



2SB880/2SD1190

For Various Drivers Applications

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulators.

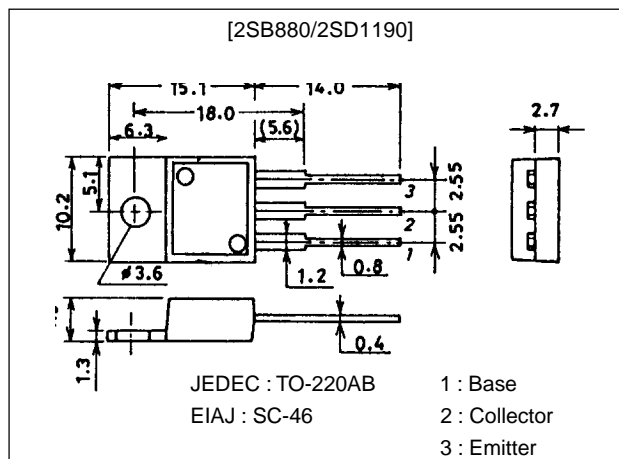
Features

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

Package Dimensions

unit:mm

2010C



() : 2SB880

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		(-)4	A
Collector Current (Pulse)	I_{CP}		(-)6	A
Collector Dissipation	P_C		1.75	W
		$T_C=25^{\circ}\text{C}$	30	W
Junction Temperature	T_J		150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)40V, I_E=0$			$(-)0.1$	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)5V, I_C=0$			$(-)3.0$	mA
DC Current Gain	h_{FE}	$V_{CE}=(-)2V, I_C=(-)2A$	2000	5000		
Gain-Bandwidth Product	f_T	$V_{CE}=(-)5V, I_C=(-)2A$		20		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)2A, I_B=(-)4mA$		0.9	$(-)1.5$	V
				$(-)1.0$		V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)2A, I_B=(-)4mA$			$(-)2.0$	V

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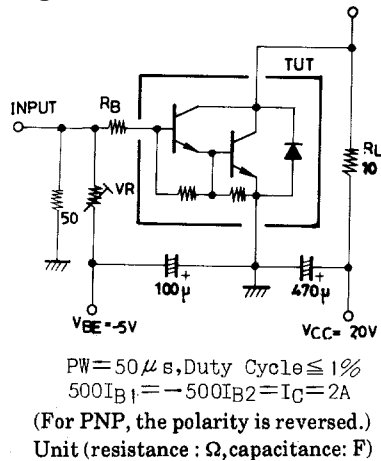
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91098HA (KT)/D251MH/4027KI/2033KI, TS No.924-1/4

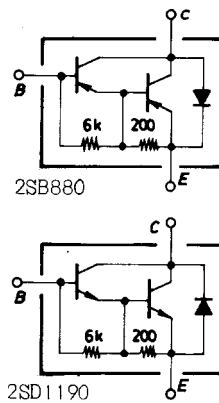
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)5mA, I_E=0$	(-)70			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)50mA, R_{BE}=\infty$	(-)60			V
Turn-ON Time	t_{on}	See specified Test Circuit		(0.5)		μs
				0.6		μs
Storage Time	t_{stg}	See specified Test Circuit		(1.4)		μs
				2.7		μs
Fall Time	t_f	See specified Test Circuit		(1.2)		μs
				1.6		μs

