

SANYO	No.3130	2SB1324/2SD1998
	PNP/NPN Epitaxial Planar Silicon Transistors	
Compact Motor Driver Applications		

Features

- Low saturation voltage
- Contains diode between collector and emitter.
- Contains bias resistance between collector and emitter.
- Large current capacity
- Small-sized package making it easy to provide high-density, small-sized hybrid ICs

(): 2SB1324

Absolute Maximum Ratings at Ta = 25°C

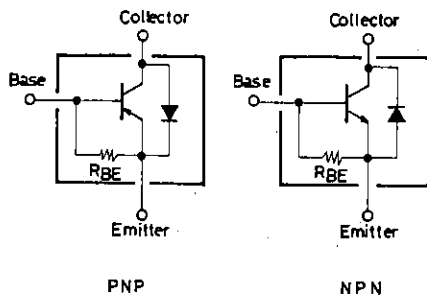
			unit
Collector to Base Voltage	V _{CB0}	(-)40	V
Collector to Emitter Voltage	V _{CEO}	(-)30	V
Emitter to Base Voltage	V _{EBO}	(-)6	V
Collector Current	I _C	(-)3	A
Collector Current(Pulse)	I _{CP}	(-)5	A
Collector Dissipation	P _C (Mounted on ceramic board 250mm ² ×0.8mm)	1.5	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = (-)30V, I _E = 0			(-)1.0	μA
DC Current Gain	h _{FE} (1)	V _{CE} = (-)2V, I _C = (-)0.5A	70			
	h _{FE} (2)	V _{CE} = (-)2V, I _C = (-)2A	50			
Gain-Bandwidth Product	f _T	V _{CE} = (-)2V, I _C = (-)0.5A		100		MHz
Output Capacitance	c _{ob}	V _{CB} = (-)10V, f = 1MHz		(55)40		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = (-)2A, I _B = (-)100mA		0.2	0.5	V
				(-0.25)	(-0.6)	
B-E Saturation Voltage	V _{BE(sat)}	V _{CE} = (-)2V, I _B = (-)100mA			(-)1.5	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = (-)10μA, I _E = 0	(-)40			V
C-E Breakdown Voltage	V _{(BR)CEO(1)}	I _C = (-)10μA, R _{BE} = ∞	(-)40			V
	V _{(BR)CEO(2)}	I _C = (-)10mA, R _{BE} = ∞	(-)30			V
Diode Forward Voltage	V _F	I _F = 0.5A			1.5	V
Base to Emitter Resistance	R _{BE}			0.8		kΩ

