



2SB882/2SD1192

Driver Applications

Applications

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

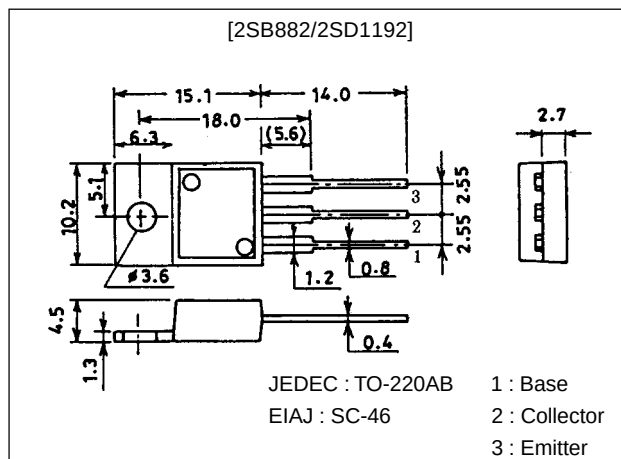
Features

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

Package Dimensions

unit:mm

2010C



() : 2SB882

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(-)70	V
Collector-to-Emitter Voltage	V_{CEO}		(-)60	V
Emitter-to-Base Voltage	V_{EBO}		(-)6	V
Collector Current	I_C		(-)10	A
Collector Current (Pulse)	I_{CP}		(-)15	A
Collector Dissipation	P_C		1.75	W
		$T_c=25^\circ\text{C}$	40	W
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
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}	$V_{CE}=(-)2\text{V}, I_C=(-)5\text{A}$	2000	5000		
Gain-Bandwidth Product	f_T	$V_{CE}=(-)5\text{V}, I_C=(-)5\text{A}$		20		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)5\text{A}, I_B=(-)10\text{mA}$		0.9	(-)1.5	V
				(-)1.0		V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)5\text{A}, I_B=(-)10\text{mA}$			(-)2.0	V

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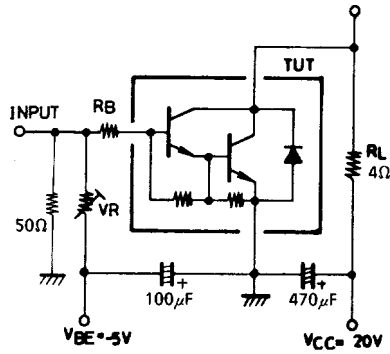
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

