

SANYO	No.2214B	2SB1228/2SD1830
		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.
- Low saturation voltage.
- Micaless package facilitating mounting.

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Absolute Maximum Ratings at Ta = 25°C

Collector-to-Base Voltage	V _{CB0}	(-)	110	V
Collector-to-Emitter Voltage	V _{CEO}	(-)	100	V
Emitter-to-Base Voltage	V _{EBO}	(-)	6	V
Collector Current	I _C	(-)	8	A
Collector Current (Pulse)	I _{CP}	(-)	12	A
Collector Dissipation	P _C		2.0	W
			30	W
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

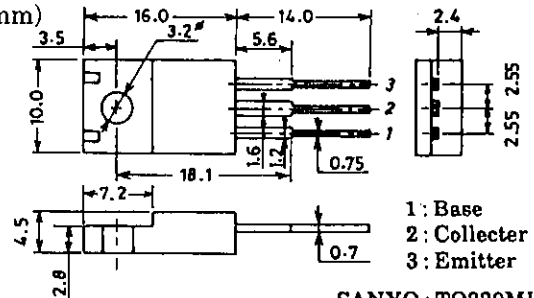
T_c = 25°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CBO}	V _{CB} = (-)80V, 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} = (-)3V, I _C = (-)4A	1500	4000		
Gain-Bandwidth Product	f _T	V _{CE} = (-)5V, I _C = (-)4A		20		MHz
C-E Saturation Voltage	V _{CE(sat)}	I _C = (-)4A, I _B = (-)8mA		0.9	(-)	1.5 V
				(-)	1.0	V
B-E Saturation Voltage	V _{BE(sat)}	I _C = (-)4A, I _B = (-)8mA			(-)	2.0 V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = (-)5mA, I _E = 0	(-)	110		V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = (-)50mA, R _{BE} = ∞	(-)	100		V
Turn-ON Time	t _{on}	See specified Test Circuit.		0.6		μs
		"		(0.7)		μs
Storage Time	t _{stg}	"		4.8		μs
		"		(1.4)		μs
Fall Time	t _f	"		1.6		μs
		"		(1.5)		μs

Package Dimensions 2041A

(unit: mm)



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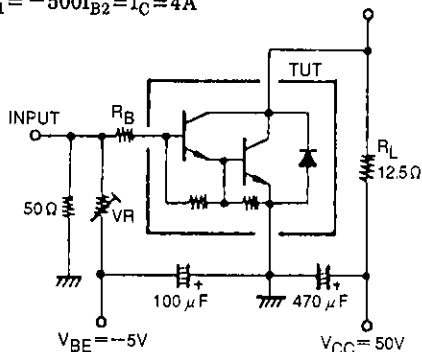
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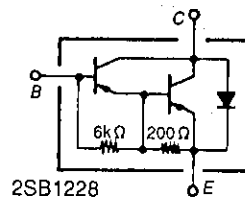
Specified Test Circuit (For PNP, the polarity is reversed.)

