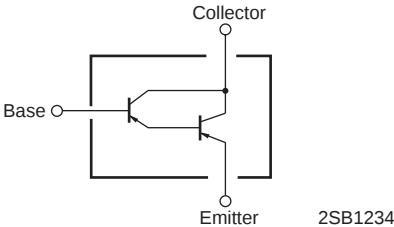
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Package Dimensions

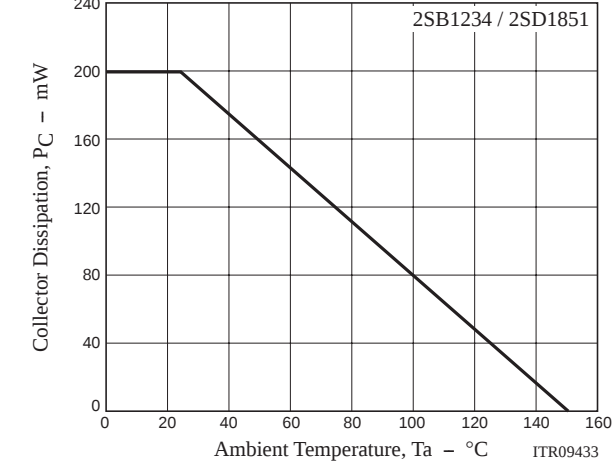
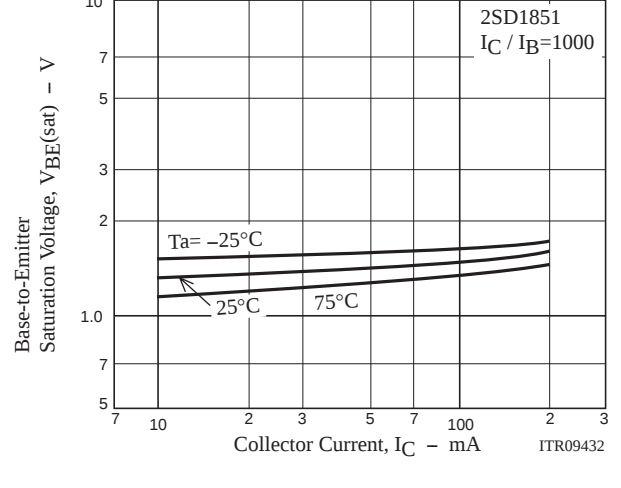
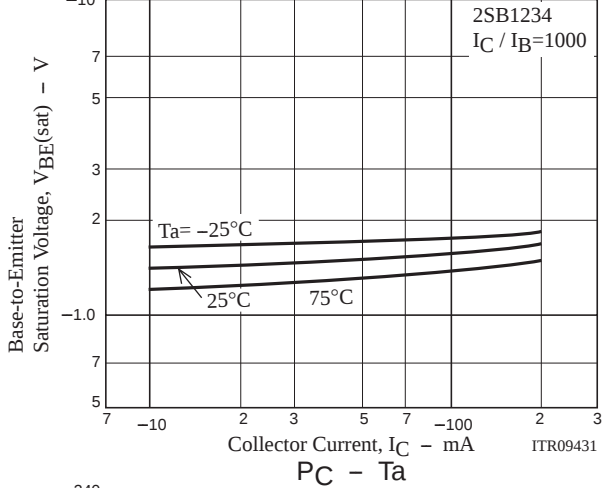
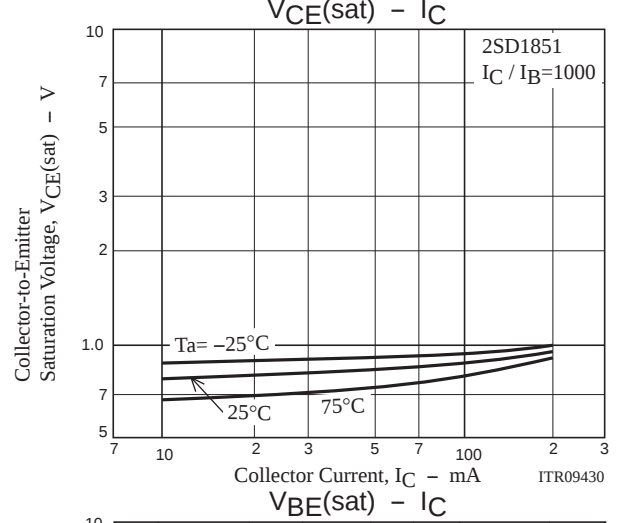
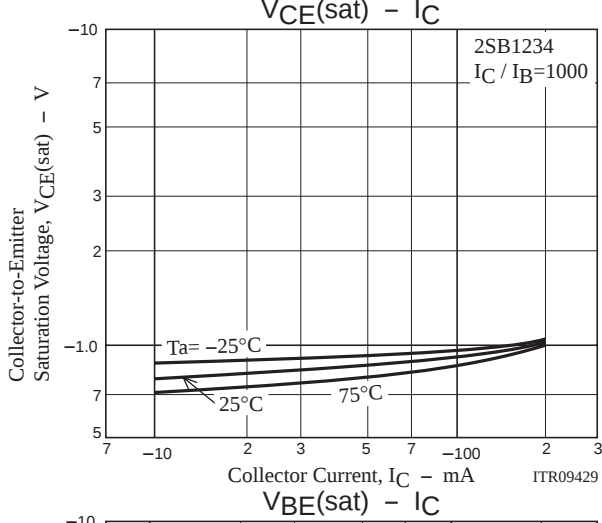
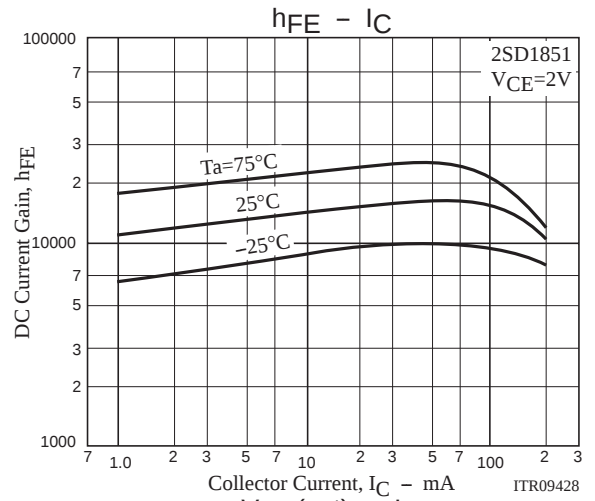
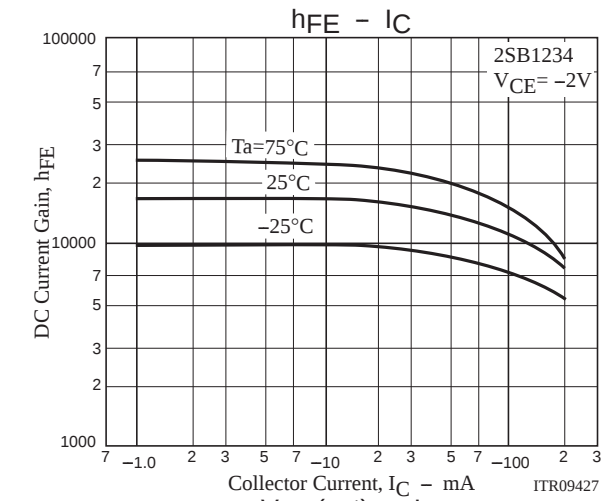
unit : mm (typ)
7013A-009



Electrical Connection



2SB1234 / 2SD1851



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