



No.925E

2SB881/2SD1191
PNP/NPN Epitaxial Planar Silicon Darlington Transistors
Driver Applications

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control.

Features

- High DC current gain.
- High current capacity and wide ASO.
- Low saturation voltage.

() : 2SB881

Absolute Maximum Ratings at Ta = 25°C

				unit
Collector-to-Base Voltage	V _{CB0}	(-)	70	V
Collector-to-Emitter Voltage	V _{CE0}	(-)	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		1.75	W
		T _c = 25°C	35	W
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

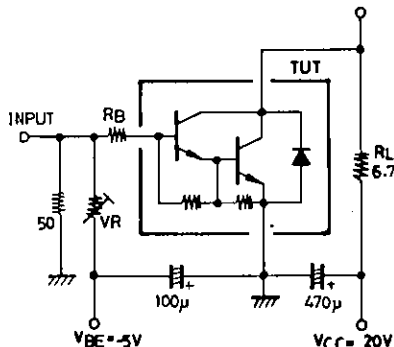
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = (-)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)		
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
Rise Time	t _{on}	See specified Test Circuit.	(0.5)0.6			μs
Storage Time	t _{stg}	"	(1.5)3.0			μs
Fall Time	t _f	"	(1.4)1.7			μs

Specified Test Circuit

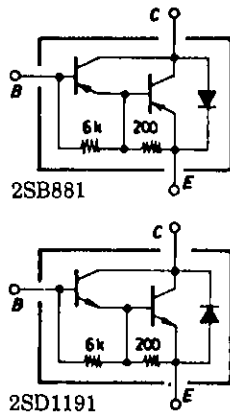
(For PNP, the polarity is reversed.)

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

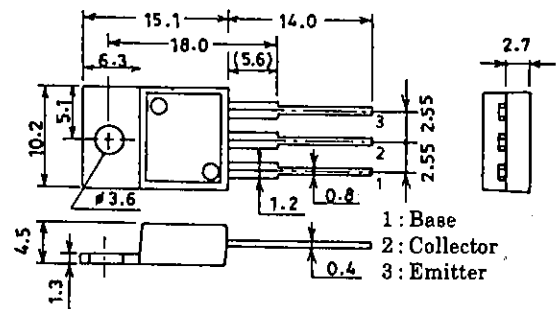


Unit (Resistance : Ω, Capacitance : F)

Electrical Connection



Package Dimensions 2010C
(unit : mm)