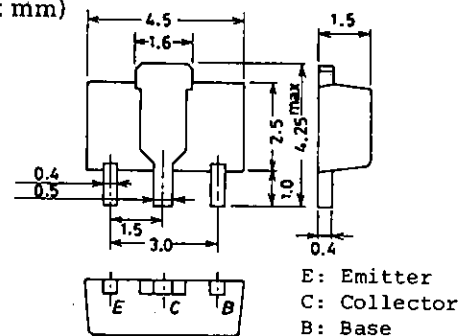
Marking 2SB1324: BL
2SD1998: DM

Electrical Connection



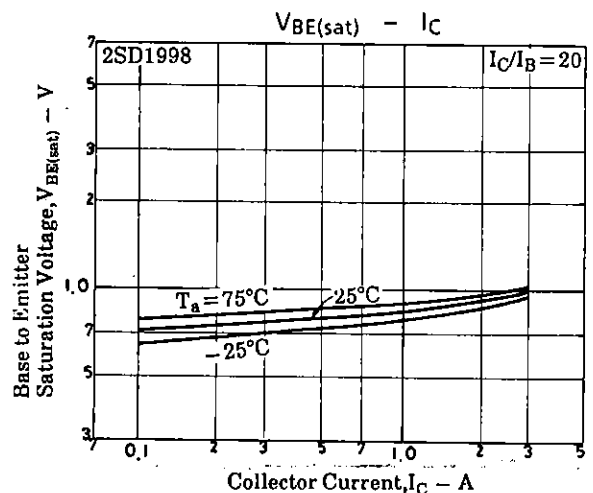
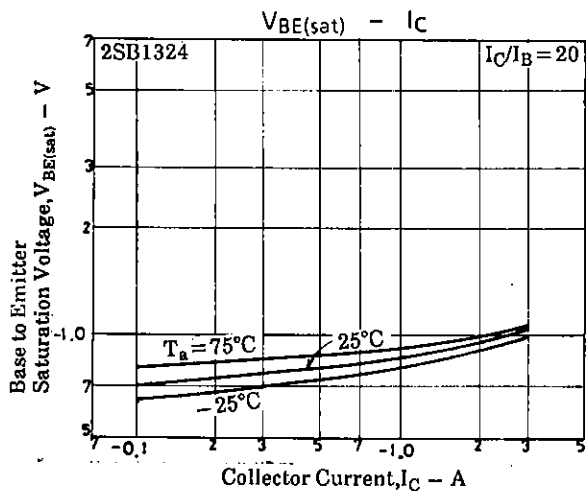
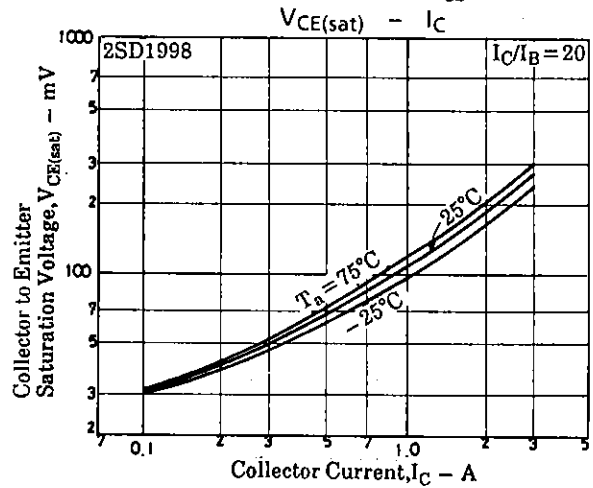
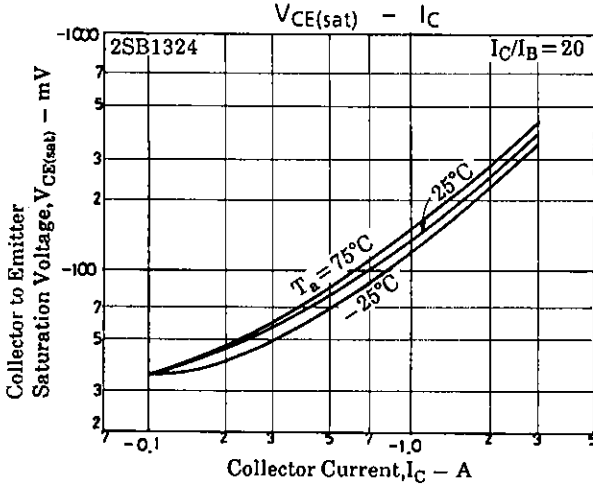
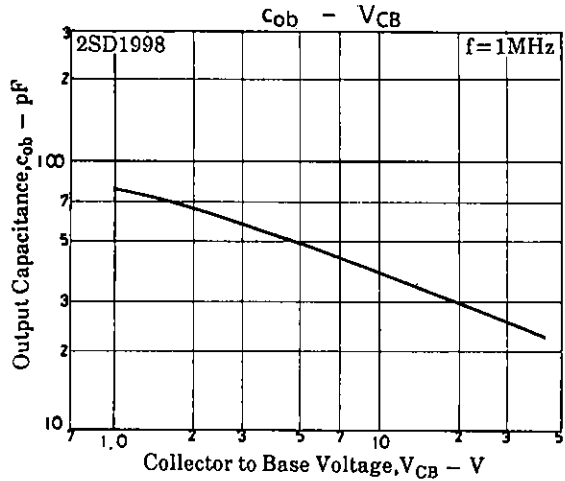
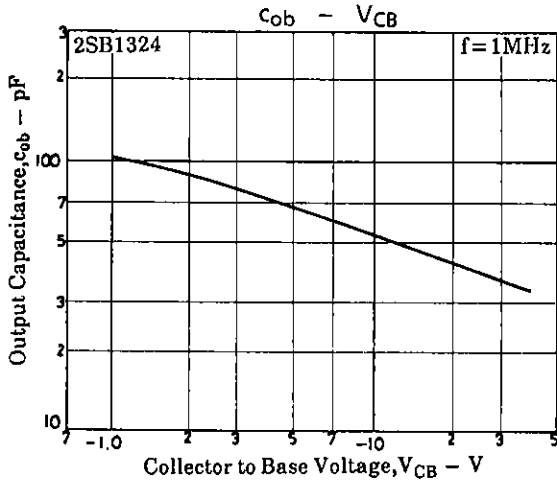
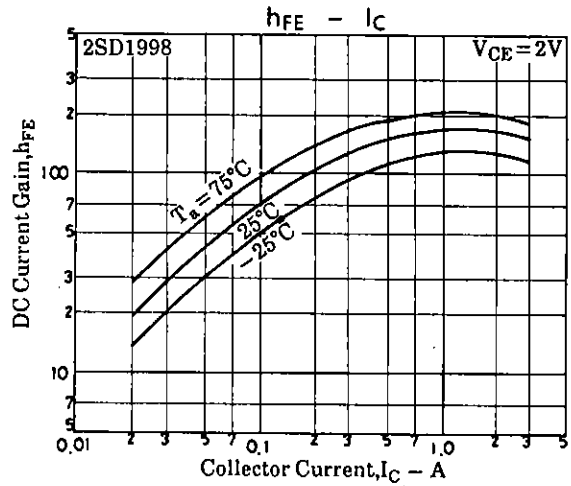
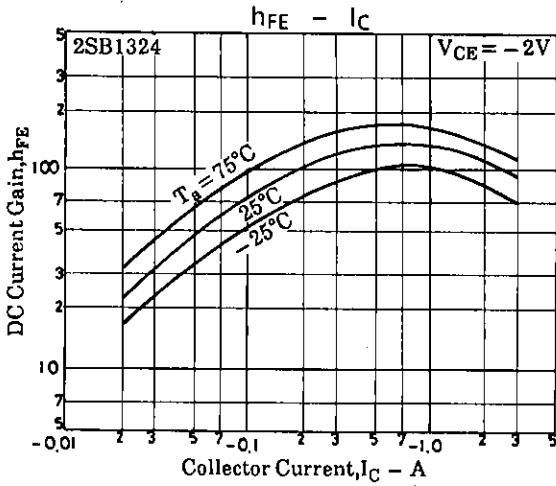
Package Dimensions 2038

