

**SANYO****2SB884/2SD1194****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.

( ) : 2SB884

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		(-110)	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>		(-100)	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		(-6)	V
Collector Current	I <sub>C</sub>		(-3)	A
Collector Current (Pulse)	I <sub>CP</sub>		(-5)	A
Collector Dissipation	P <sub>C</sub>		1.75	W
		T <sub>c</sub> =25°C	30	W
Junction Temperature	T <sub>j</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-55 to +150	°C

**Electrical Characteristics at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =(-)80V, I <sub>E</sub> =0			(-0.1)	mA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =(-)5V, I <sub>C</sub> =0			(-3)	mA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =(-)3V, I <sub>C</sub> =(-)1.5A	1500	4000		
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =(-)1.5A, I <sub>B</sub> =(-)3mA		0.9	(-1.5)	V
				(-1.0)		V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =(-)1.5A, I <sub>B</sub> =(-)3mA			(-2.0)	V
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =(-)5V, I <sub>C</sub> =(-)1.5A			20	MHz

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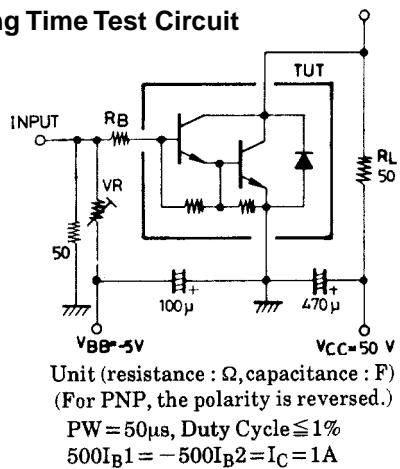
**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters**

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

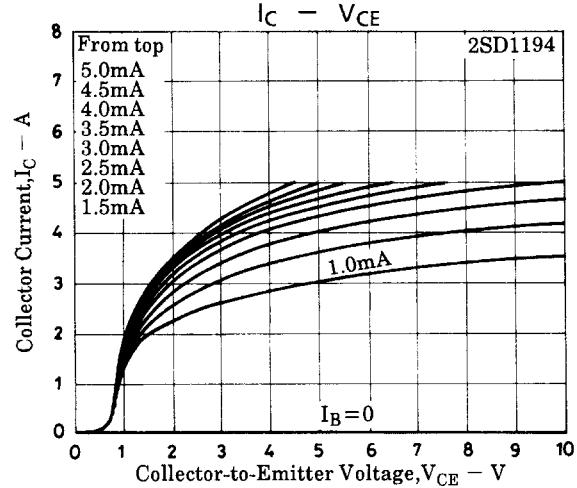
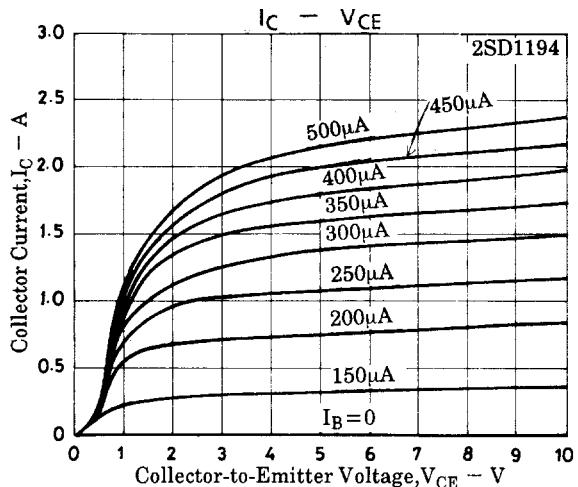
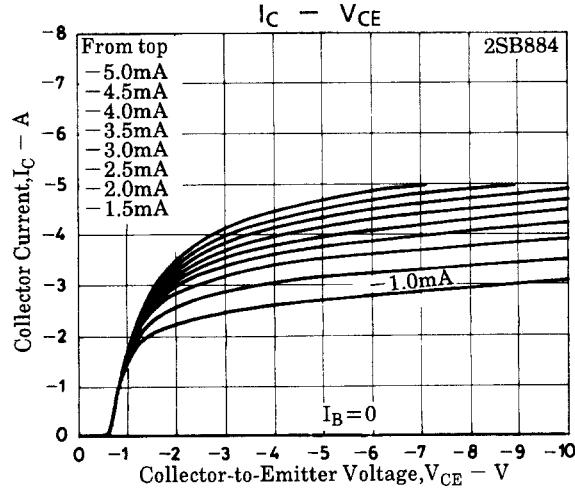
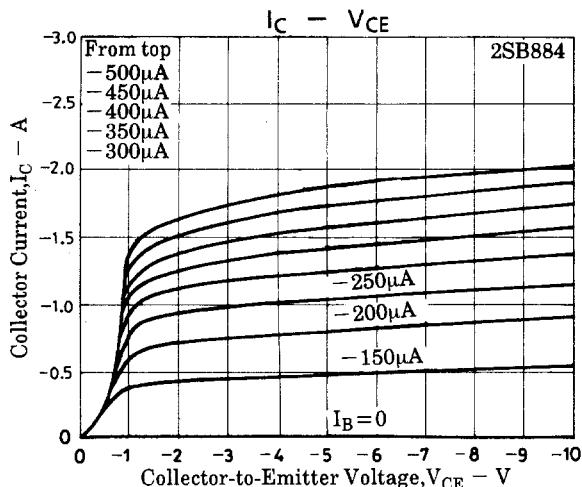
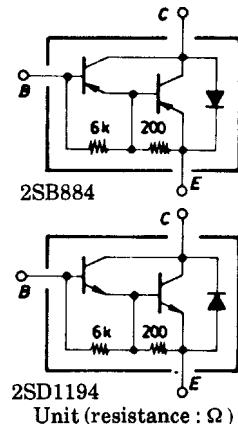
# 2SB884/2SD1194