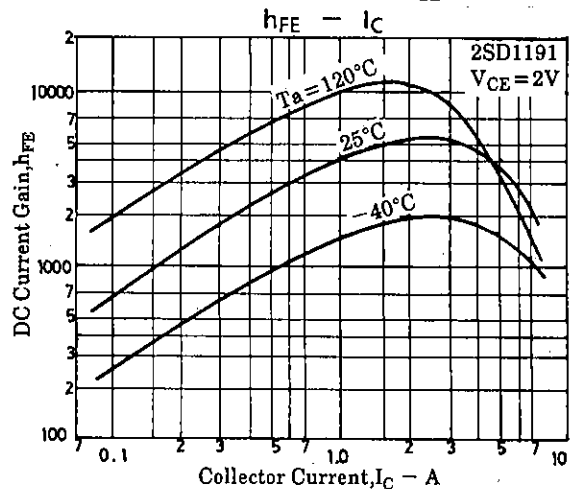
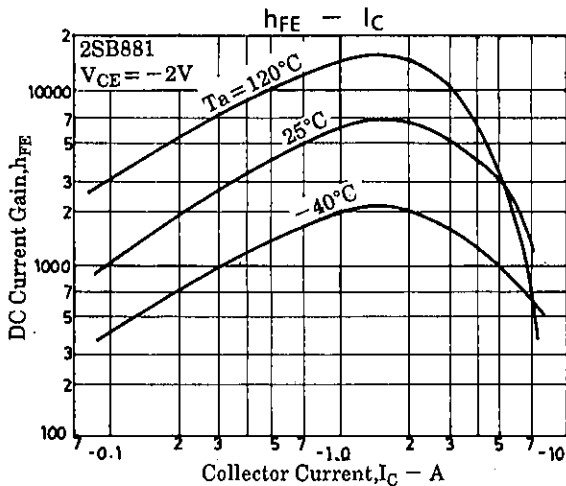
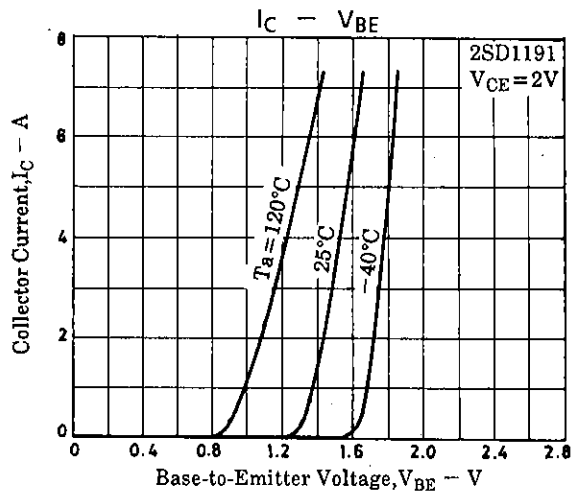
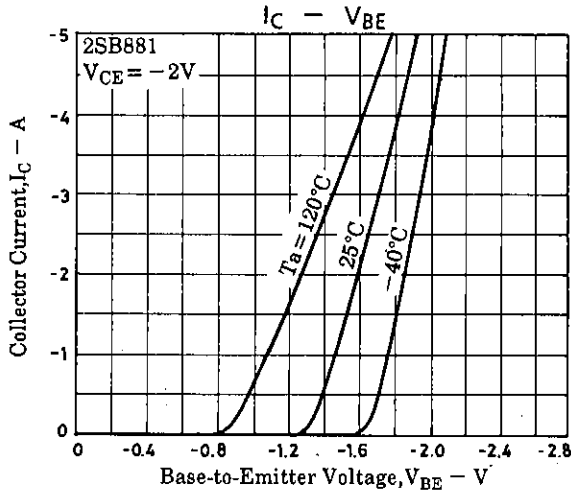
