

SANYO	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_{EB0}	(-)6	V
Collector Current	I_C	(-)7	A
Collector Current (Pulse)	I_{CP}	(-)10	A
Collector Dissipation	P_C	1.75	W
		35	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

$T_c = 25^\circ\text{C}$

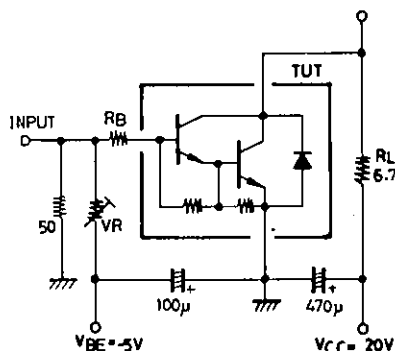
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)40\text{V}, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)5\text{V}, I_C = 0$			(-)3.0	mA
DC Current Gain	h_{FE}	$V_{CE} = (-)2\text{V}, I_C = (-)3.5\text{A}$	2000	5000		
Gain Bandwidth Product	f_T	$V_{CE} = (-)5\text{V}, I_C = (-)3.5\text{A}$		20		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)3.5\text{A}, I_B = (-)7\text{mA}$		0.9(-)1.5		V
				(-1.0)		
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)3.5\text{A}, I_B = (-)7\text{mA}$			(-)2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)5\text{mA}, I_E = 0$	(-)70			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)50\text{mA}, R_{BE} = \infty$	(-)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

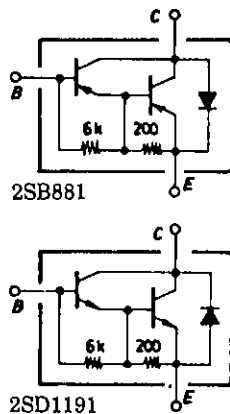
(For PNP, the polarity is reversed.)

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

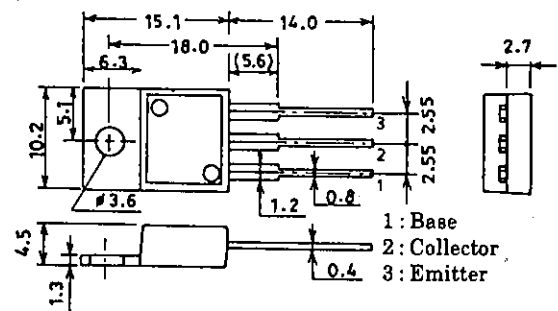


Unit (Resistance : Ω, Capacitance : F)