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -5\text{mA}, I_E = 0$	(-)	110		V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50\text{mA}, R_{BE} = \infty$	(-)	100		V
Turn-ON Time	$t_{on}$	See specified Test Circuit		(0.8)		$\mu\text{s}$
				0.7		$\mu\text{s}$
Storage Time	$t_{stg}$	See specified Test Circuit		(2.4)		$\mu\text{s}$
				5.0		$\mu\text{s}$
Fall Time	$t_f$	See specified Test Circuit		(1.2)		$\mu\text{s}$
				1.2		$\mu\text{s}$

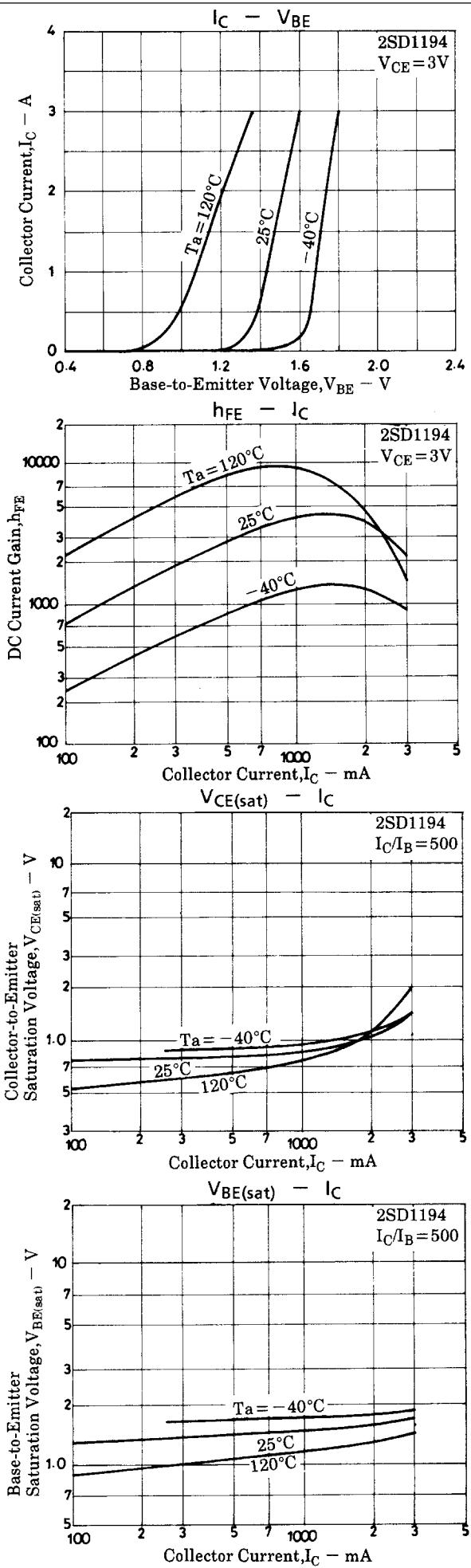
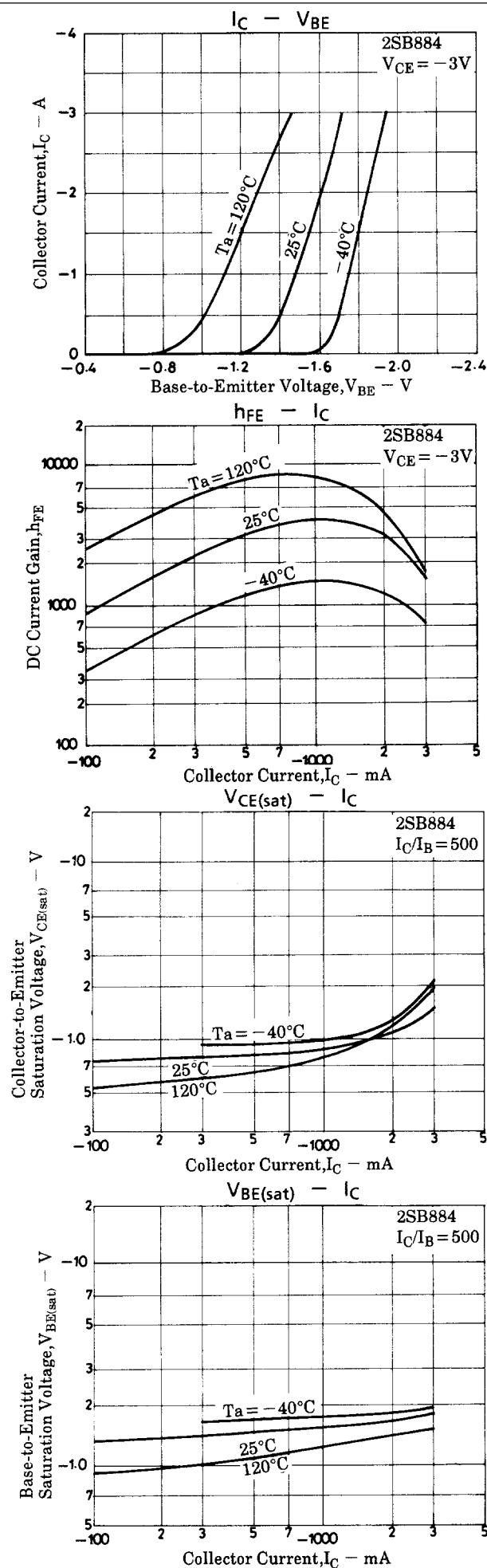
## Switching Time Test Circuit