91098HA (KT)/10996TS (KOTO) 8-4329/D251MH/4067KI/2045MW, TS No.926-1/4

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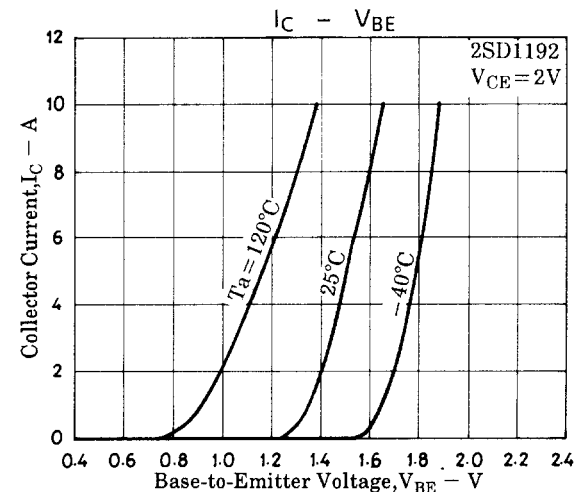
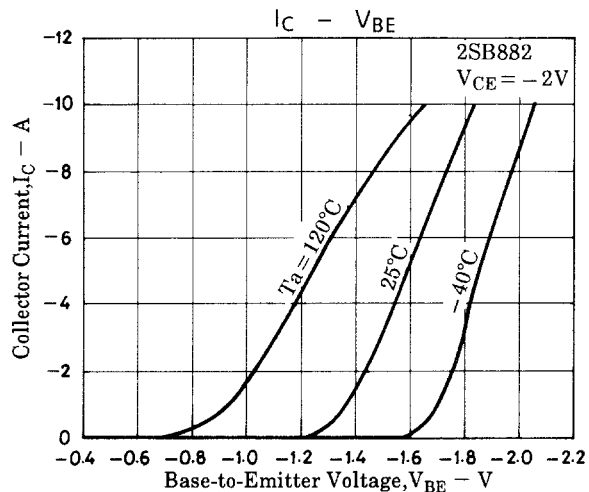
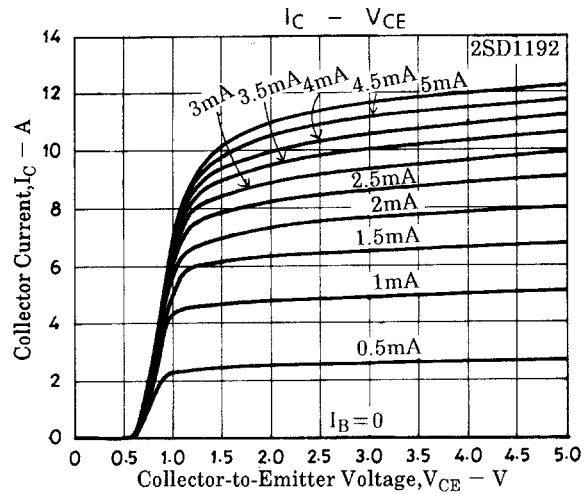
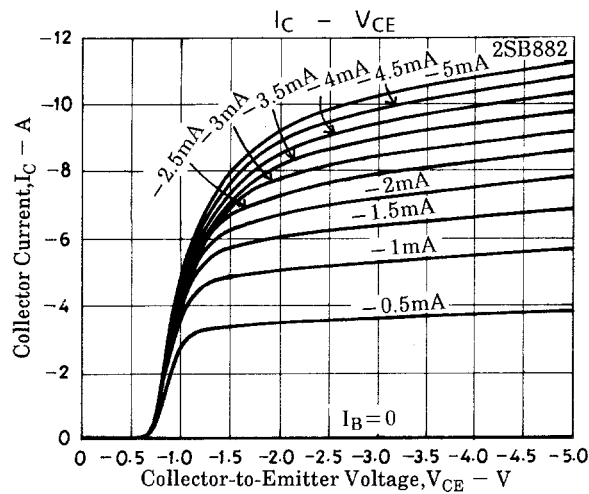
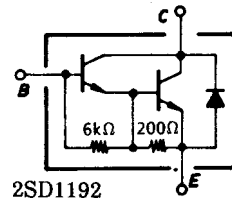
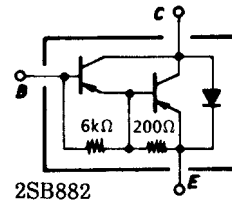
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)5mA, I_E = 0$	(-)70			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)50mA, R_{BE} = \infty$	(-)60			V
Turn-ON Time	t_{on}	See specified Test Circuit		(0.5)		μs
Storage Time	t_{stg}	See specified Test Circuit		0.6		μs
				(1.5)		μs
Fall Time	t_f	See specified Test Circuit		3.0		μs
				(1.7)		μs
				1.8		μs