PW = 50μs, Duty cycle ≤ 1%

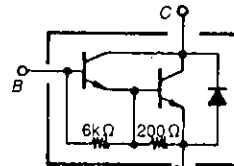
500I_{B1} = -500I_{B2} = I_C = 4A



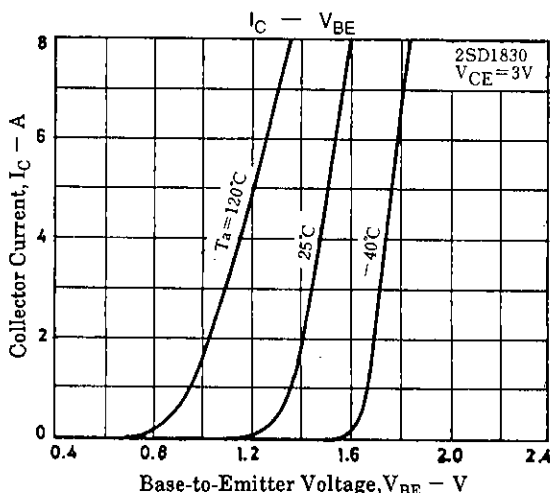
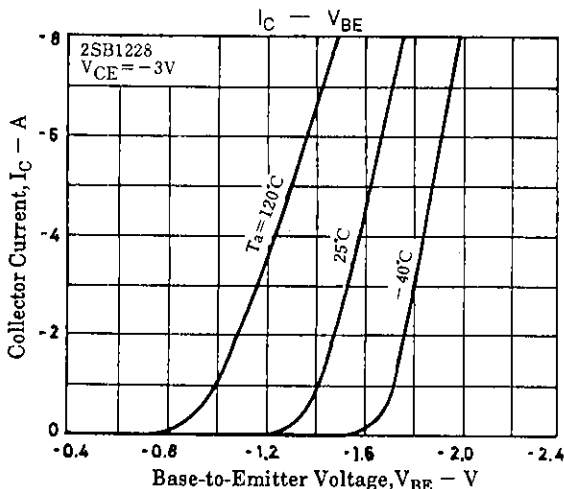
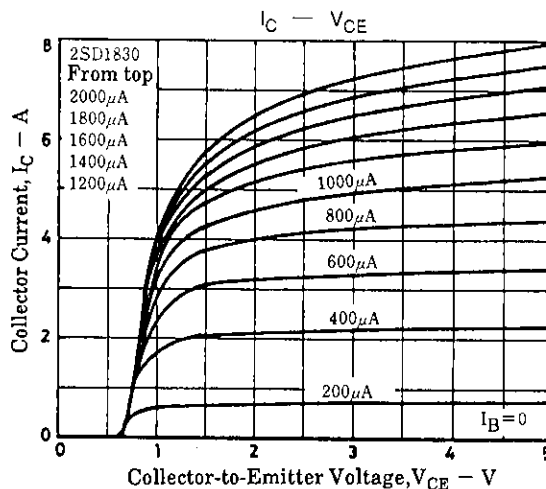
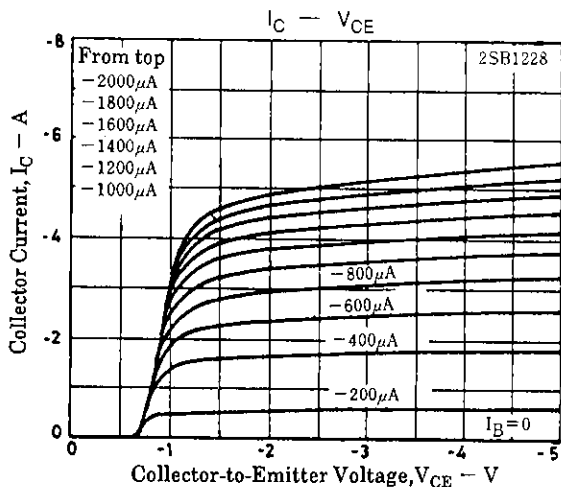
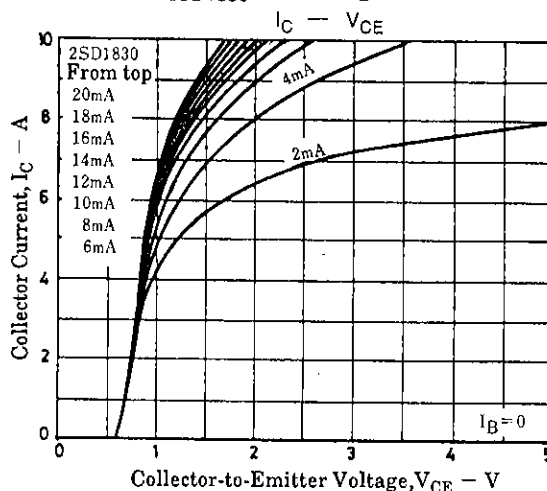
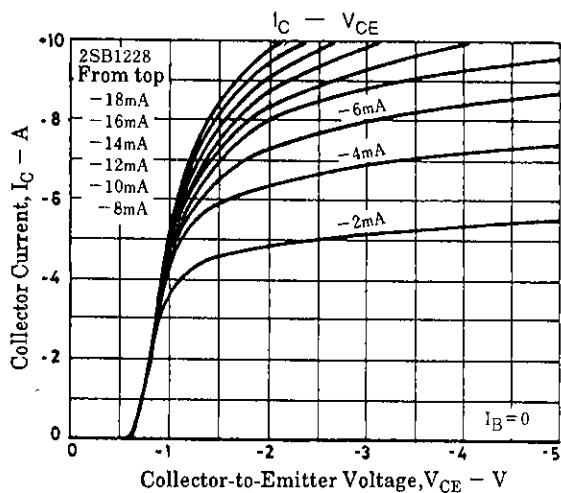
Electrical Connection