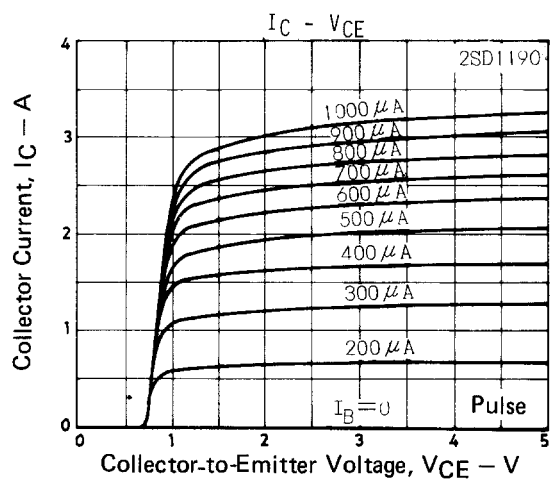
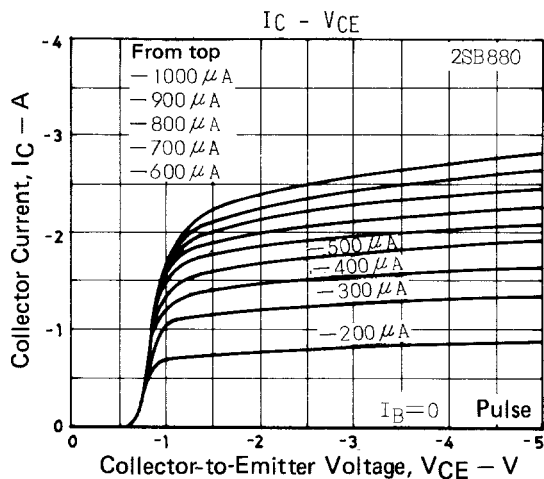
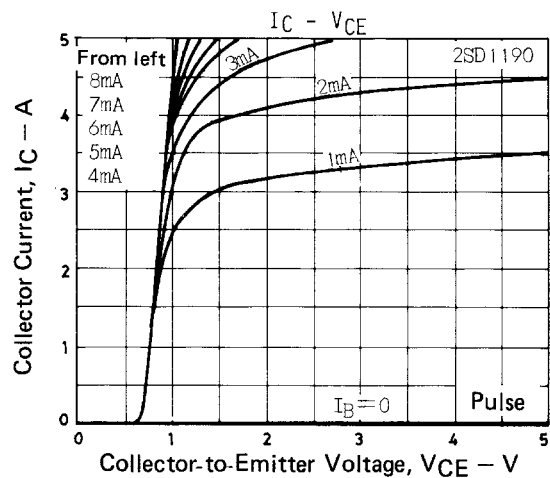
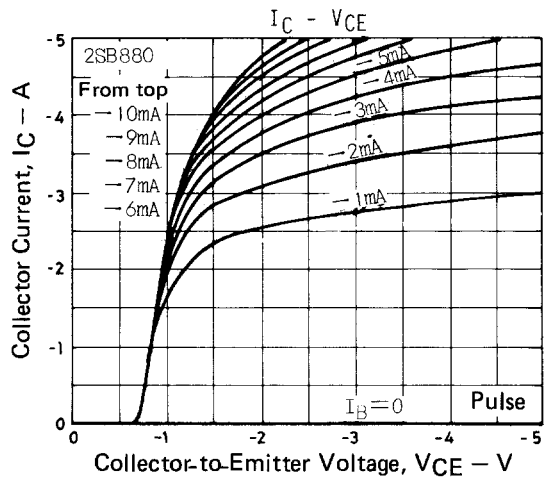
Switching Time Test Circuit

