



SANYO Semiconductors

# DATA SHEET

## 2SB1126 / 2SD1626 — PNP / NPN Epitaxial Planar Silicon Transistors For Various Drivers

### Applications

- Relay drivers, hammer drivers, lamp drivers, motor drivers.

### Features

- High DC current gain (4000 or greater).
- Large current capacity.
- Ultrasmall size making it easy to provide high-density, small-sized hybrid IC's.

### Specifications ( ) : 2SB1126

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		(-)80	V
Collector-to-Emitter Voltage	VCEO		(-)50	V
Emitter-to-Base Voltage	VEBO		(-)10	V
Collector Current	IC		(-)1.5	A
Collector Current (Pulse)	ICP		(-)3	A
Collector Dissipation	PC		500	mW
		Mounted on a ceramic board (250mm <sup>2</sup> ×0.8mm)	1.5	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	VCB=(-)40V, IE=0A			(-)100	nA
Emitter Cutoff Current	IEBO	VEB=(-)8V, IC=0A			(-)100	nA

Marking 2SB1126 : BI  
2SD1626 : DI

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# 2SB1126 / 2SD1626

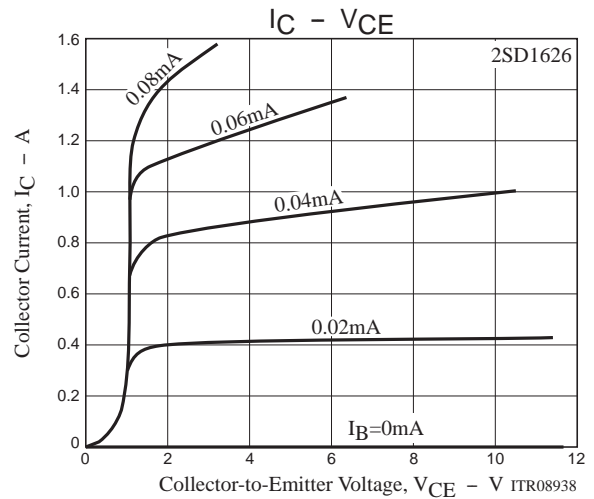
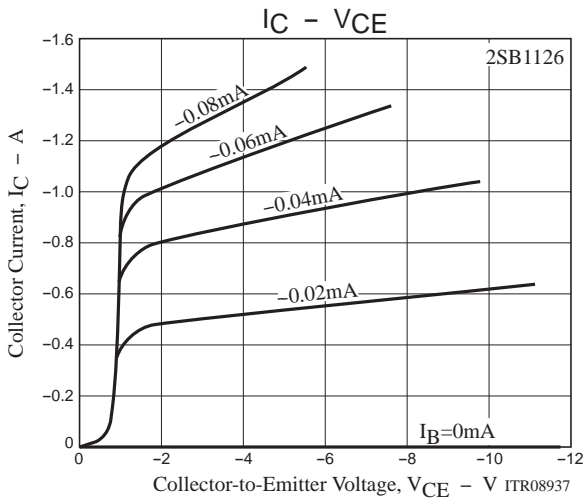
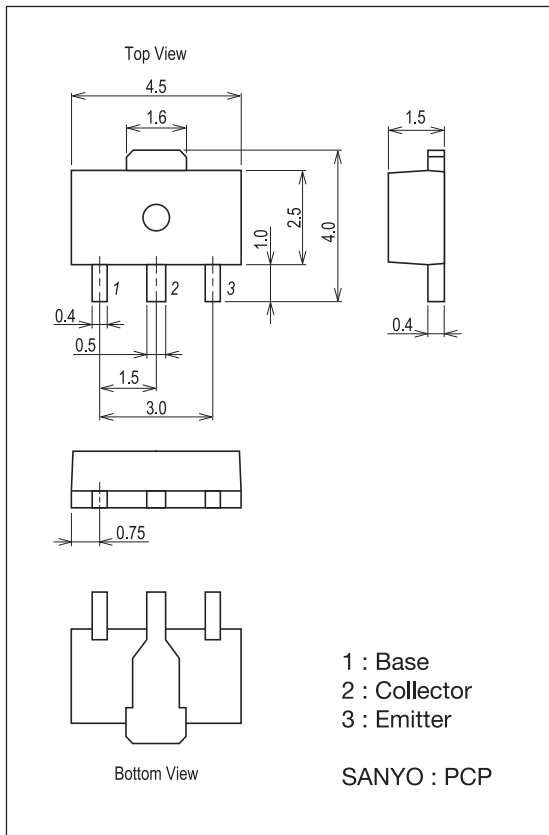
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	hFE1	$V_{CE}=(-)2V, I_C=(-)500mA$	4000			
	hFE2	$V_{CE}=(-)2V, I_C=(-)10mA$	3000			
Gain-Bandwidth Product	$f_T$	$V_{CE}=(-)10V, I_C=(-)50mA$		120		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)0.5mA$		(-)0.9	(-)1.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)0.5mA$		(-)1.5	(-)2.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0A$	(-)80			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0A$	(-)10			V