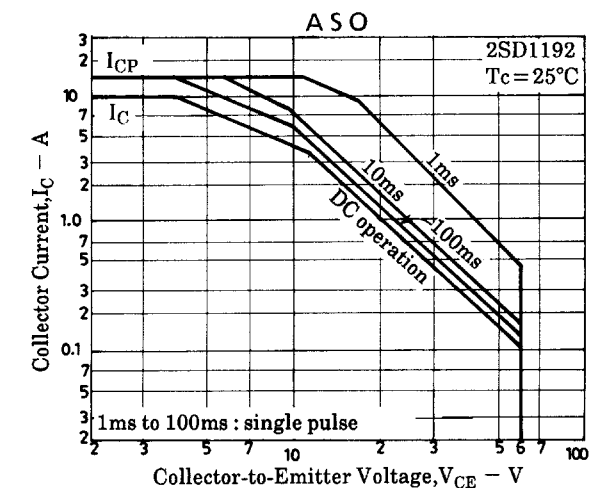
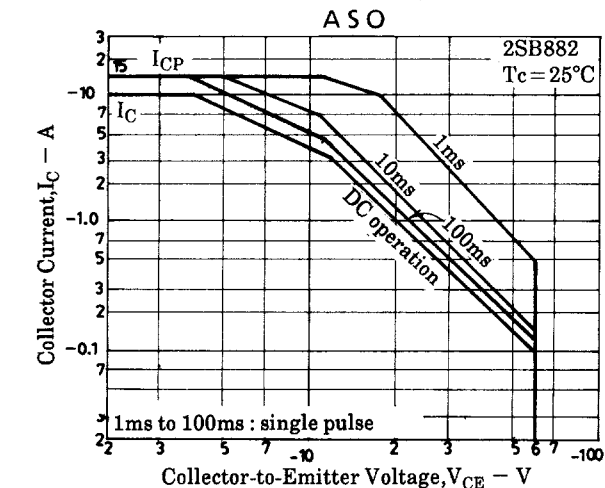
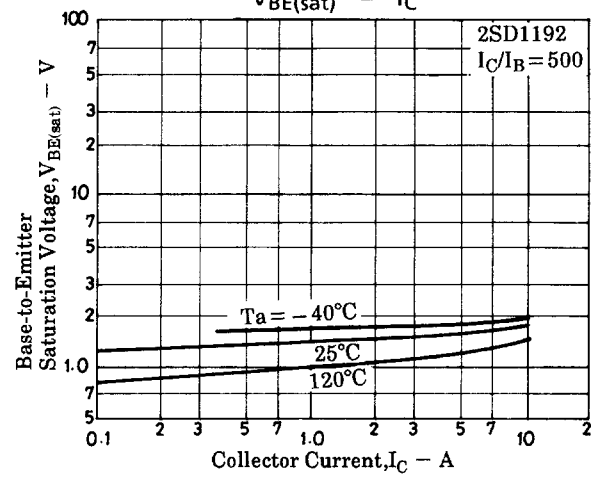
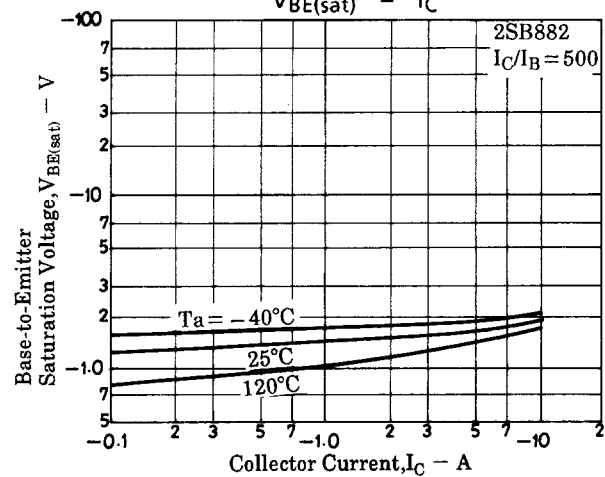
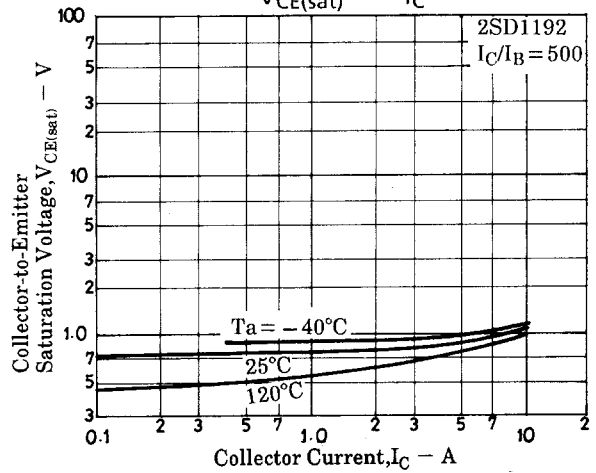
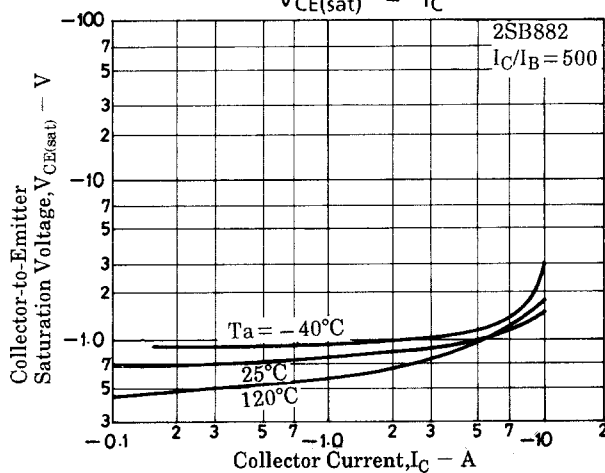
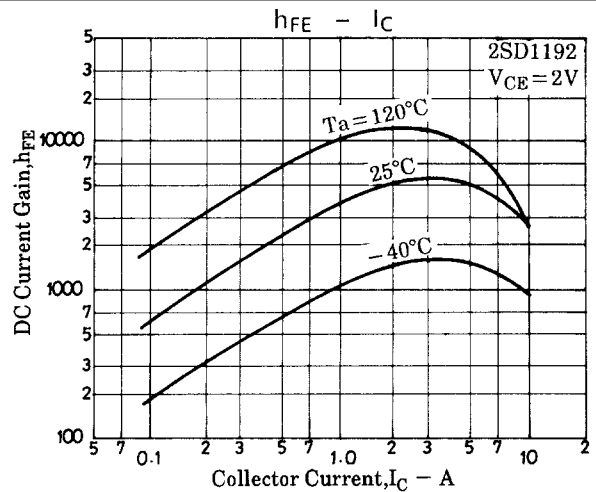
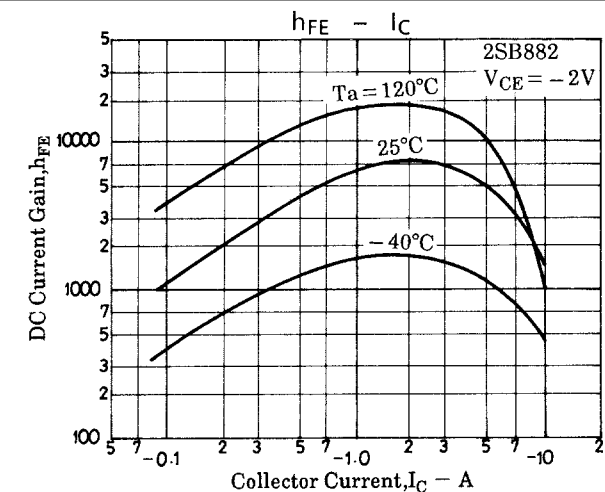
Switching Time Test Circuit

