



No.930C

# 2SB892/2SD1207

PNP/NPN Epitaxial Planar Silicon Transistors

## Large-Current Switching Applications

### APPLICATIONS

- Power supplies, relay drivers, lamp drivers, and automotive wiring

### FEATURES

- FBET and MBIT processed (Original process of SANYO)
- Low saturation voltage
- Large current capacity and wide ASO

Values for 2SB892 shown in ( )

### ABSOLUTE MAXIMUM RATINGS/T<sub>a</sub>=25°C

			unit
Collector to base voltage	V <sub>CBO</sub>	(-)60	V
Collector to emitter voltage	V <sub>CEO</sub>	(-)50	V
Emitter to base voltage	V <sub>EBO</sub>	(-)6	V
Collector current	I <sub>C</sub>	(-)2	A
Collector Current(Pulse)	I <sub>CP</sub>	(-)4	A
Allowable collector dissipation	P <sub>C</sub>	1	W
Junction temperature	T <sub>j</sub>	150	°C
Storage ambient temperature	T <sub>stg</sub>	-55~+150	°C

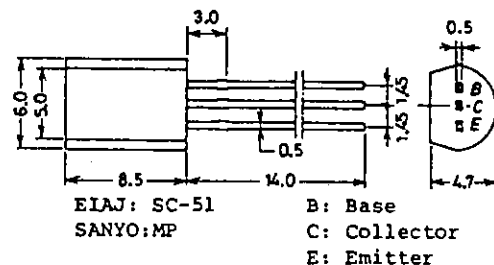
### ELECTRICAL CHARACTERISTICS/T<sub>a</sub>=25°C