Electrical Connection



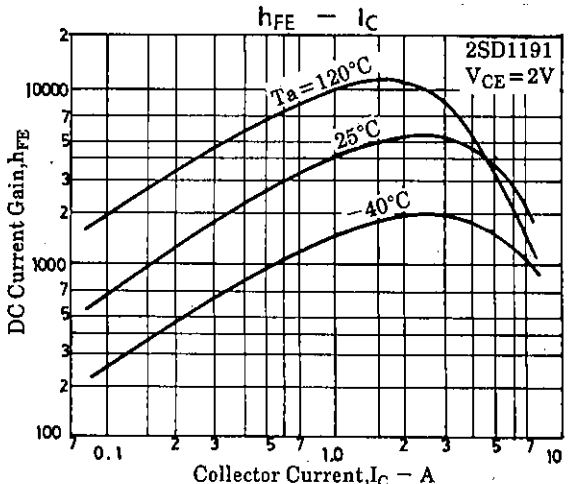
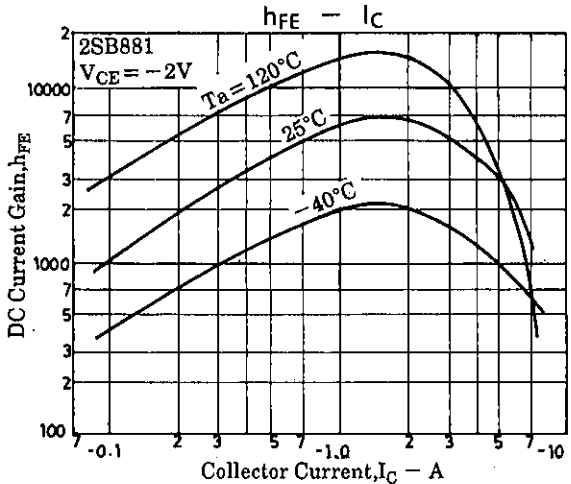
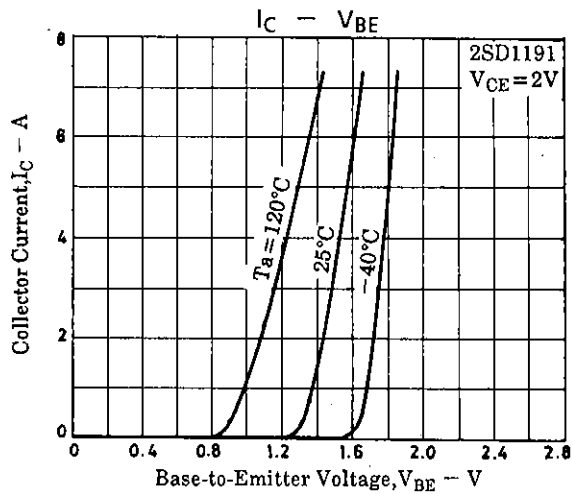
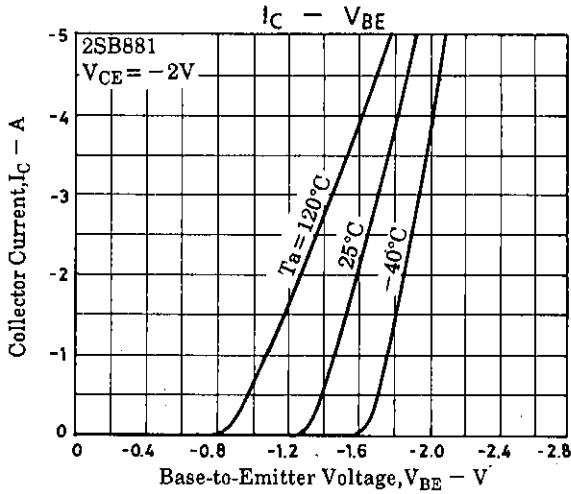