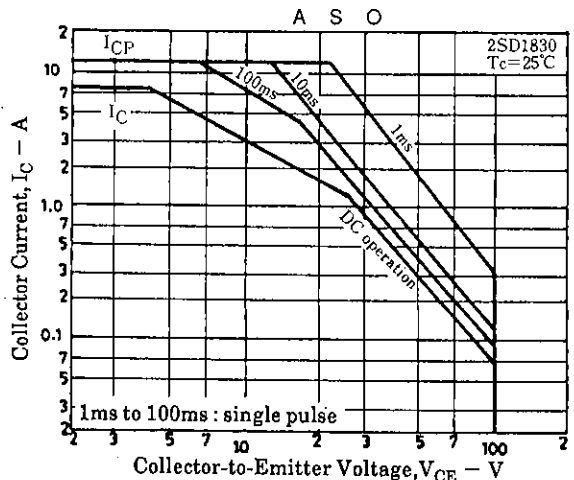
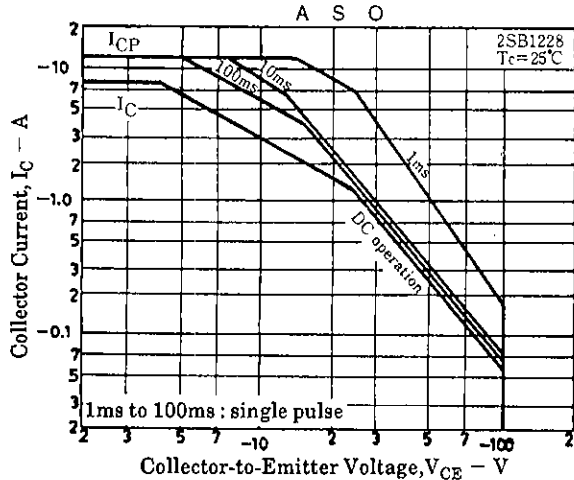
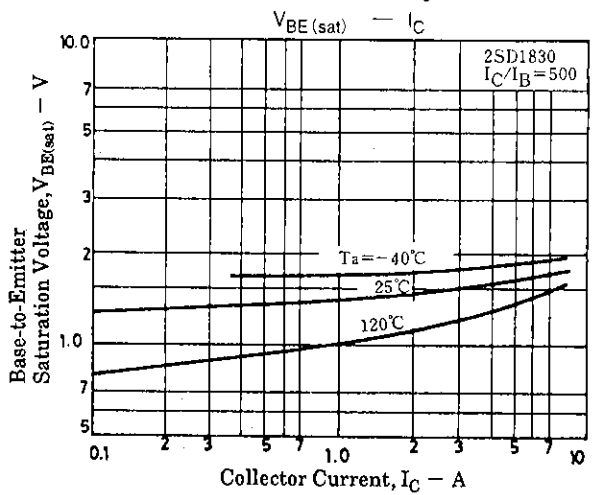
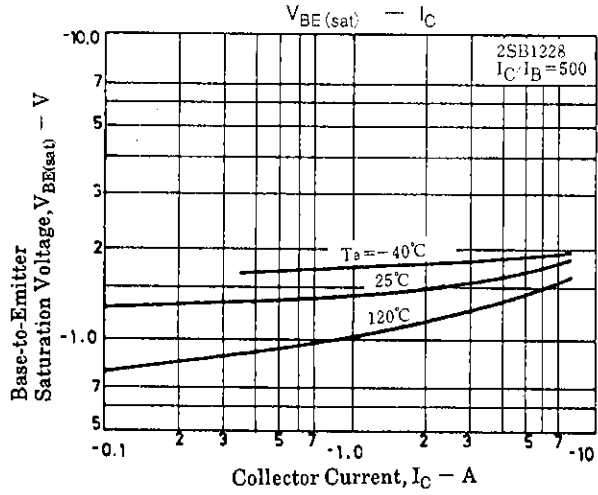
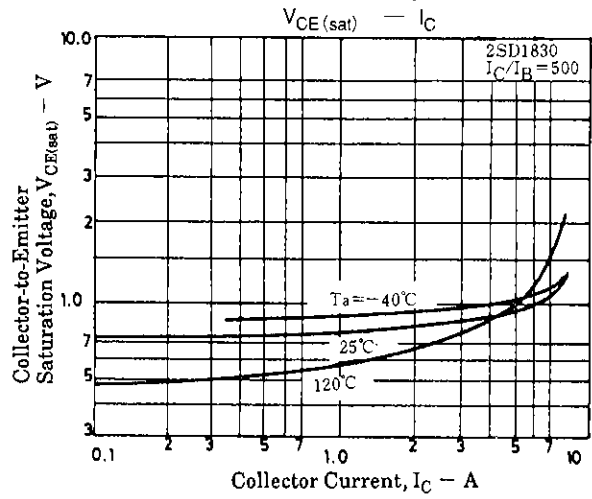
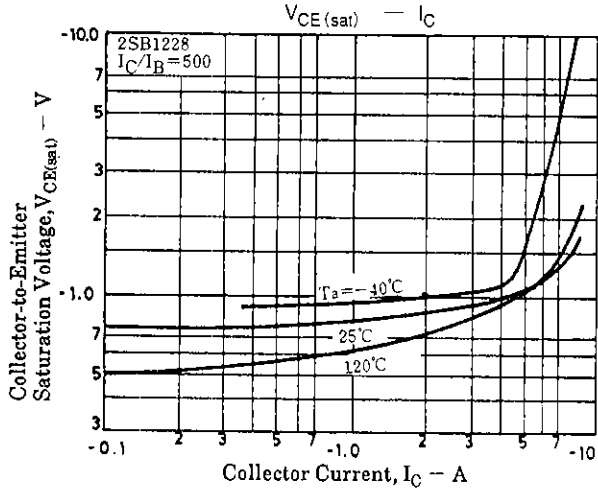