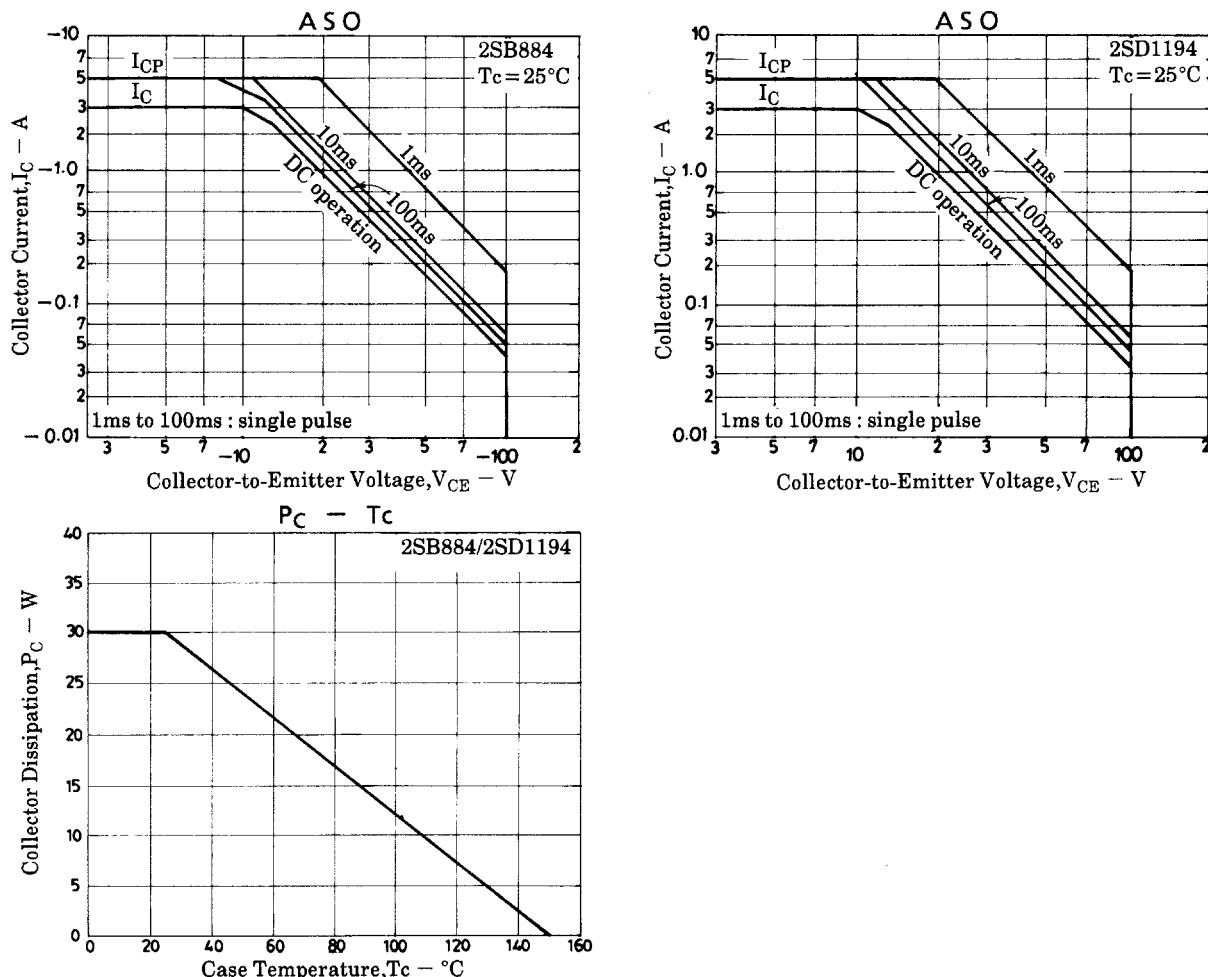


## Electrical Connection



## 2SB884/2SD1194





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Datasheets for electronics components.