

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

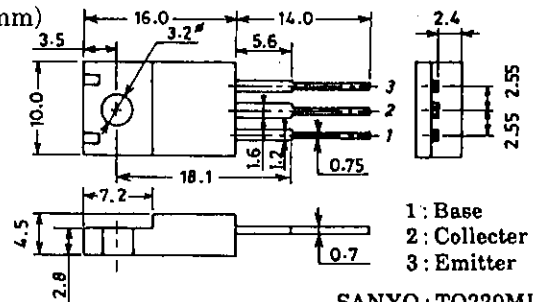
Collector-to-Base Voltage	V_{CBO}	(-)110	V
Collector-to-Emitter Voltage	V_{CEO}	(-)100	V
Emitter-to-Base Voltage	V_{EBO}	(-)6	V
Collector Current	I_C	(-)8	A
Collector Current (Pulse)	I_{CP}	(-)12	A
Collector Dissipation	P_C	2.0	W
		$T_c = 25^\circ C$	30
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	
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	$V_{(BR)CEO}$	$I_C = (-)50mA, R_{BE} = \infty$	(-)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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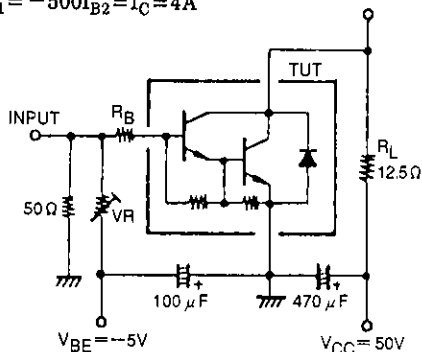
SANYO Electric Co., Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

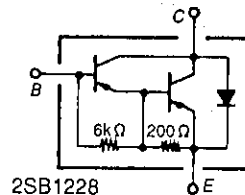
Specified Test Circuit (For PNP, the polarity is reversed.)

