

SANYO	No.2210B	2SB1224/2SD1826
		PNP/NPN Epitaxial Planar Silicon Darlington Transistor
Driver Applications		

Applications

- Suitable for use in control of motor drivers, printer hammer drivers, relay drivers, and constant-voltage regulators.

Features

- High DC current gain.
- Large current capacity and wide ASO.
- Micaless package facilitating mounting.

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Absolute Maximum Ratings at Ta = 25°C

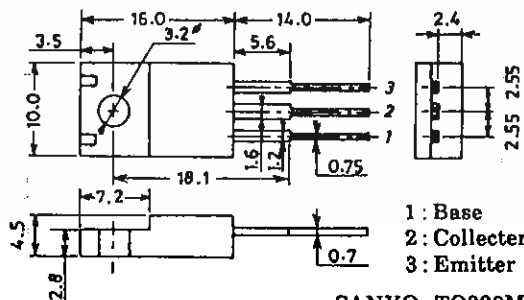
			unit
Collector-to-Base Voltage	V _{CB0}	(-)70	V
Collector-to-Emitter Voltage	V _{CEO}	(-)60	V
Emitter-to-Base Voltage	V _{EBO}	(-)6	V
Collector Current	I _C	(-)7	A
Collector Current (Pulse)	I _{CP}	(-)10	A
Collector Dissipation	P _C	2.0	W
		25	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

T_c = 25°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CBO}	V _{CB} = (-)40V, I _E = 0			(-)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} = (-)5V, I _C = 0			(-)3.0	mA
DC Current Gain	h _{FE}	V _{CE} = (-)2V, I _C = (-)3.5A	2000	5000		
Gain-Bandwidth Product	f _T	V _{CE} = (-)5V, I _C = (-)3.5A		20		MHz
C-E Saturation Voltage	V _{CE(sat)}	I _C = (-)3.5A, I _B = (-)7mA		0.9	(-)1.5	V
				(-1.0)		V
B-E Saturation Voltage	V _{BE(sat)}	I _C = (-)3.5A, I _B = (-)7mA			(-)2.0	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = (-)5mA, I _E = 0	(-)70			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = (-)50mA, R _{BE} = ∞	(-)60			V
Turn-ON Time	t _{on}	See specified Test Circuit.		0.6		μs
		"		(0.5)		μs
Storage Time	t _{stg}	"		3.0		μs
		"		(1.5)		μs
Fall Time	t _f	"		1.7		μs
		"		(1.4)		μs

Package Dimensions 2041A
(unit: mm)



