



## 2SB892/2SD1207

### Large-Current Switching Applications

#### Features

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

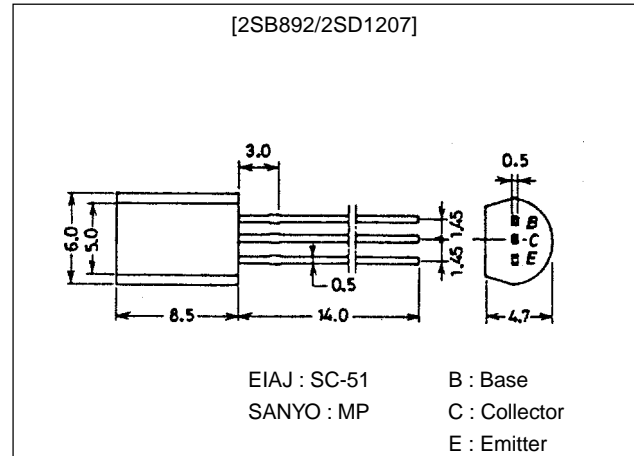
#### Features

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

#### Package Dimensions

unit:mm

2006A



() : 2SB892

#### Specifications

##### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		(-)60	V
Collector-to-Emitter Voltage	$V_{CEO}$		(-)50	V
Emitter-to-Base Voltage	$V_{EBO}$		(-)6	V
Collector Current	$I_C$		(-)2	A
Collector Current (Pulse)	$I_{CP}$		(-)4	A
Allowable Collector Dissipation	$P_C$		1	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	$I_{CBO}$	$V_{CB} = (-)50V, I_E = 0$			(-)0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)4V, I_C = 0$			(-)0.1	$\mu A$
DC Current Gain	$h_{FE1}$	$V_{CE} = (-)2V, I_C = (-)100mA$	100		560	
	$h_{FE2}$	$V_{CE} = (-)2V, I_C = (-)1.5A$	40			
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-)10V, I_C = (-)50mA$		150		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = (-)10V, f = 1MHz$		12		pF
				(22)		pF

\* : The 2SB892/2SD1207 are graded as follows by  $h_{FE}$  at 100mA :