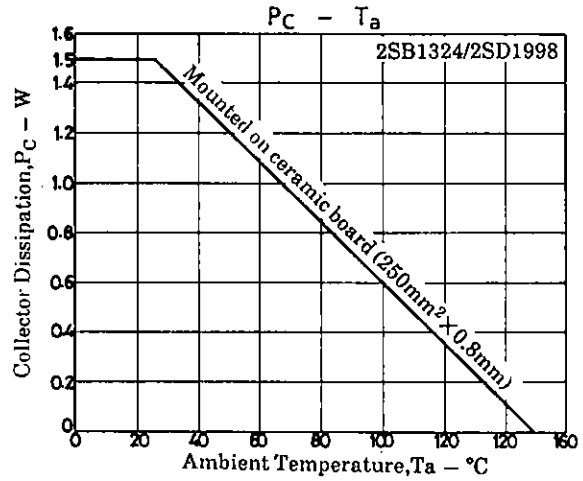
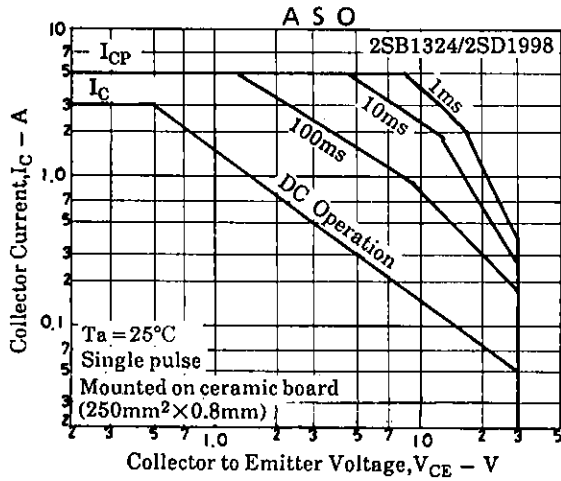
(unit: mm)



E: Emitter
C: Collector
B: Base

SANYO: PCP
(Bottom View)





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