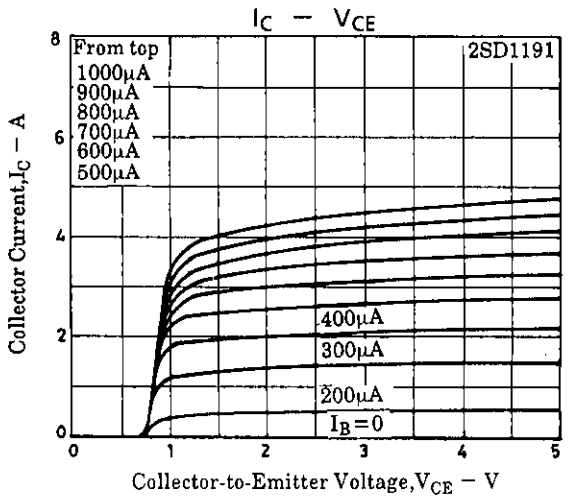
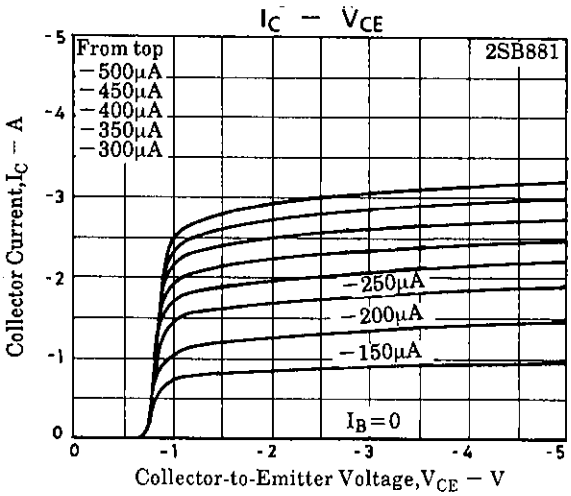
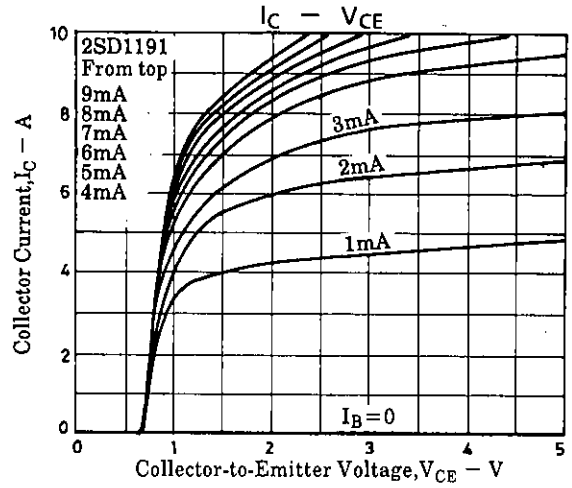
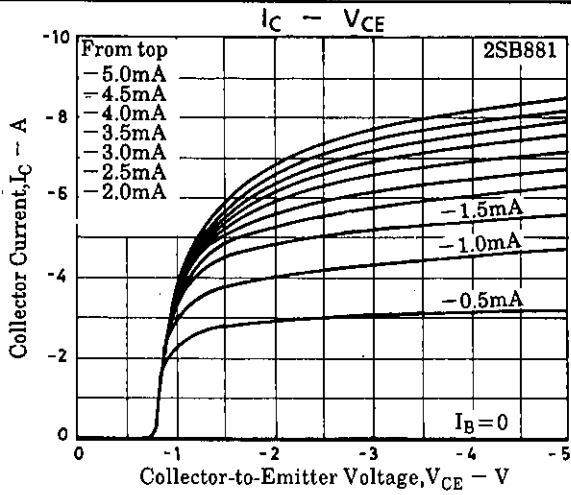
Package Dimensions 2010C
(unit : mm)