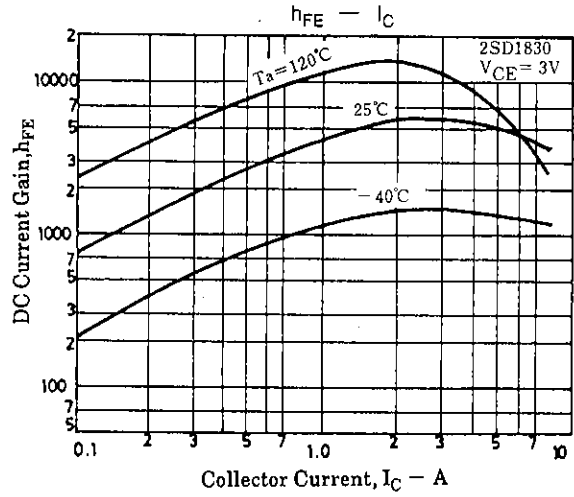
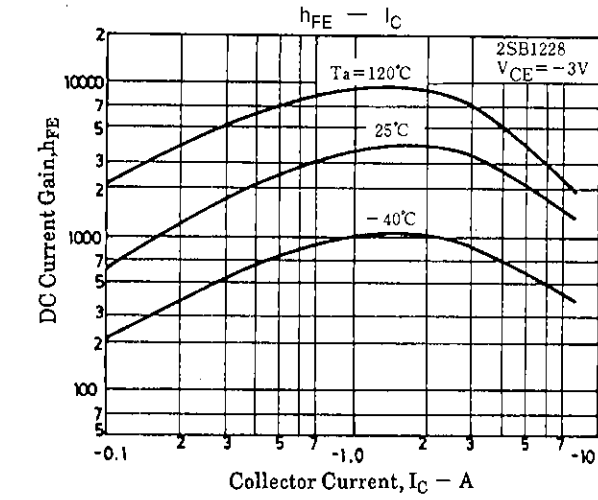
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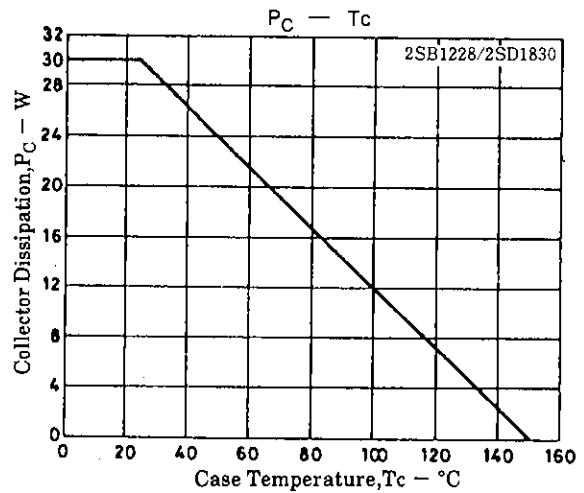
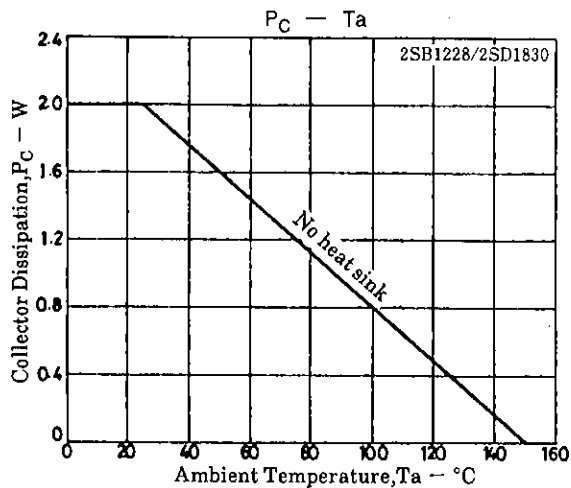


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