



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.

() : 2SB892

Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)50\text{V}, I_E=0$			(-)-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)-0.1	μA
DC Current Gain	h_{FE1}	$V_{CE}=(-)2\text{V}, I_C=(-)100\text{mA}$	100		560	
	h_{FE2}	$V_{CE}=(-)2\text{V}, I_C=(-)1.5\text{A}$	40			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$		150		MHz

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

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Rank	R	S	T	U
h_{FE}	100 to 200	140 to 280	200 to 400	280 to 560

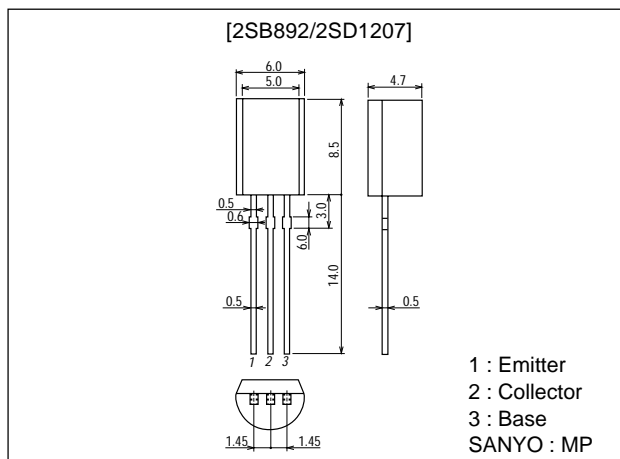
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Package Dimensions