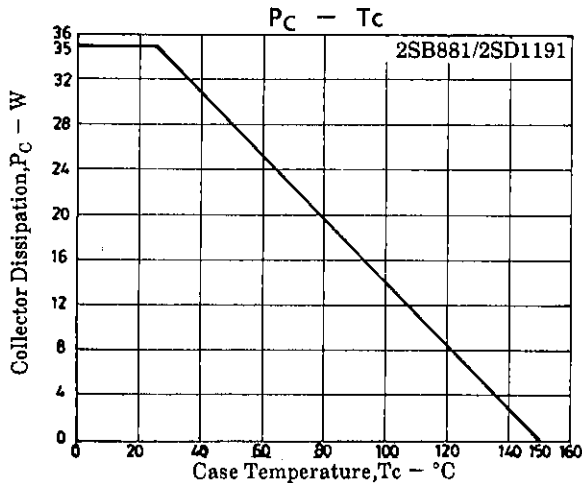
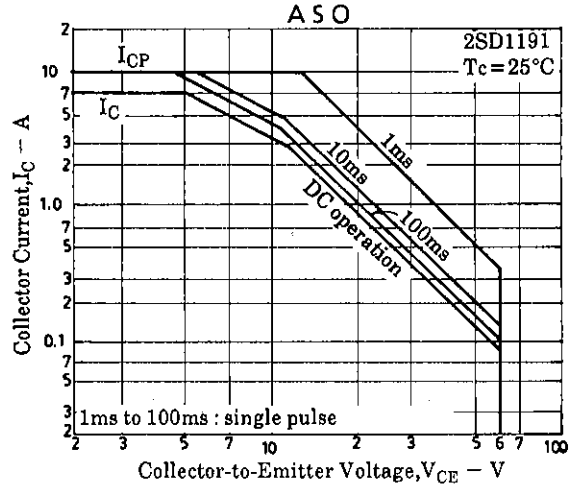
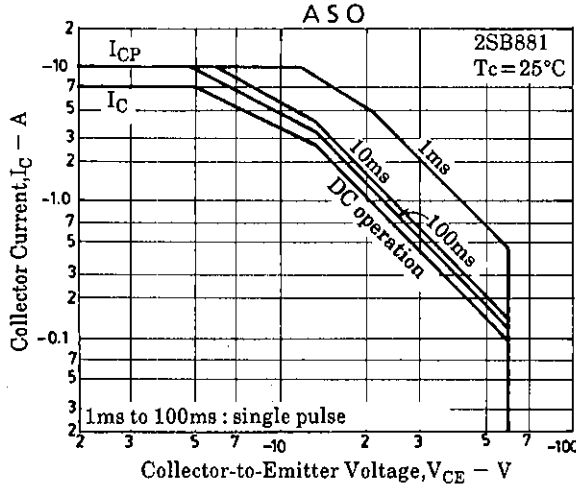
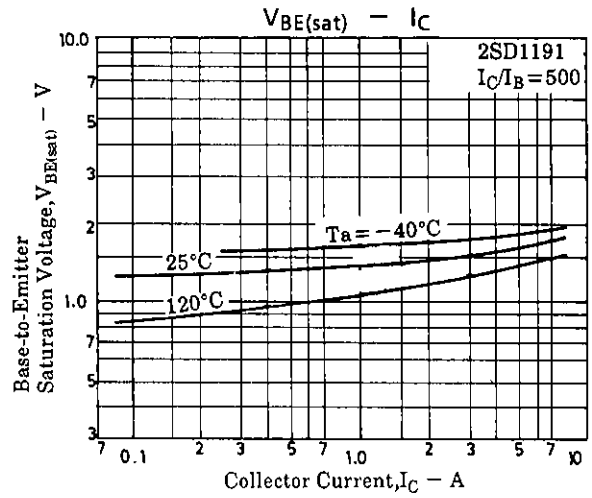
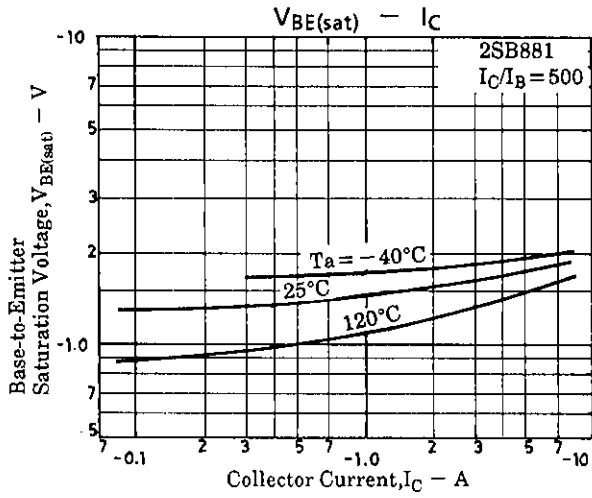
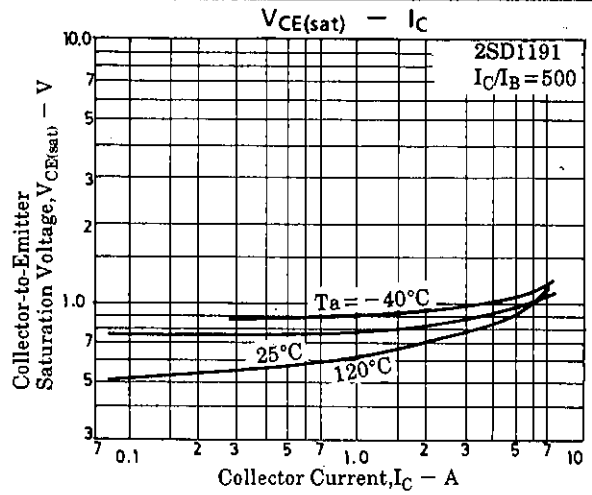
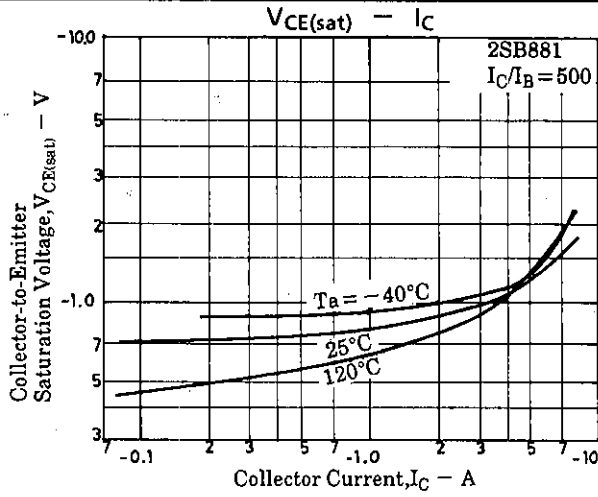
JEDEC : TO220AB
EIAJ : SC46

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