PW = 50μs, Duty cycle ≤ 1%

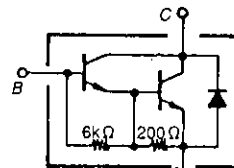
500I_{B1} = -500I_{B2} = I_C = 4A



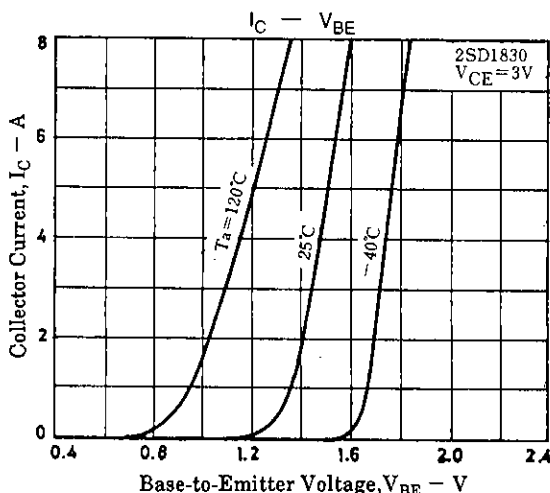
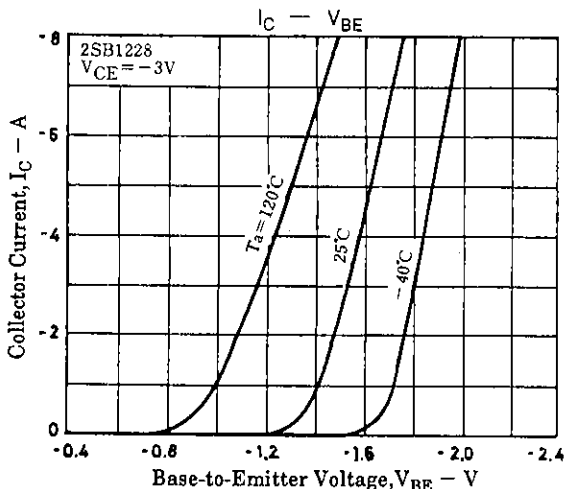
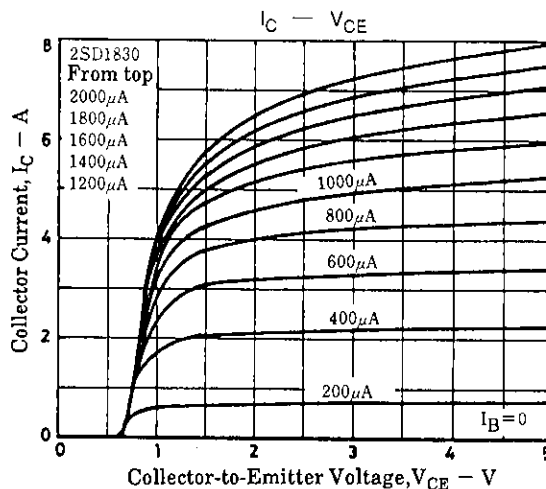
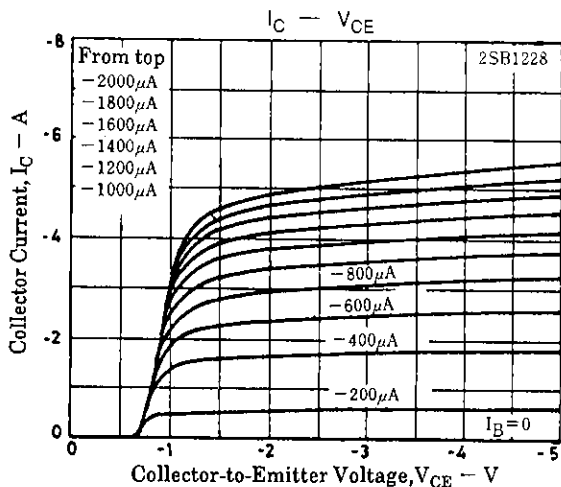
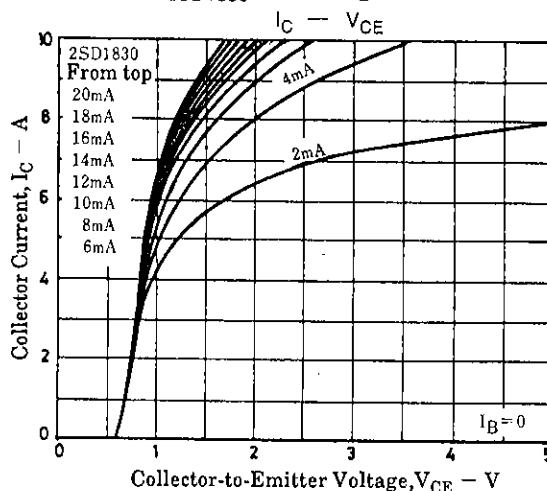
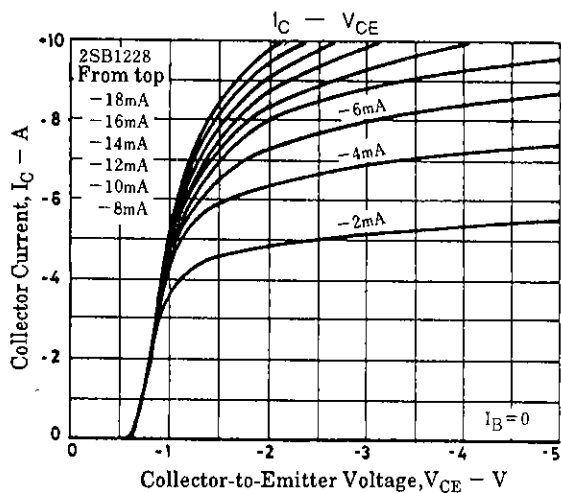
Electrical Connection