unit:mm

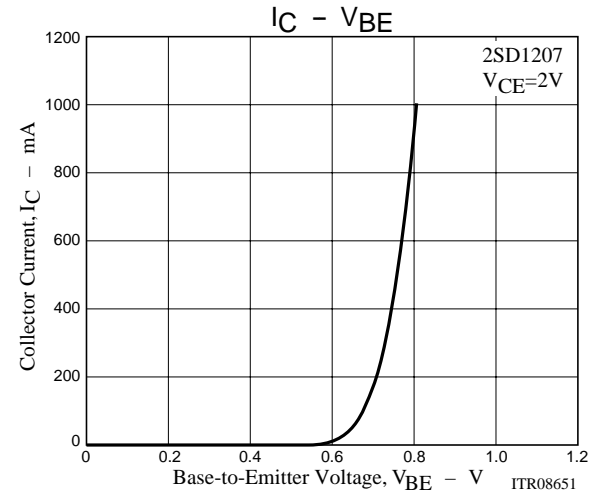
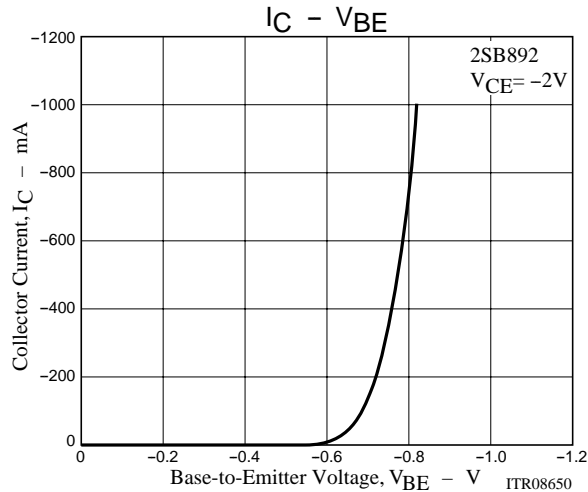
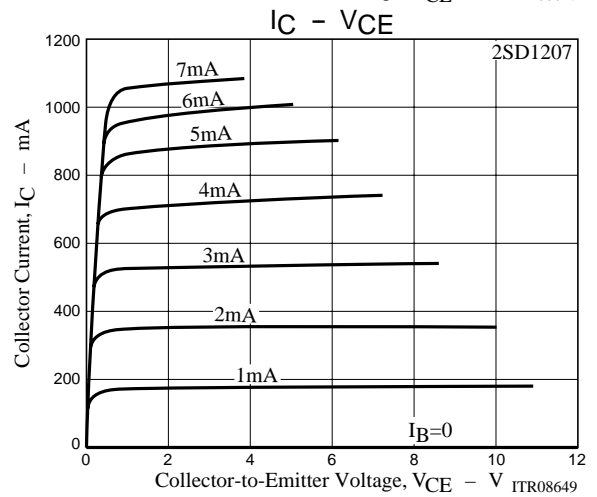
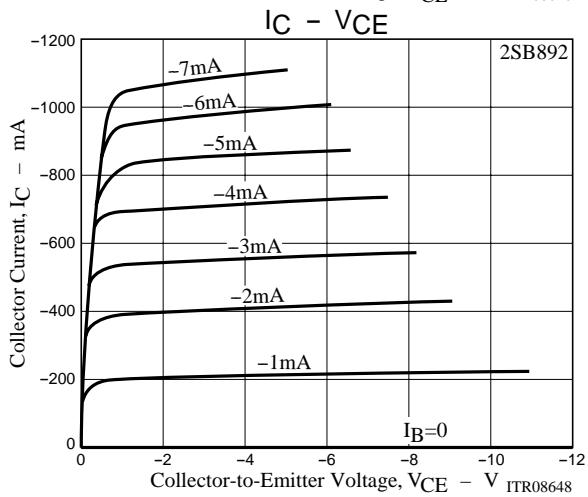
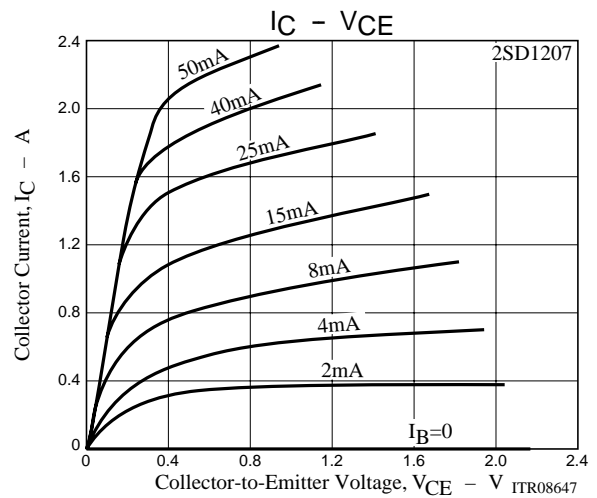
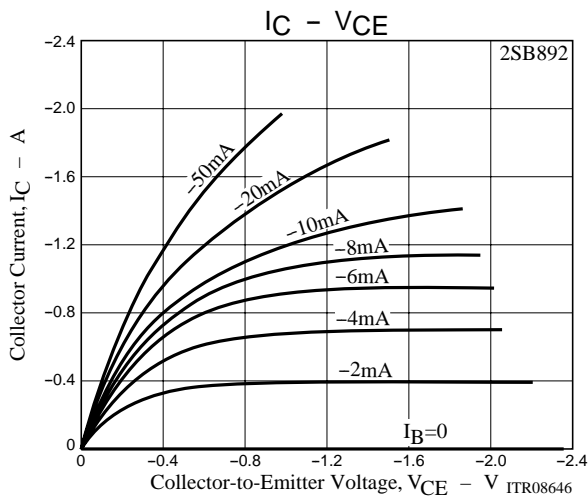
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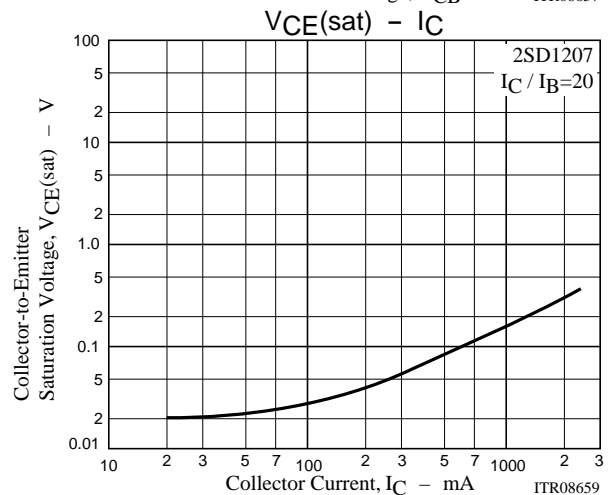
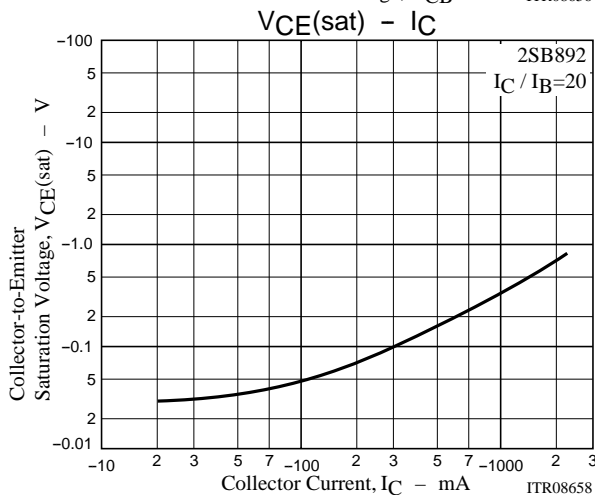