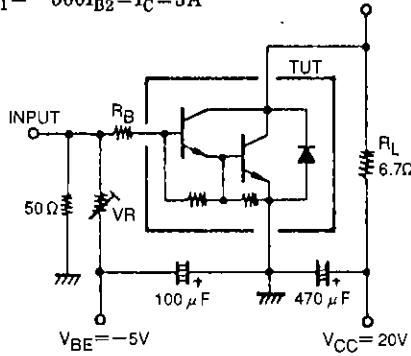
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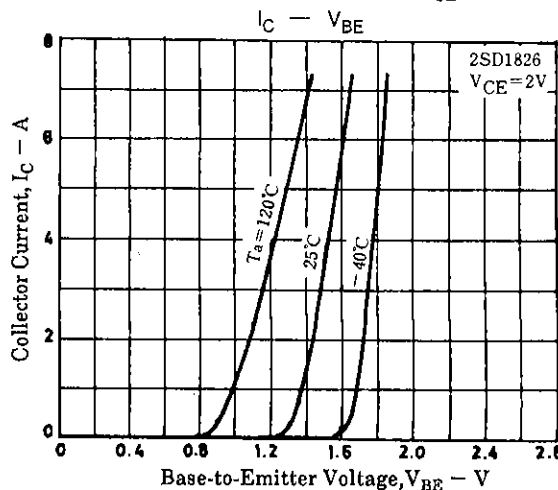
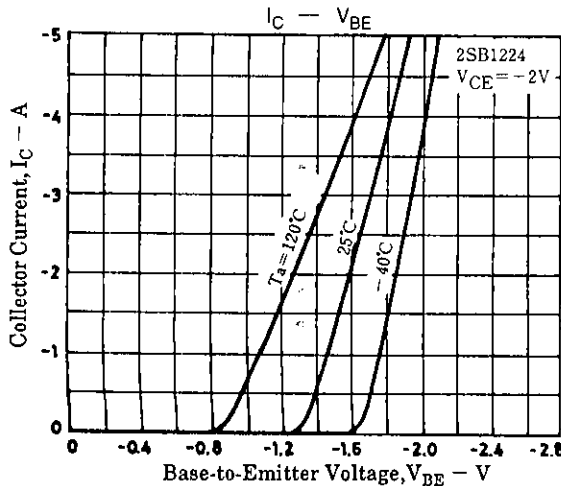
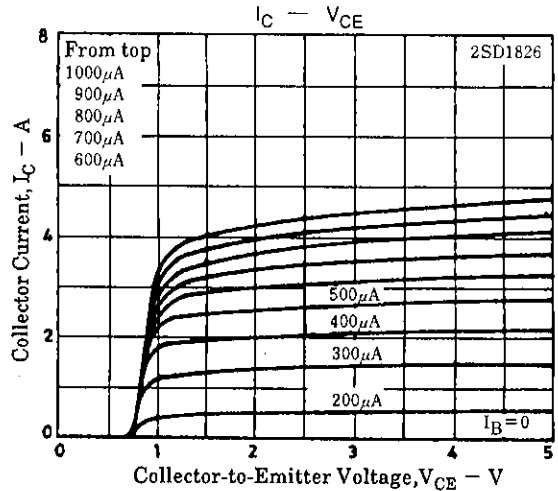
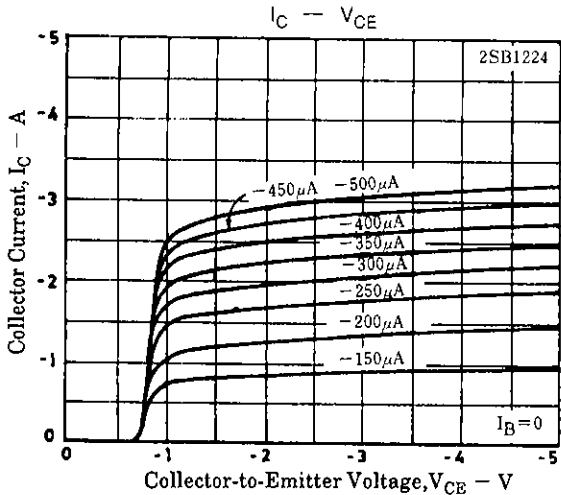
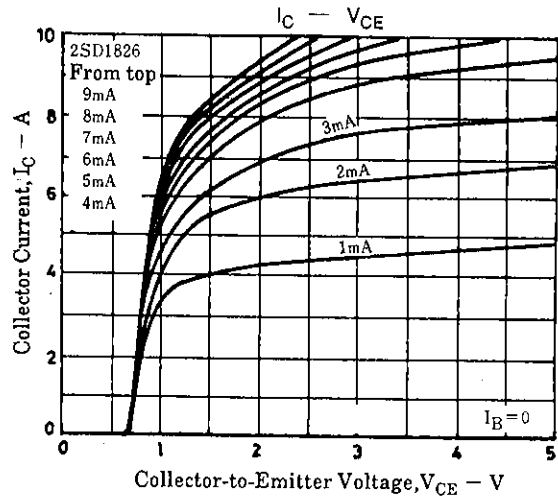
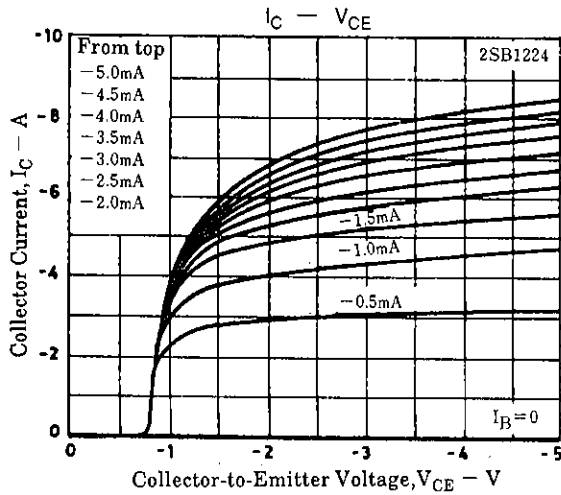
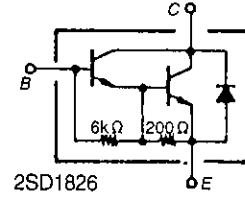
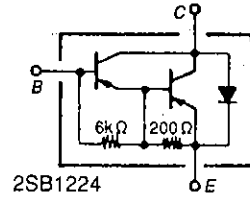
2SB1224/2SD1826

Specified Test Circuit (For PNP, the polarity is reversed.)