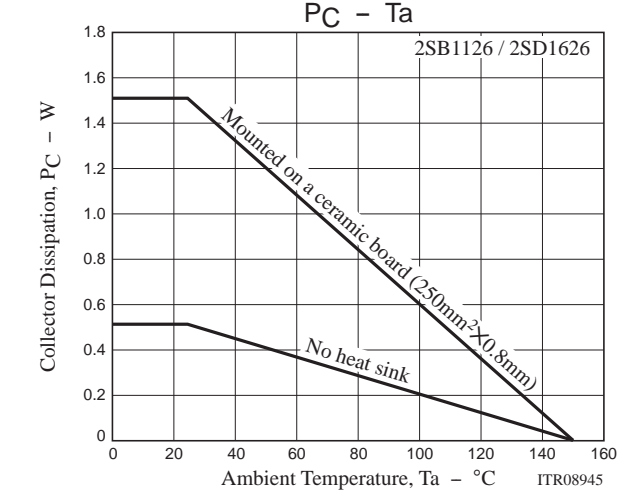
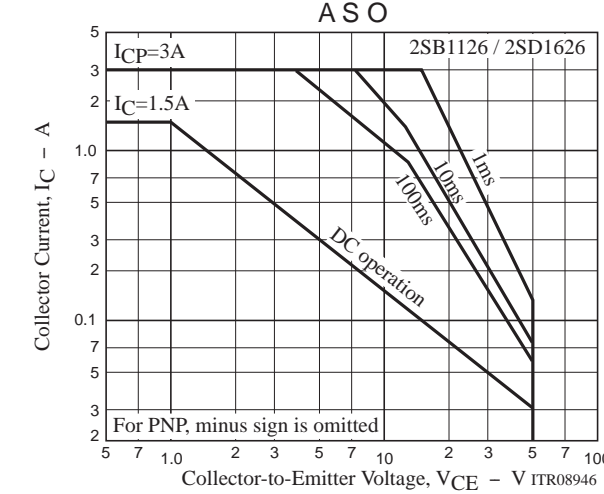
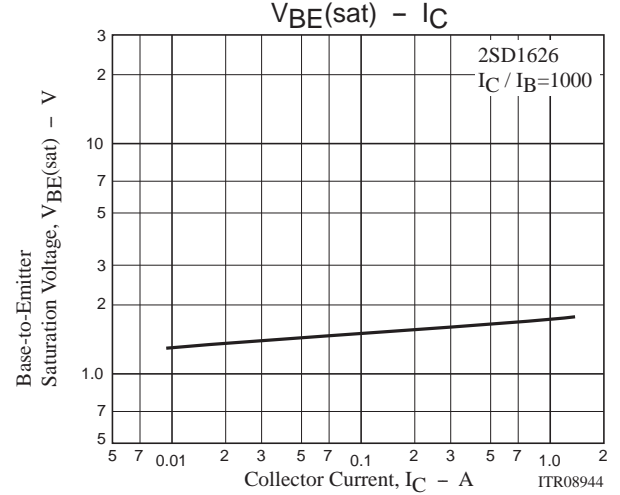
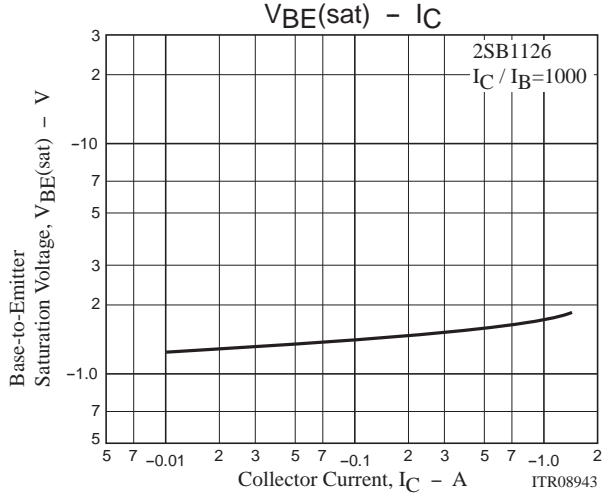
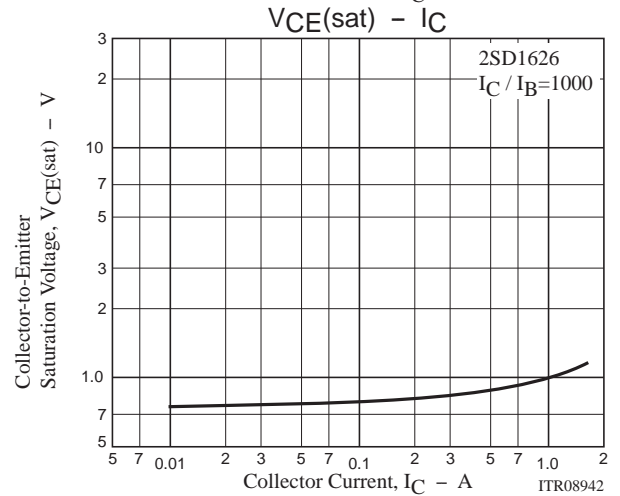
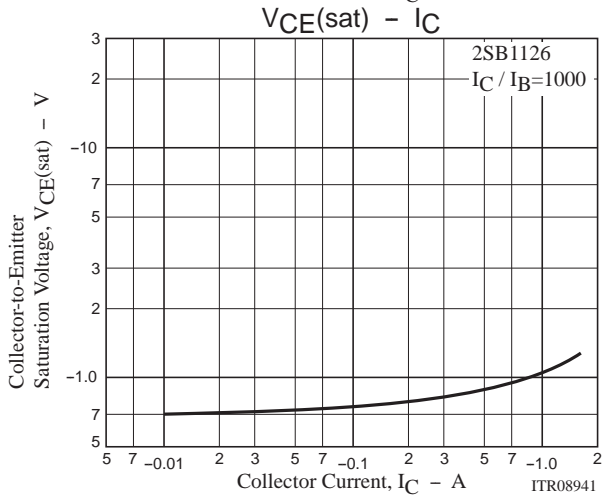