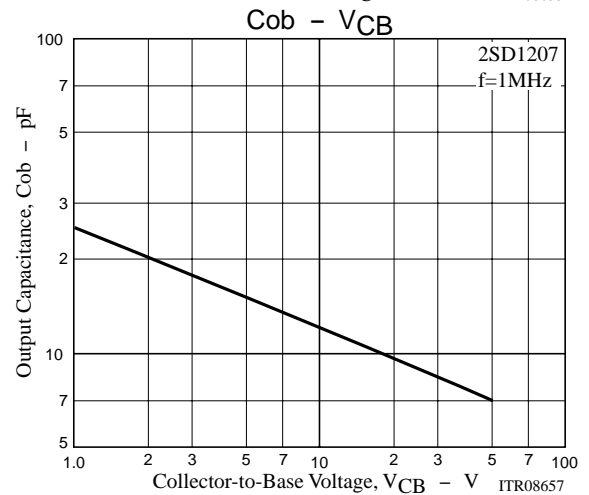
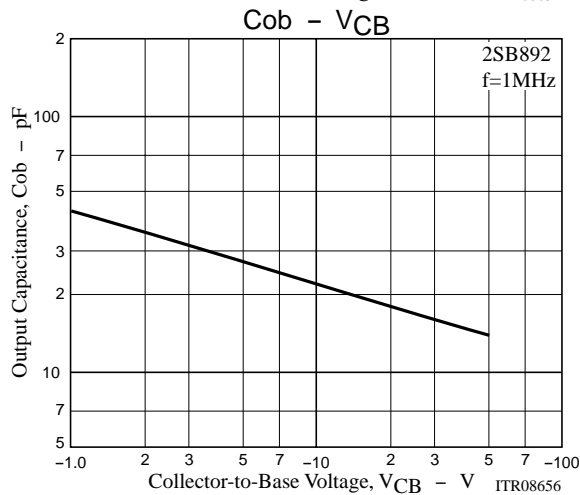
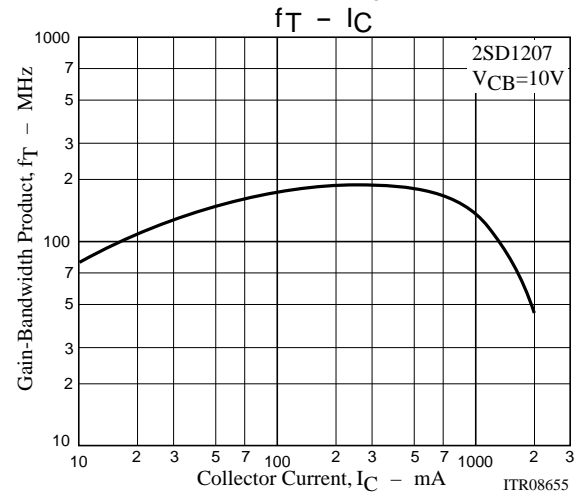
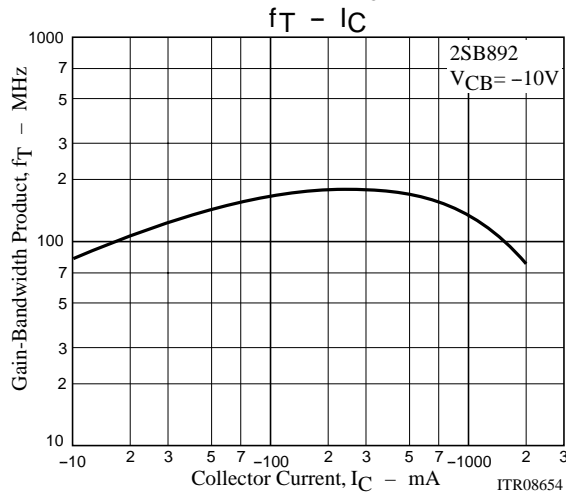
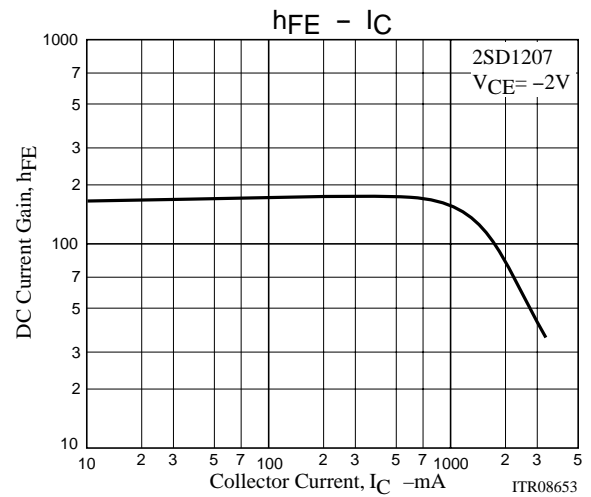
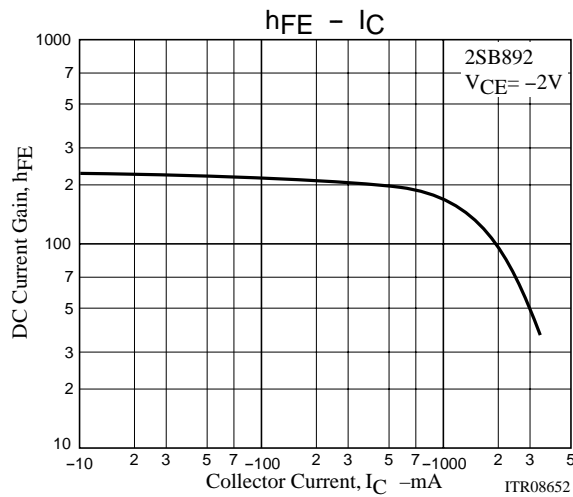
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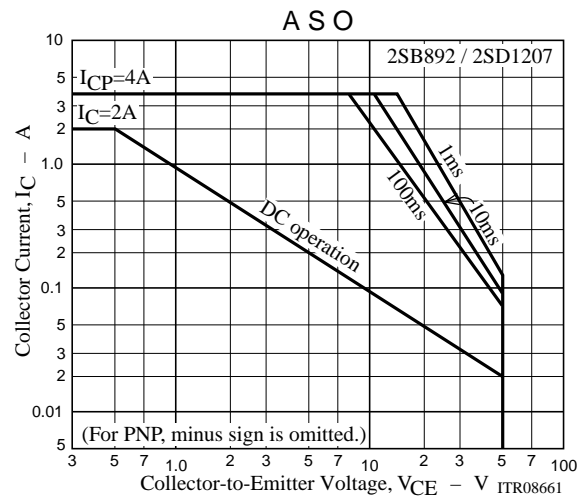
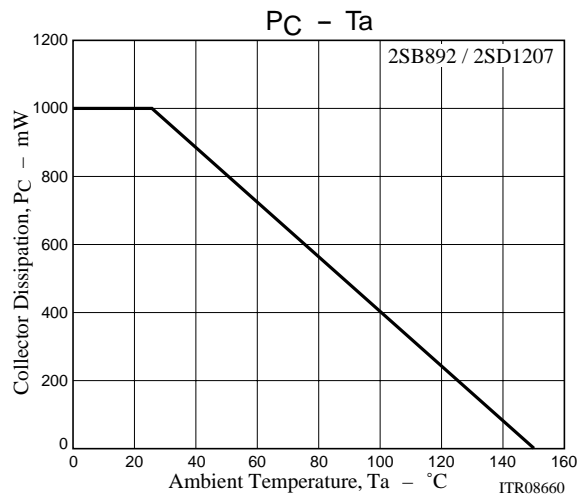
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		12		pF
				(22)		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)1A, I_B=(-)50mA$		0.15	0.4	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)1A, I_B=(-)50mA$		(-0.3)	(-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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