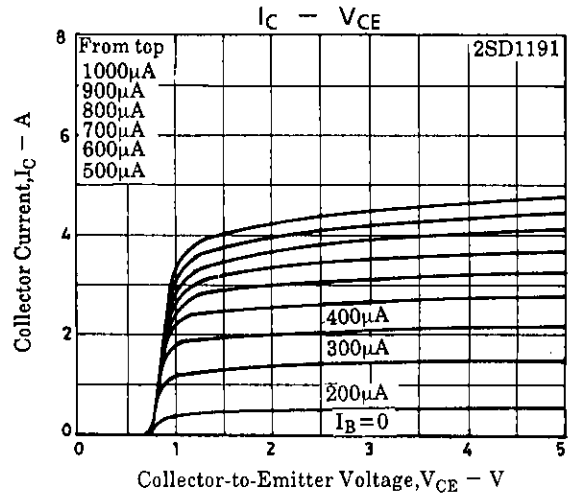
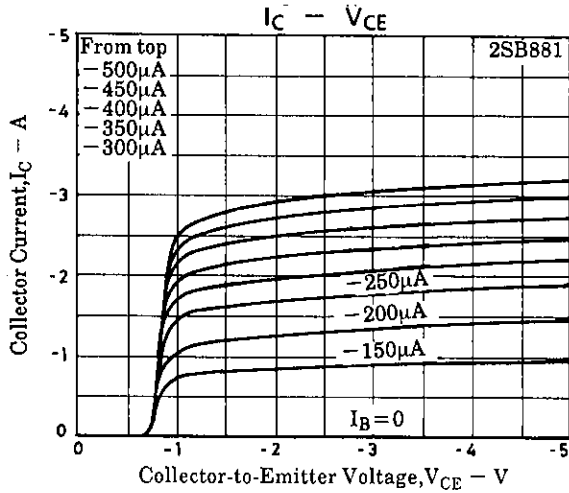
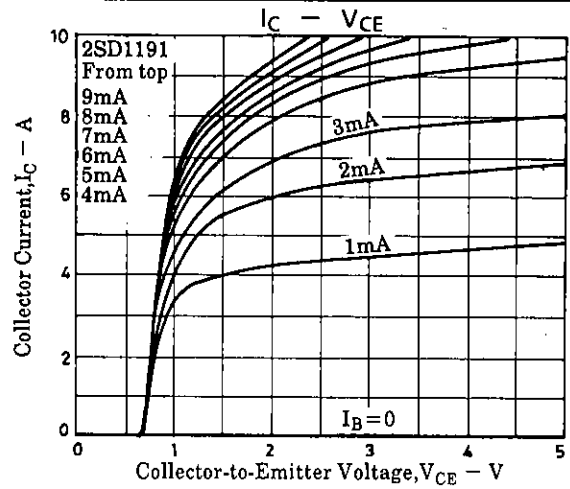
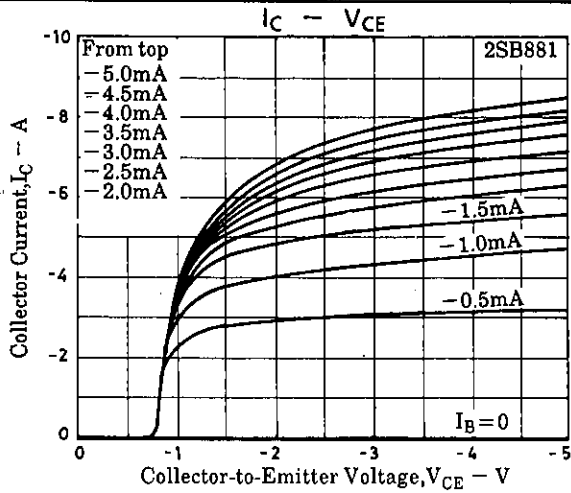