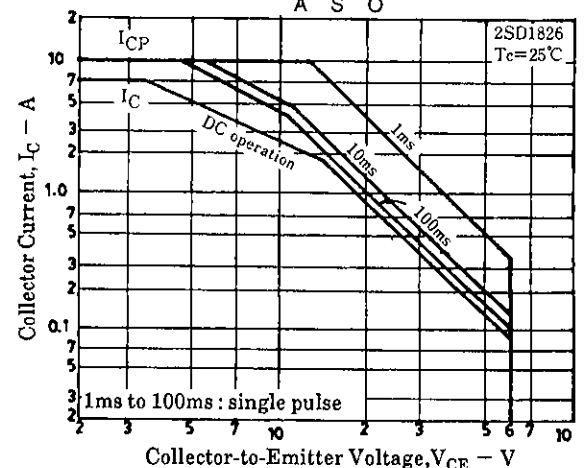
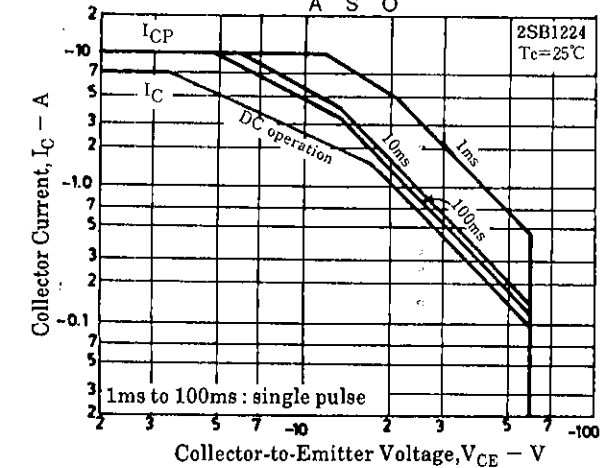
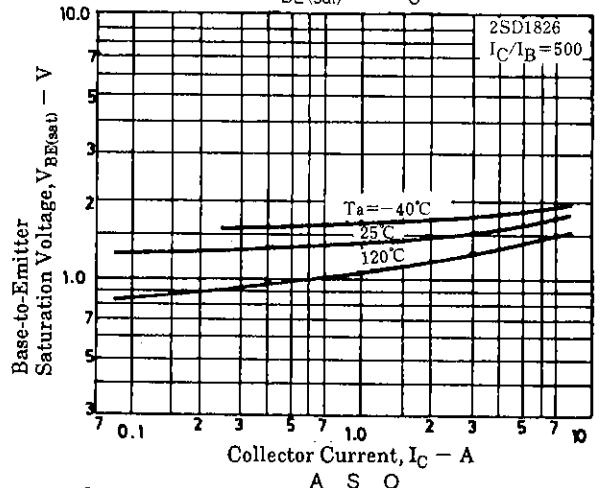
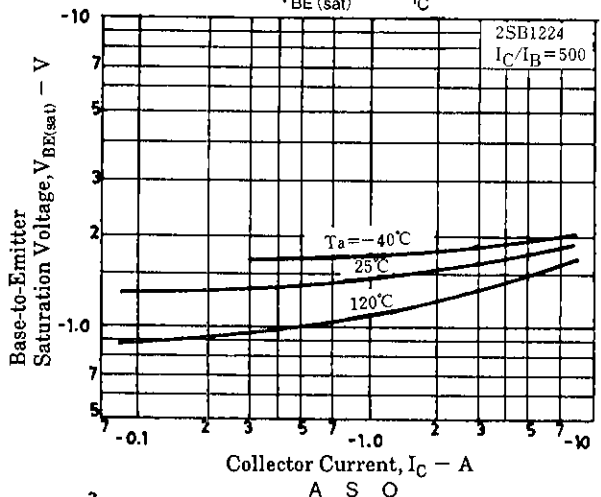
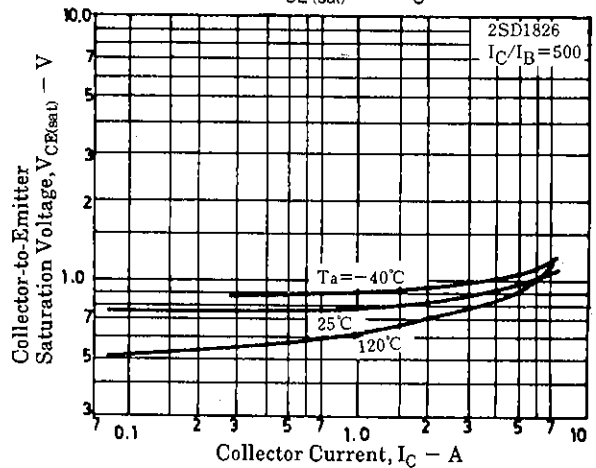
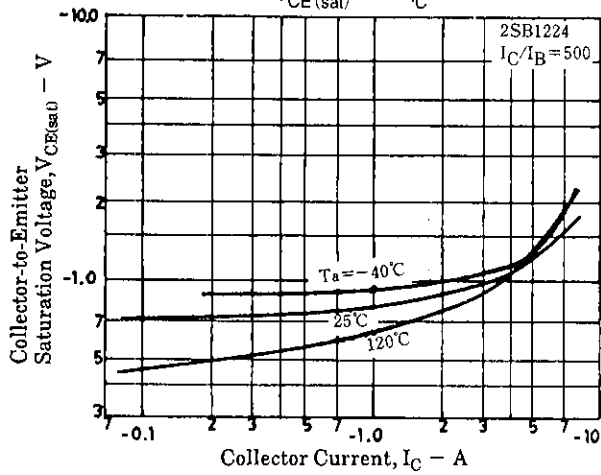
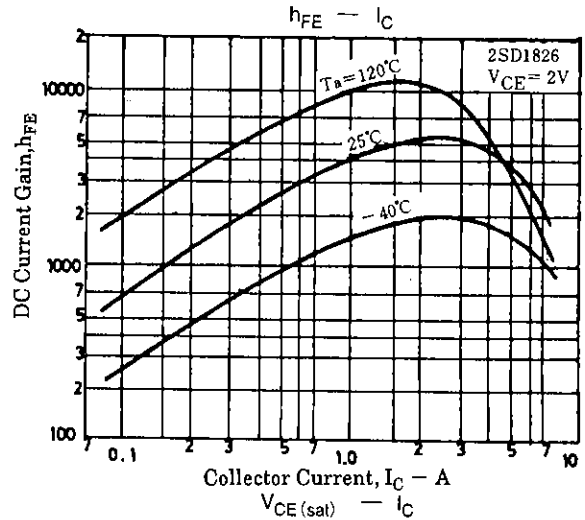
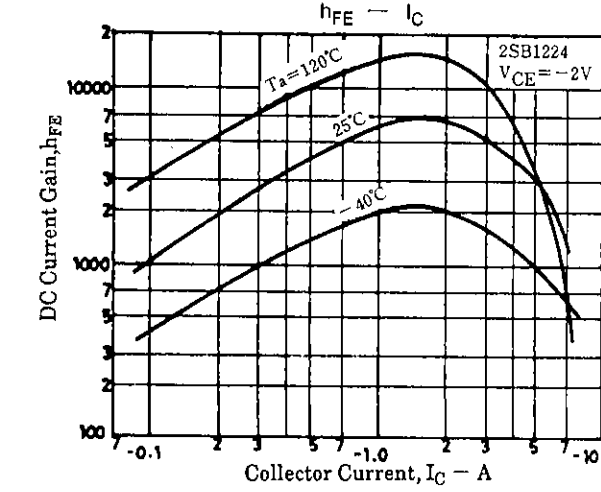
PW = 50μs, Duty cycle ≤ 1%
 $500I_{B1} = -500I_{B2} = I_C = 3A$