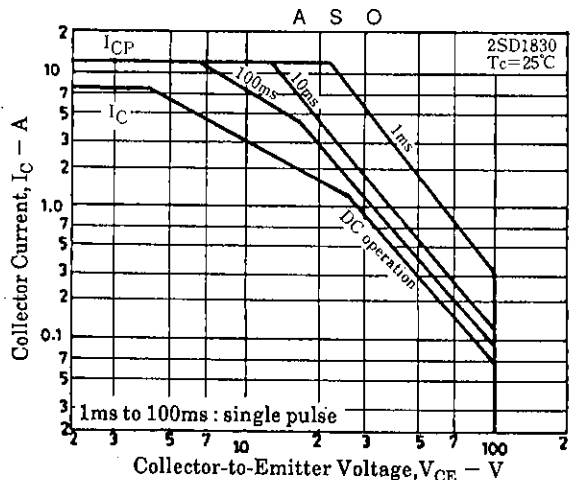
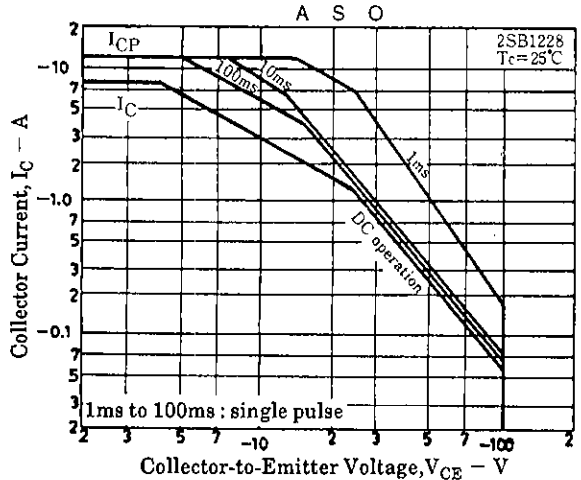
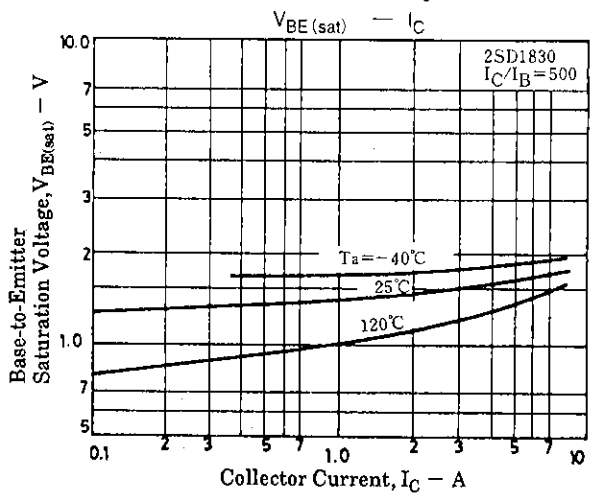
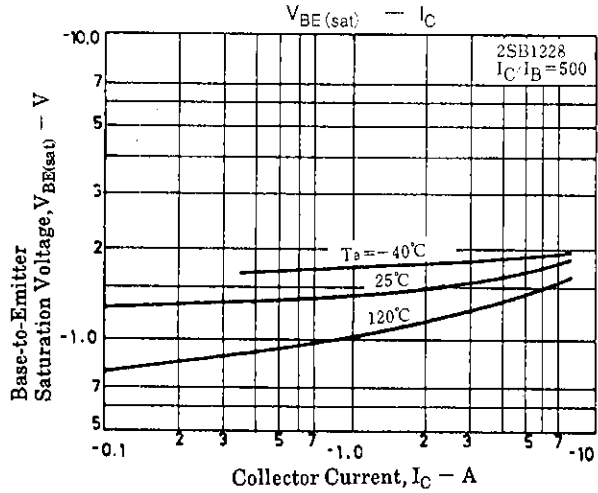
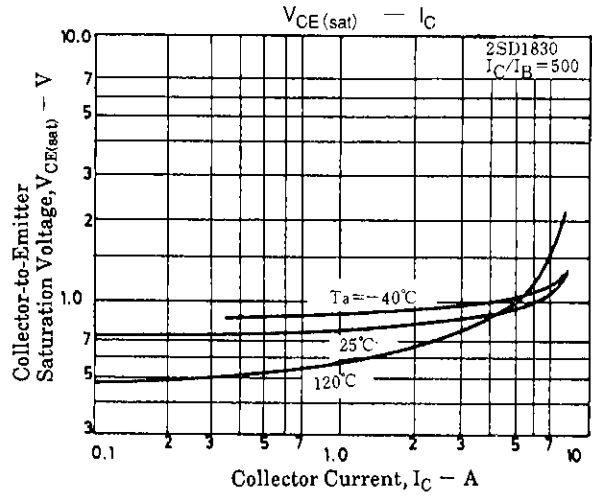
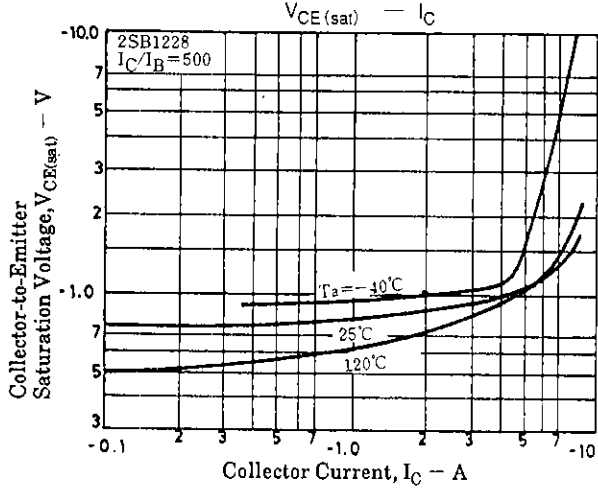