JEDEC : TO220AB
EIAJ : SC46

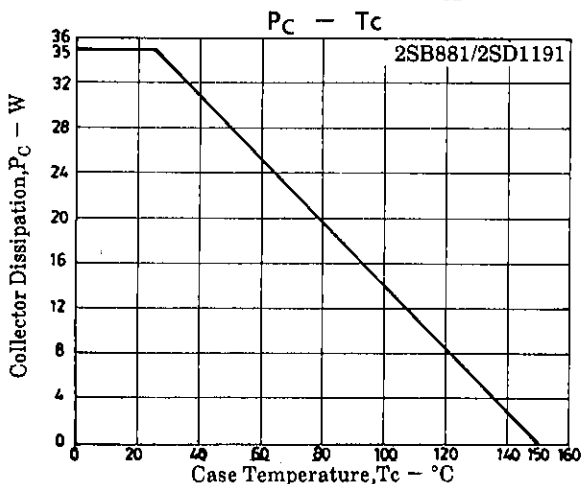
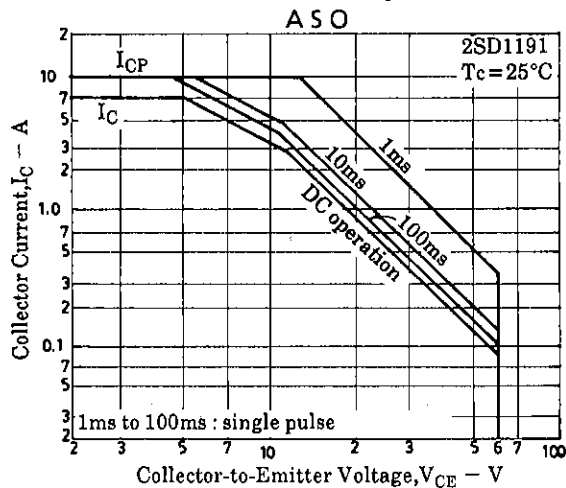
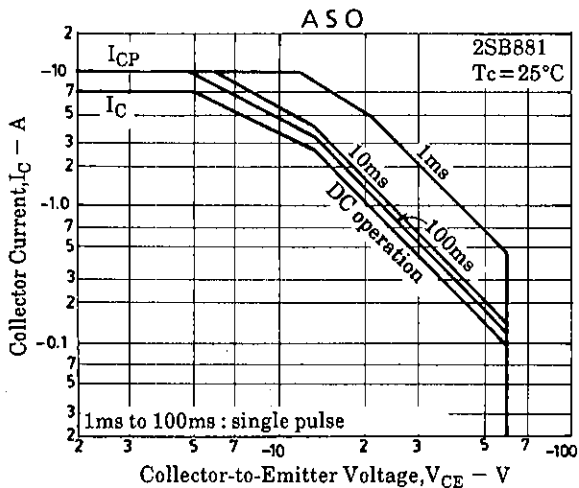
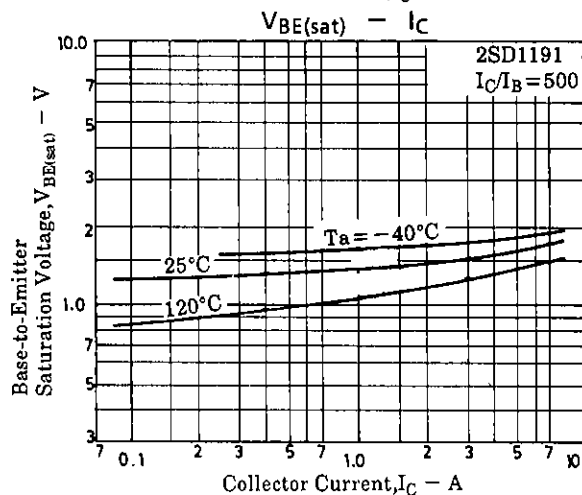
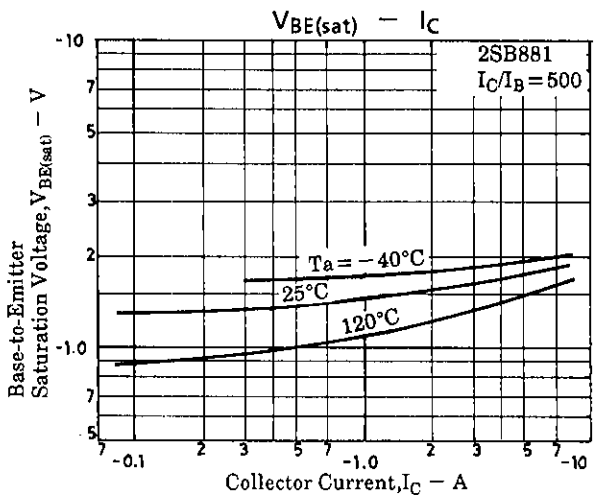
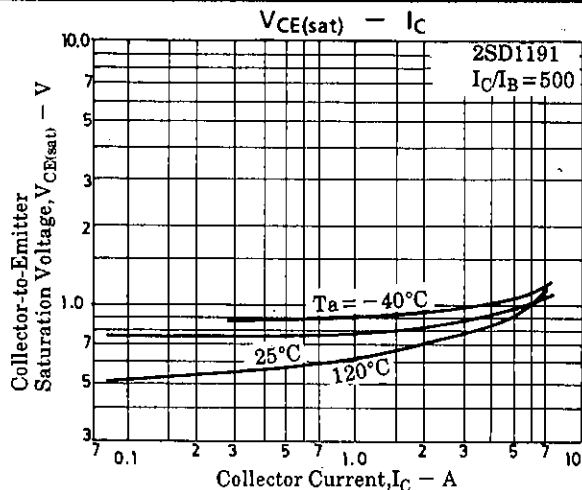
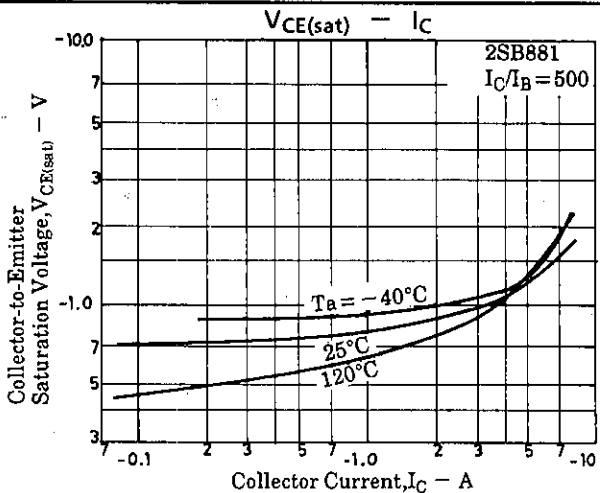
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