100	R	200	140	S	280	200	T	400	280	U	560
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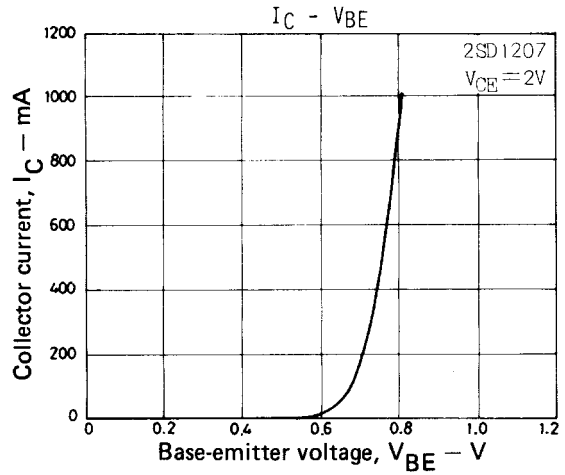
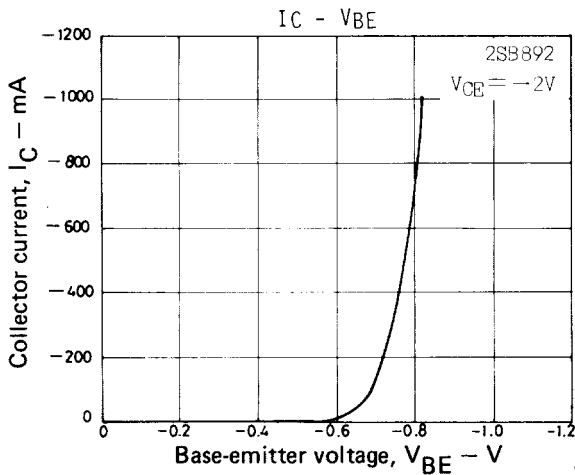
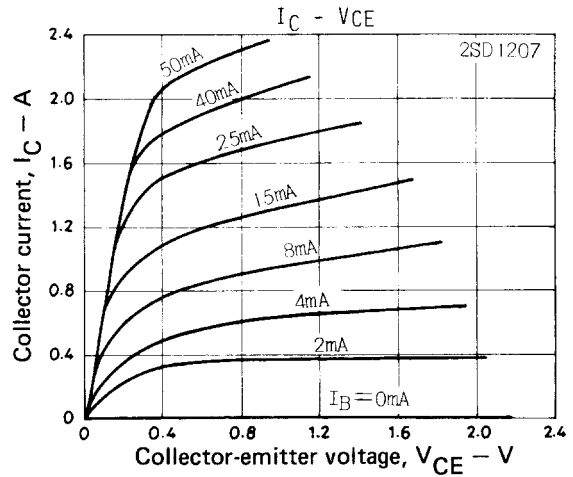
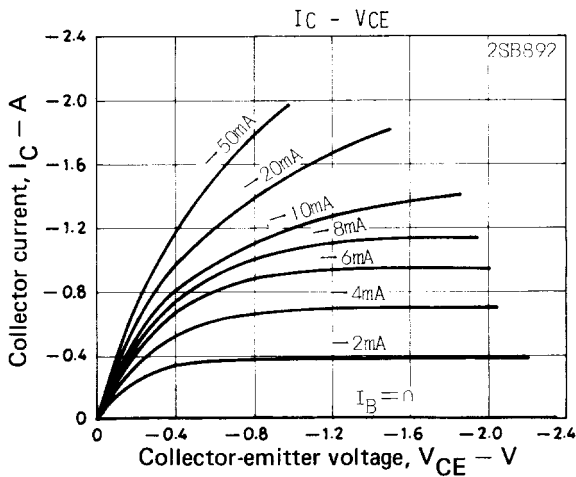
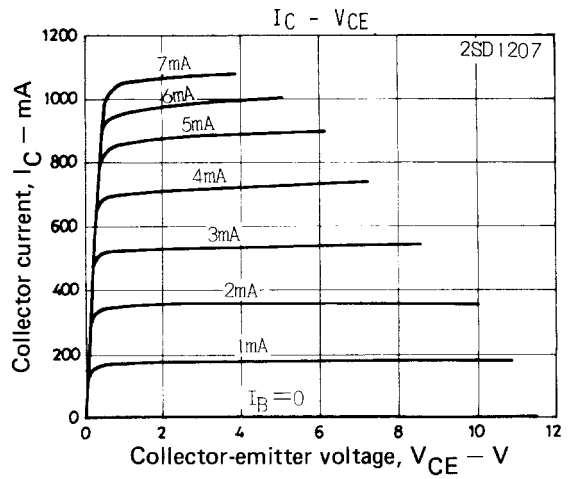
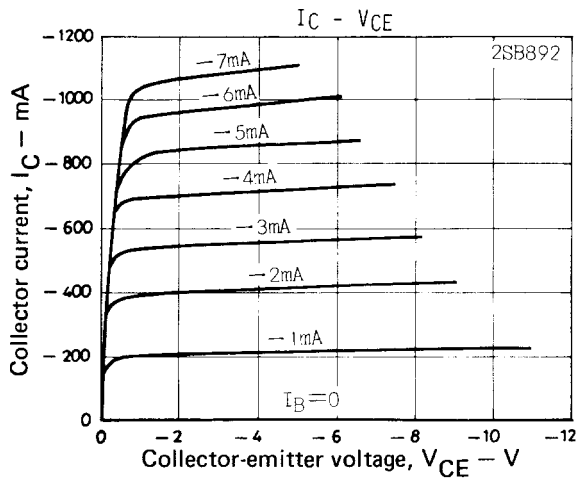
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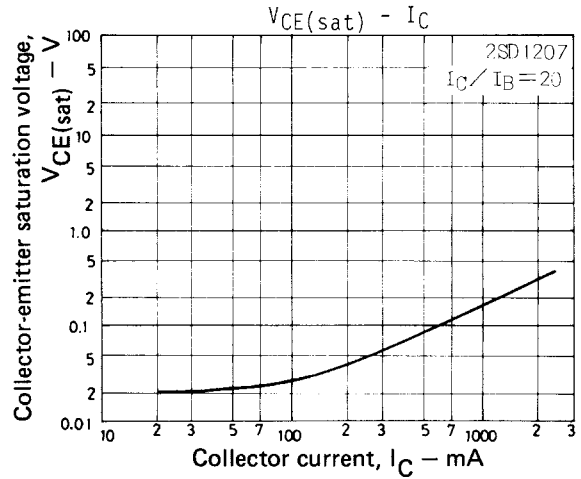