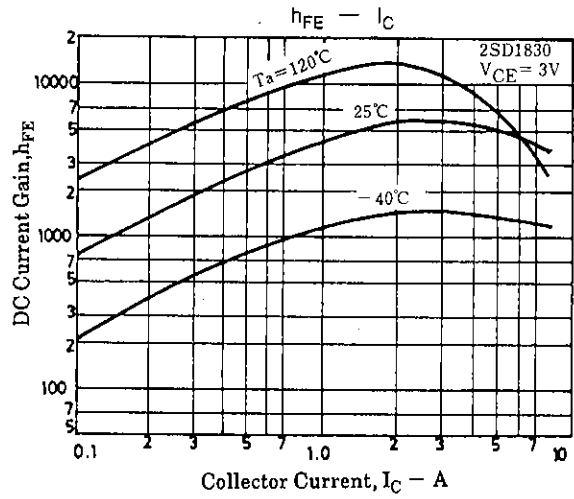
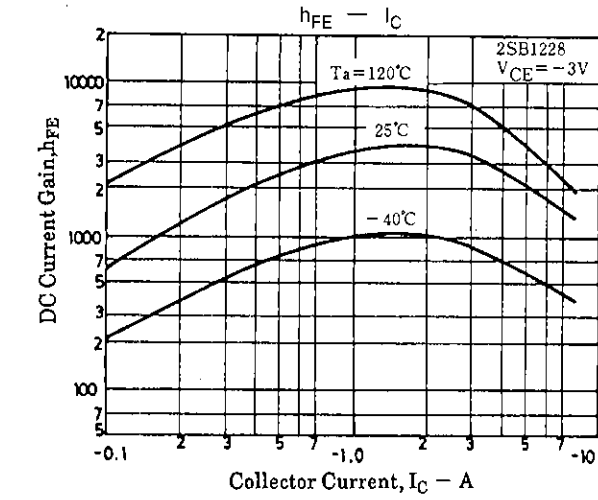
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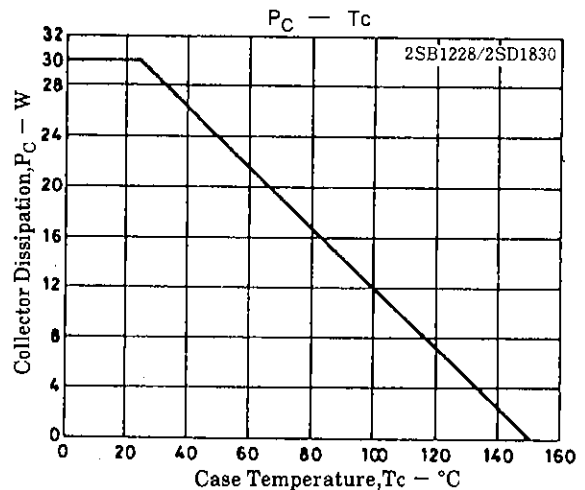
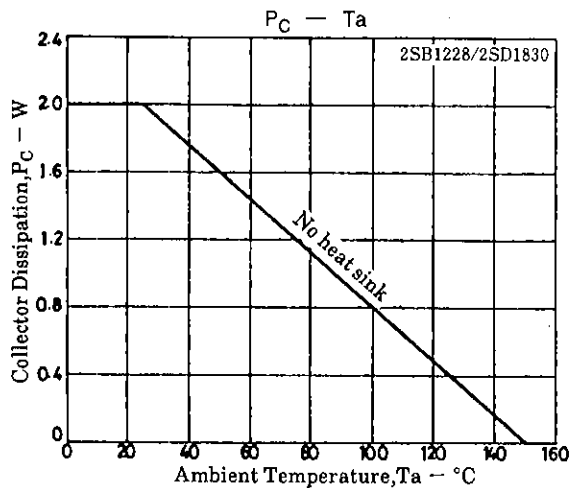


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