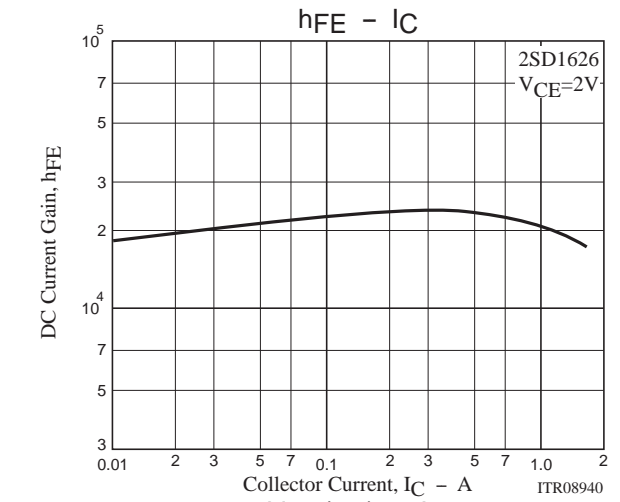
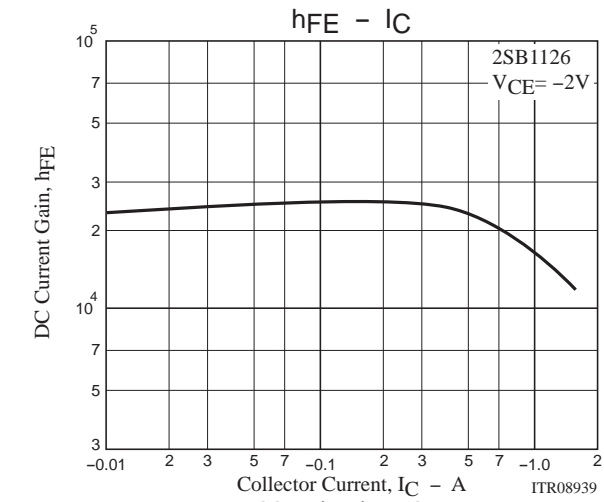
## Package Dimensions

unit : mm (typ)

7007B-004



2SB1126 / 2SD1626



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