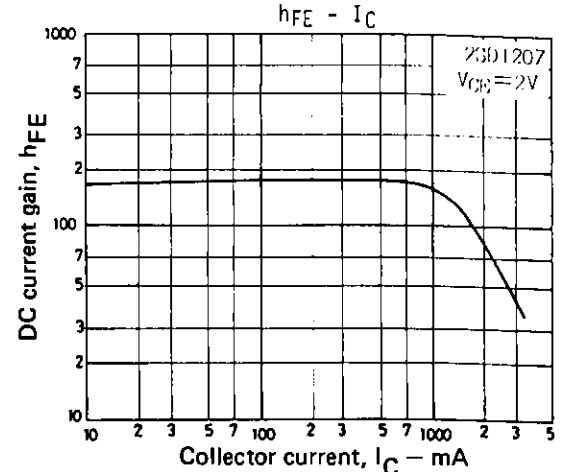
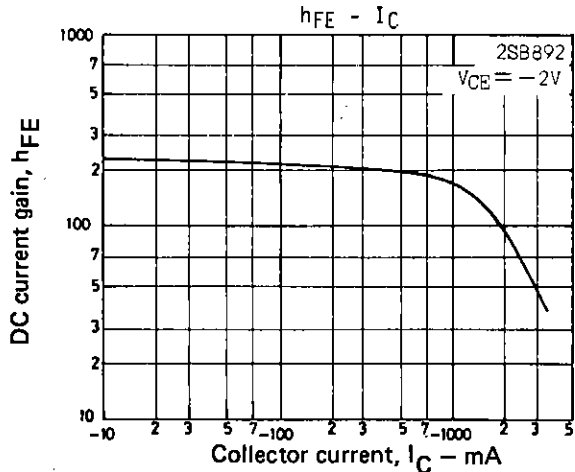
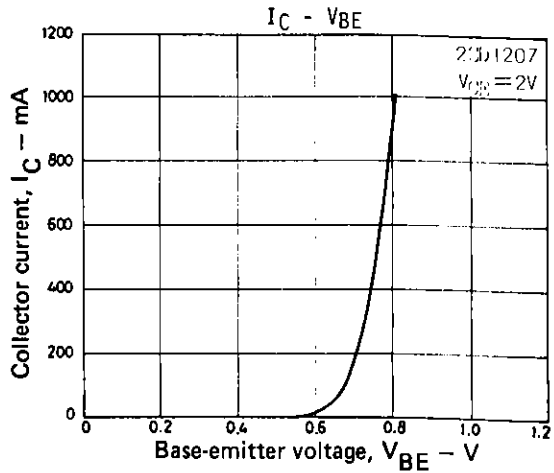
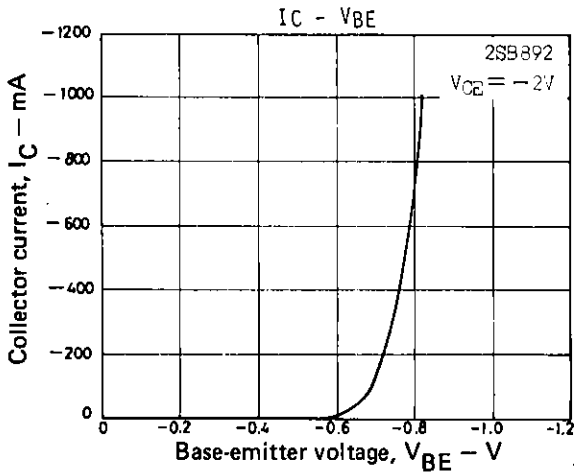
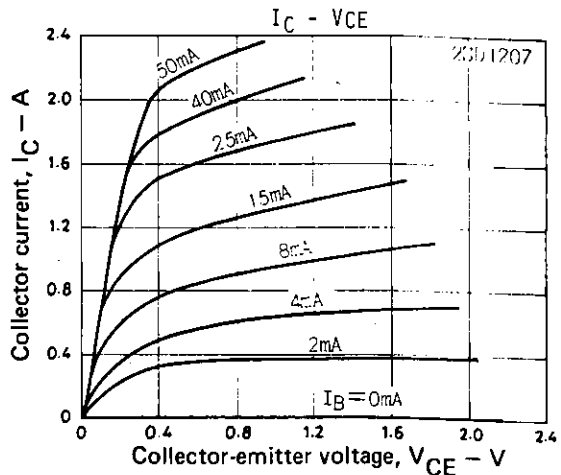
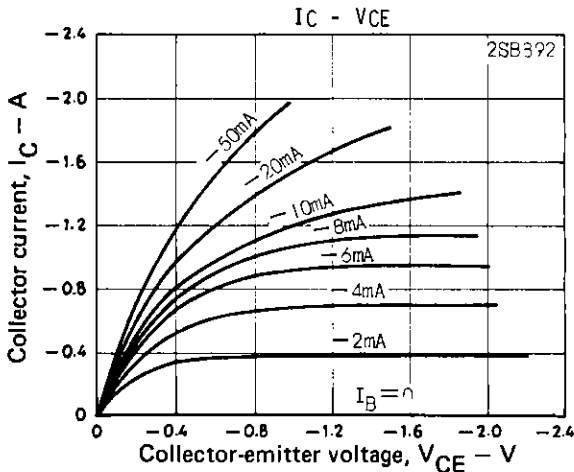
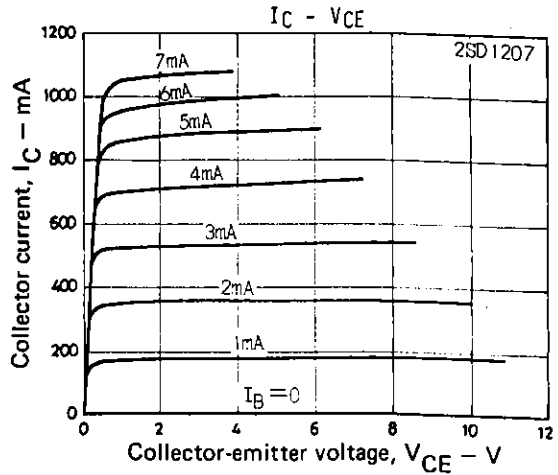
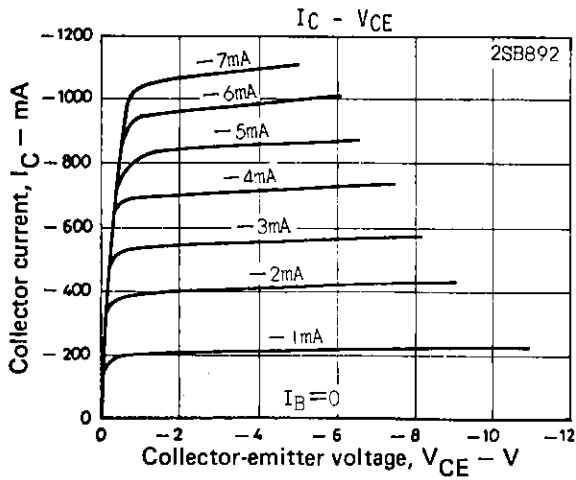
			min	typ	max	unit
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =(-)50V, I <sub>E</sub> =0			(-)0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =(-)4V, I <sub>C</sub> =0			(-)0.1	μA
DC current gain	h <sub>FE</sub> (1)*	V <sub>CE</sub> =(-)2V, I <sub>C</sub> =(-)100mA	100		560	
			h <sub>FE</sub> (2)	40		
Gain-bandwidth product	f <sub>T</sub>	V <sub>CE</sub> =(-)10V, I <sub>C</sub> =(-)50mA		150		MHz
Output capacitance	c <sub>ob</sub>	V <sub>CB</sub> =(-)10V, f=1MHz		12		pF
				(22)		pF
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =(-)1A, I <sub>B</sub> =(-)50mA	0.15		0.4	V
				(-0.3)	(-0.7)	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =(-)1A, I <sub>B</sub> =(-)50mA		(-)0.9	(-)1.2	V
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =(-)10μA, I <sub>E</sub> =0	(-)60			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =(-)1mA, R <sub>BE</sub> =∞	(-)50			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =(-)10μA, I <sub>C</sub> =0	(-)6			V