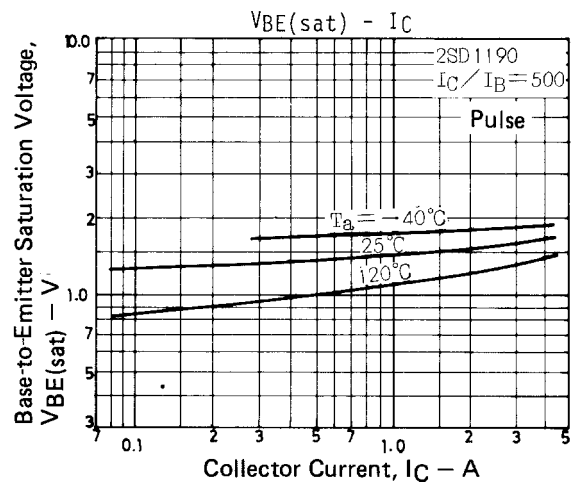
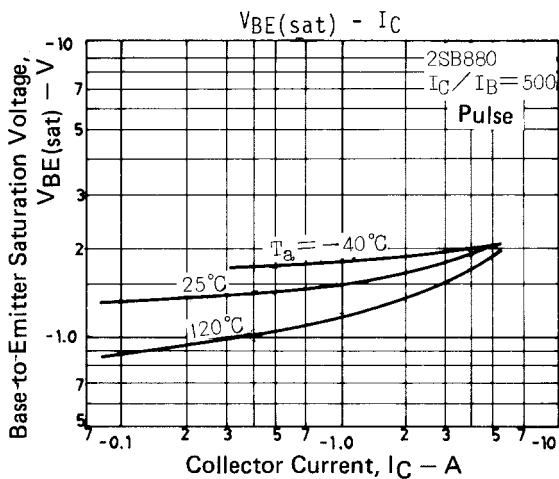
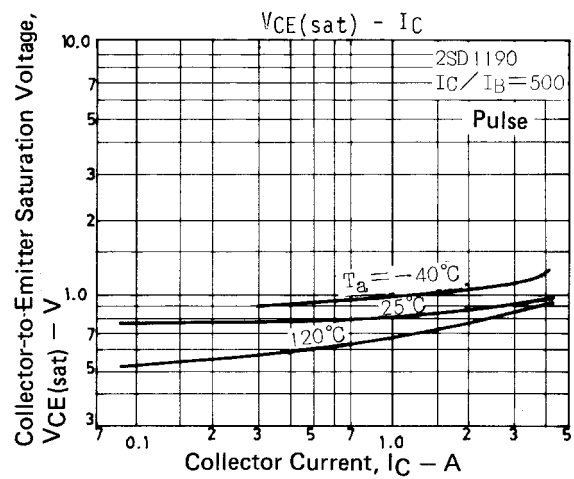
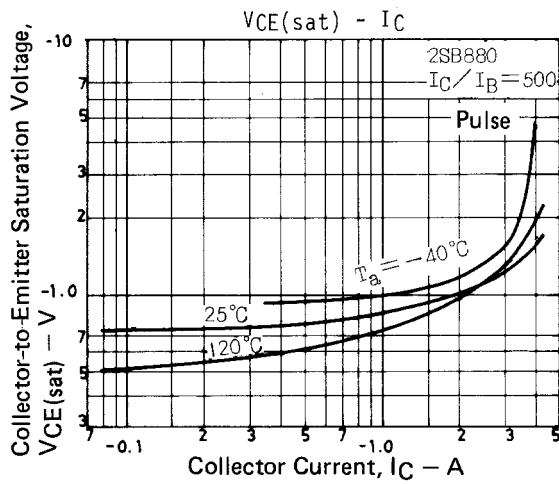
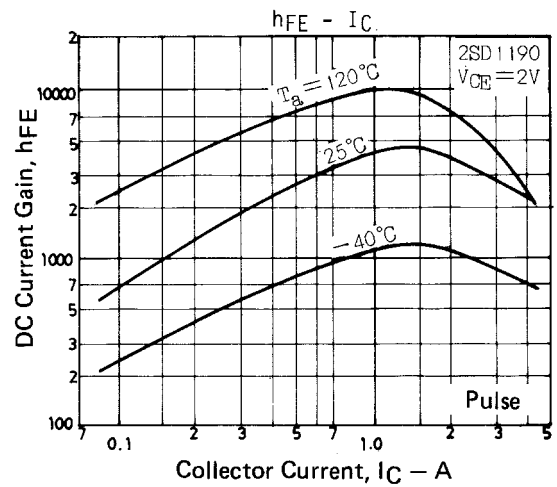
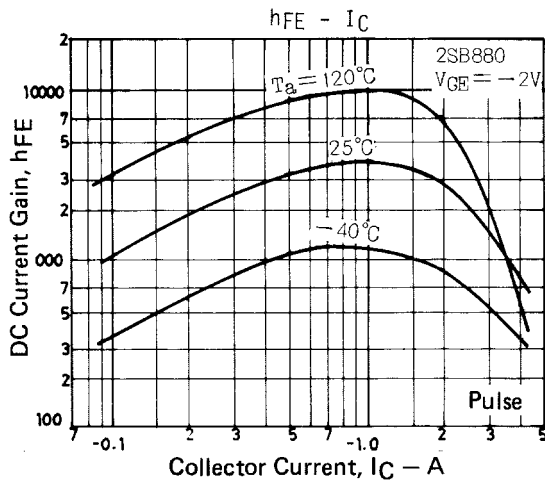
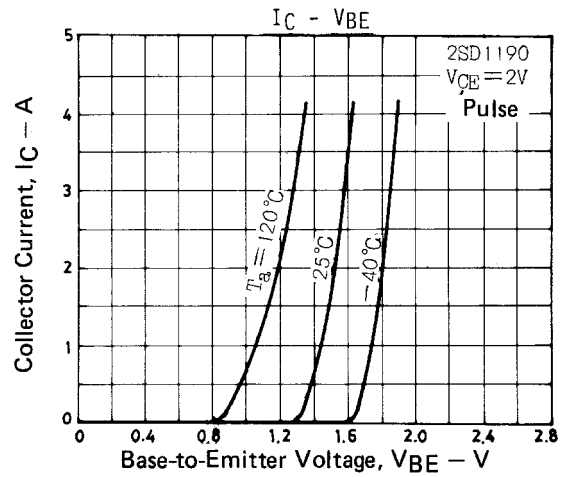
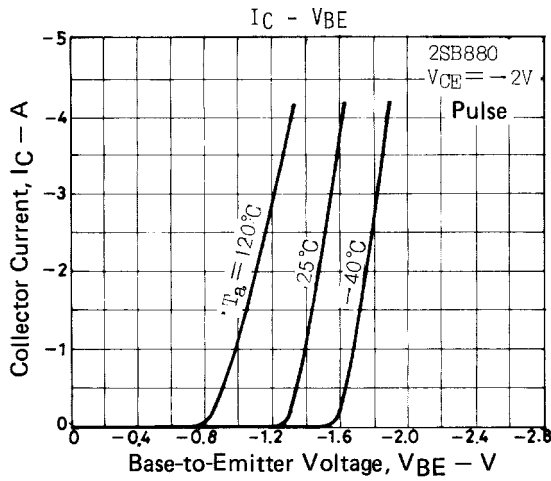