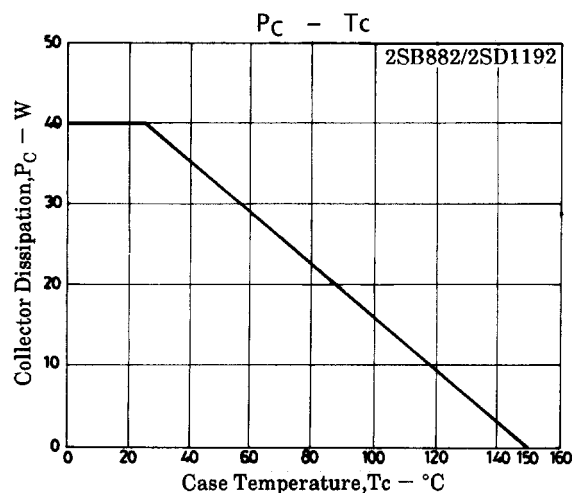
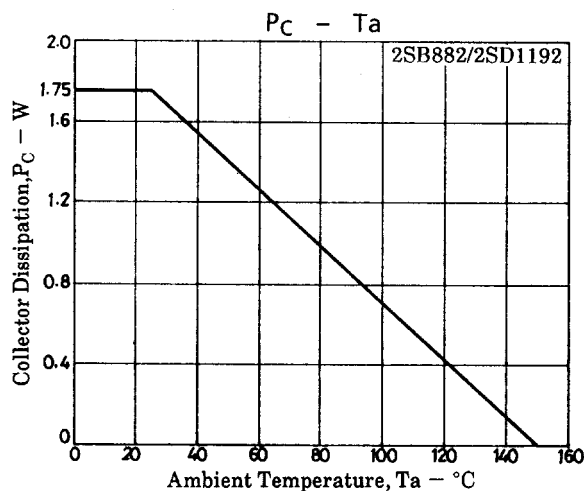


(For PNP, the polarity is reversed.)
 $PW = 50\mu s$, Duty Cycle $\leq 1\%$
 $500I_{B1} = -500I_{B2} = I_C = 5A$

Electrical Connection







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