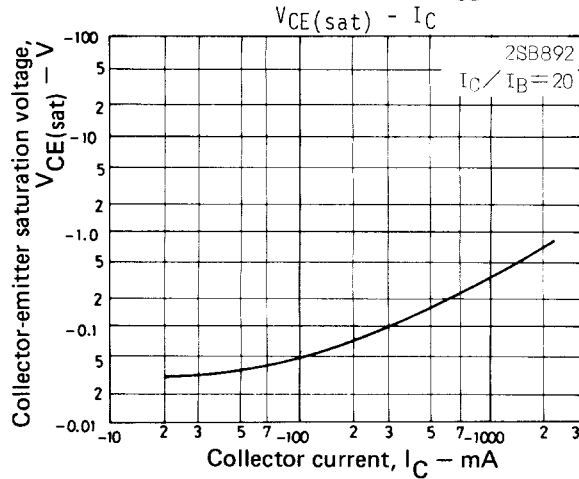
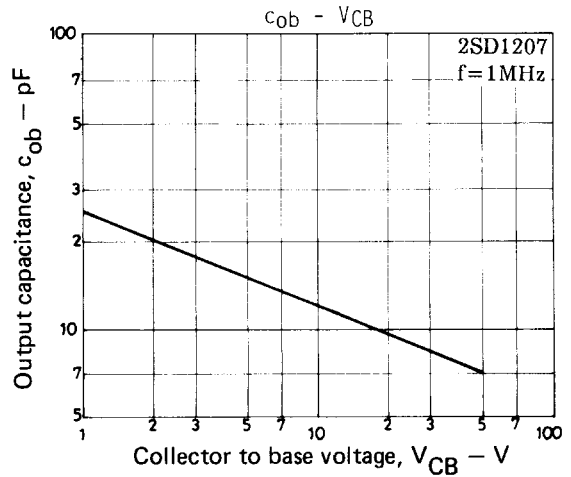
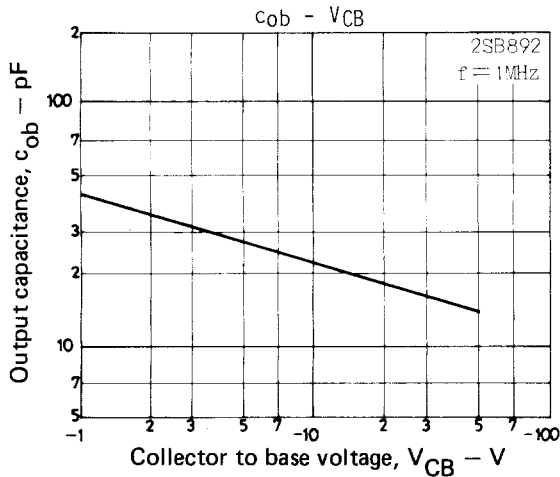
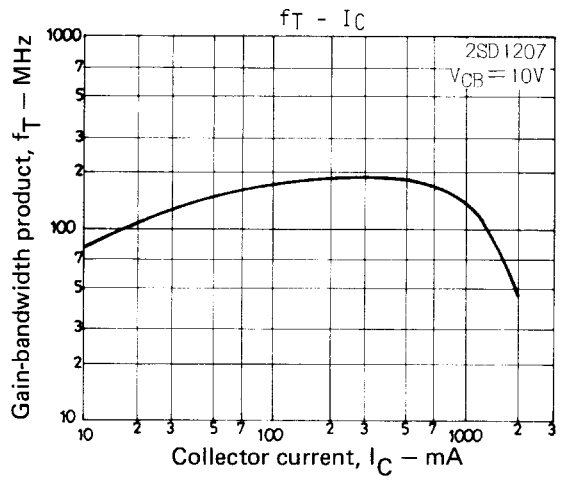
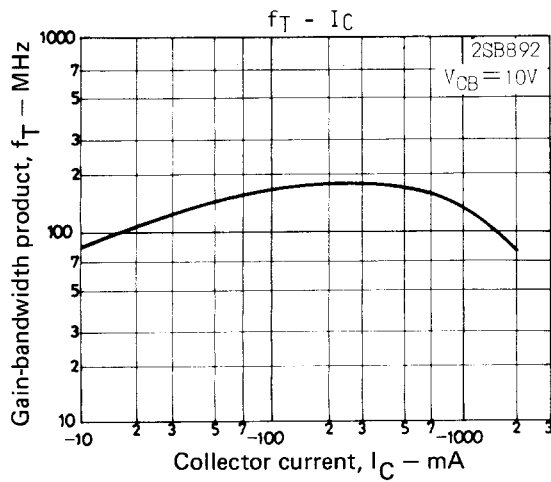
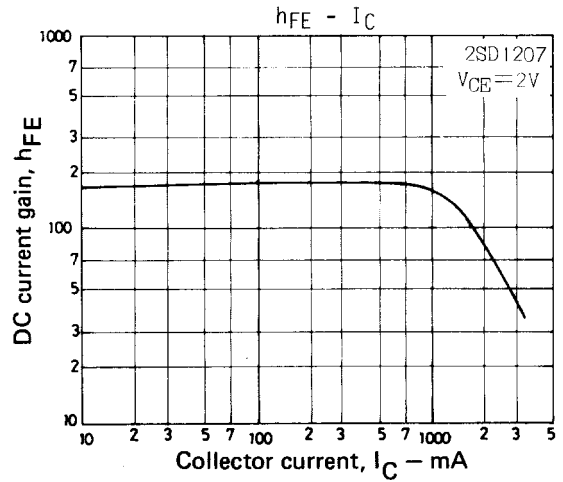
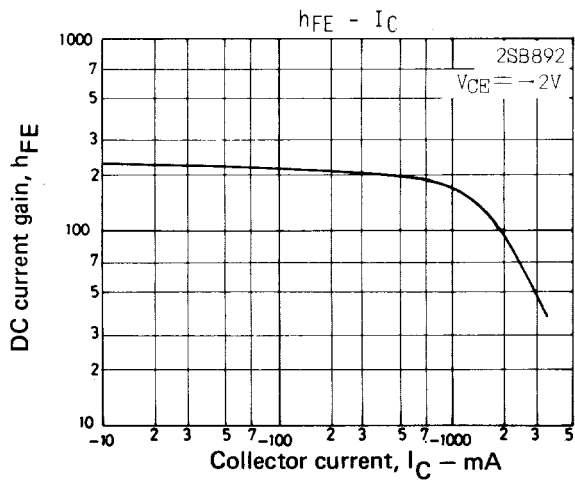
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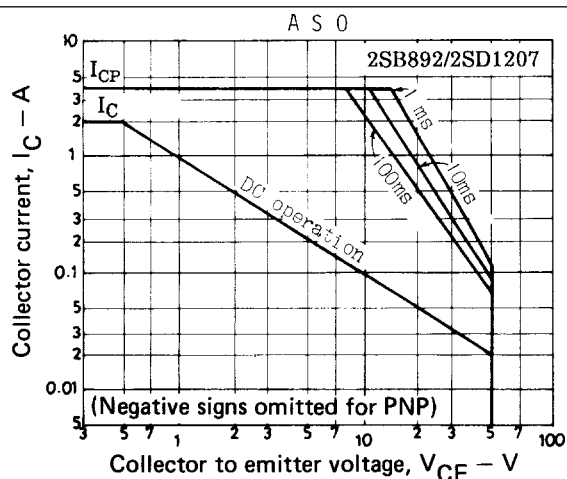
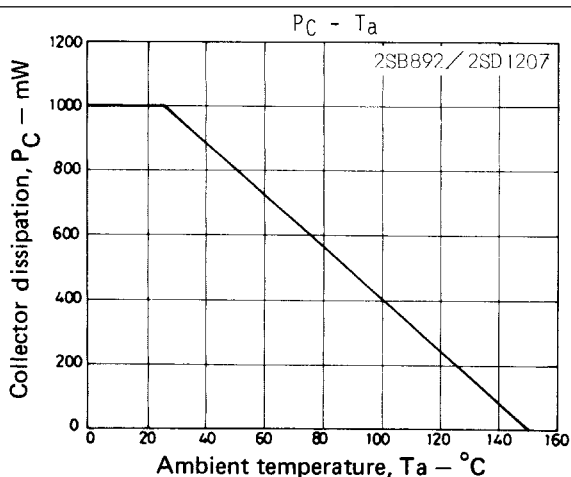
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)1A, I_B=(-)50mA$		0.15	0.4	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)1A, I_B=(-)50mA$		(-0.3)	(-0.7)	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-60)			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-50)			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	(-6)			V



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