Electrical Connection

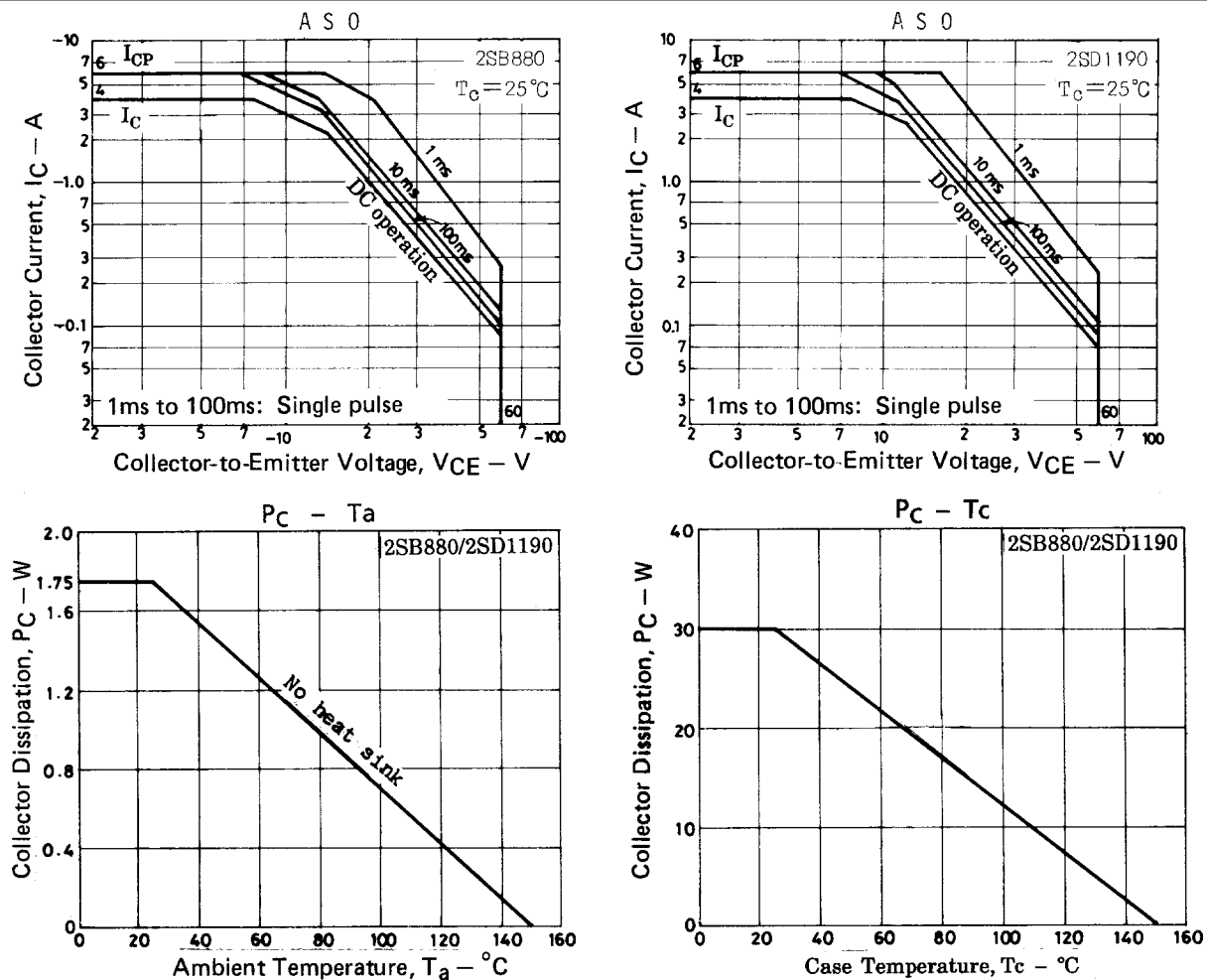


Unit (Resistance : Ω)





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