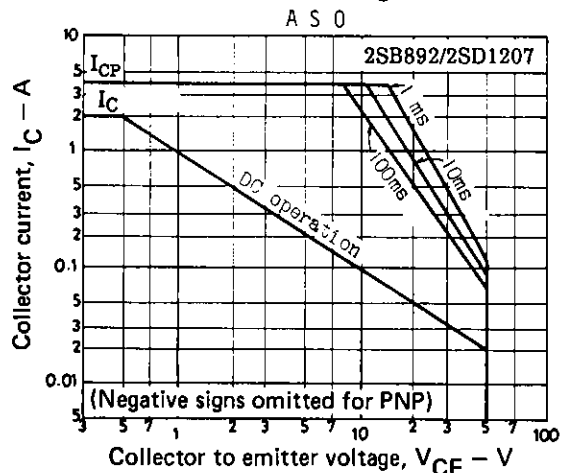
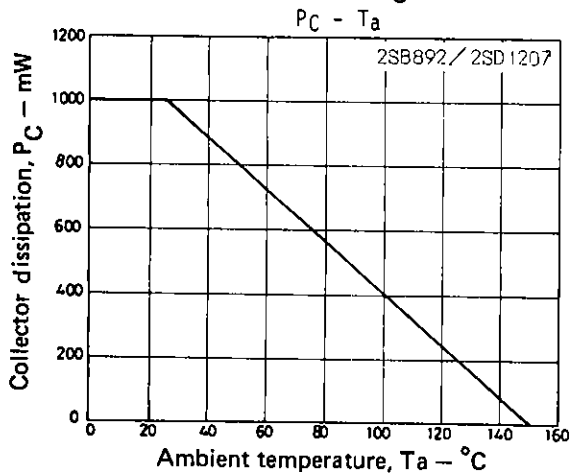
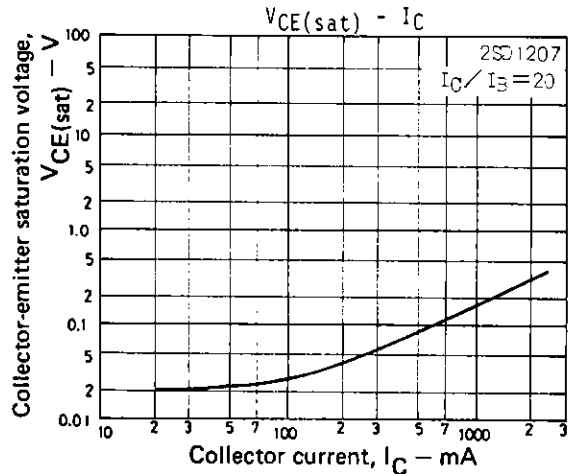
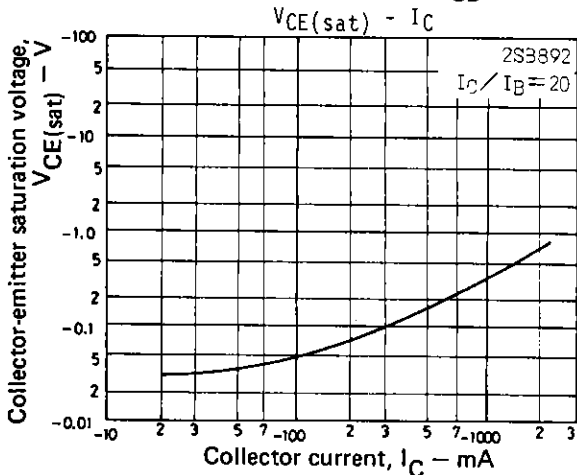
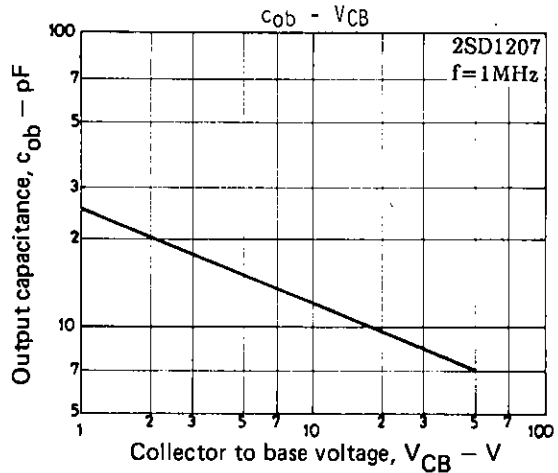
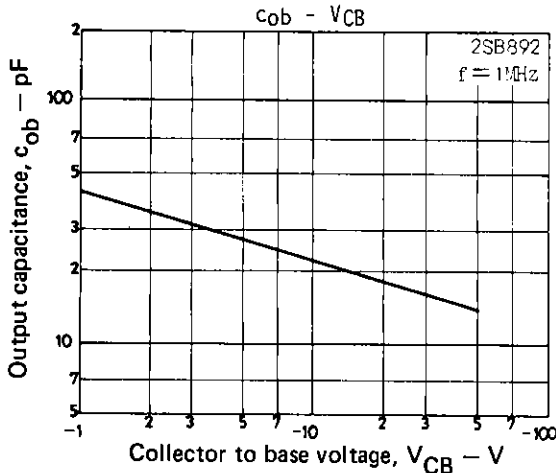
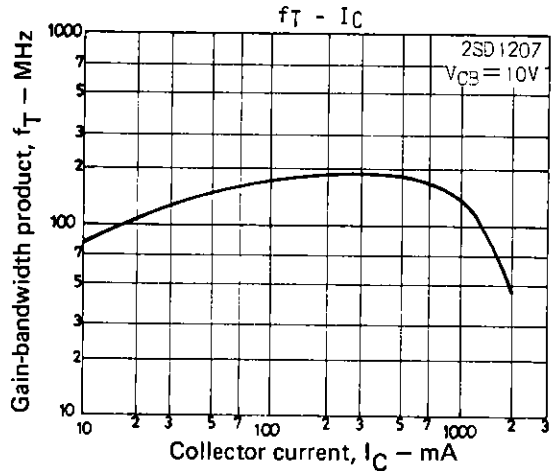
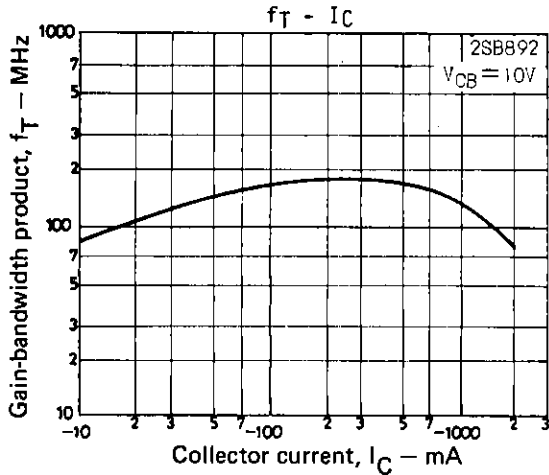
\* 2SB892 and 2SD1207 are graded as follows by h<sub>FE</sub> at 100mA:

100	R	200	140	S	280	200	T	400	280	U	560
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Package Dimensions 2006A  
(unit: mm)







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