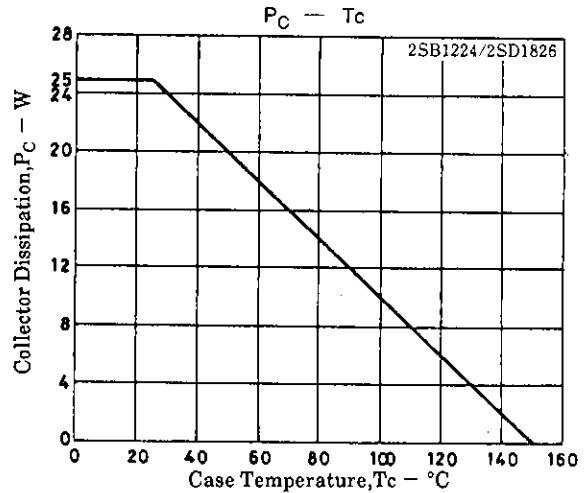
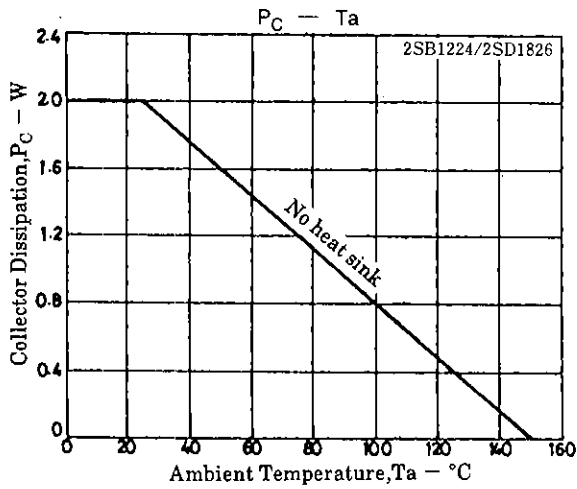
Electrical Connection



2SB1224/2SD1826



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