



SANYO Semiconductors

DATA SHEET

2SB887 / 2SD1197

PNP Epitaxial Planar Silicon Darlington Transistor
NPN Triple Diffused Planar Silicon Darlington Transistor

Driver Applications

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control.

Features

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

Specifications () : 2SB887

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		(-)110	V
Collector-to-Emitter Voltage	V _{CEO}		(-)100	V
Emitter-to-Base Voltage	V _{EBO}		(-)6	V
Collector Current	I _C		(-)10	A
Collector Current (Pulse)	I _{CP}		(-)15	A
Collector Dissipation	P _C		2.5	W
		T _c =25°C	70	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} =(-)80V, I _E =0A			(-)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)5V, I _C =0A			(-)3.0	mA
DC Current Gain	h _{FE}	V _{CE} =(-)3V, I _C =(-)5A	1500	4000		
Gain-Bandwidth Product	f _T	V _{CE} =(-)5V, I _C =(-)5A		20		MHz
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)5A, I _B =(-)10mA		(-1.0)0.9	(-)1.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)5A, I _B =(-)10mA			(-)2.0	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)5mA, I _E =0A	(-)110			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)50mA, R _{BE} =∞	(-)100			V

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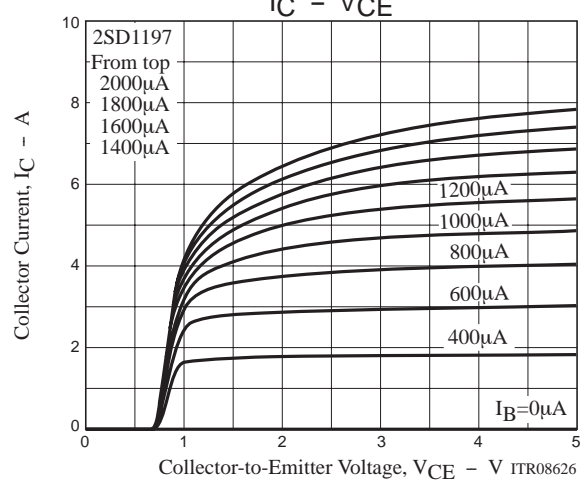
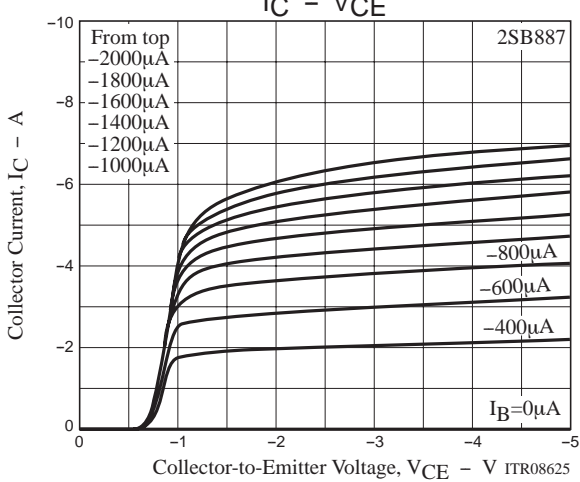
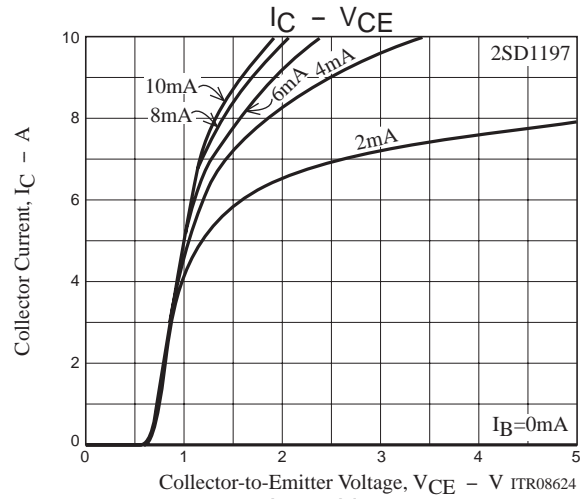
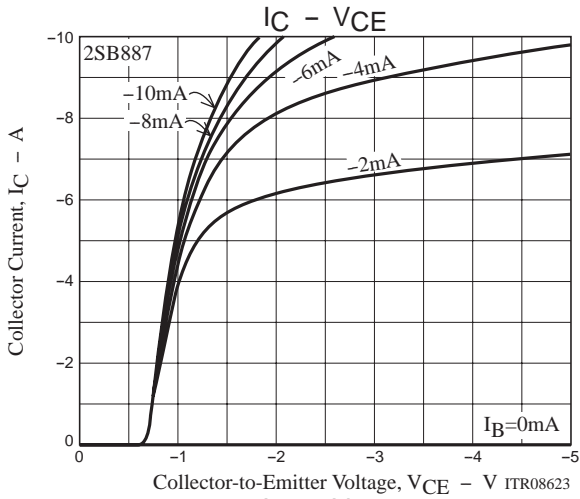
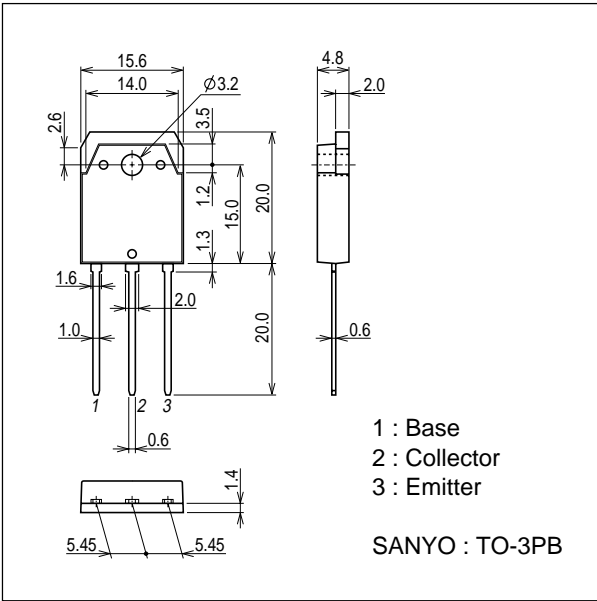
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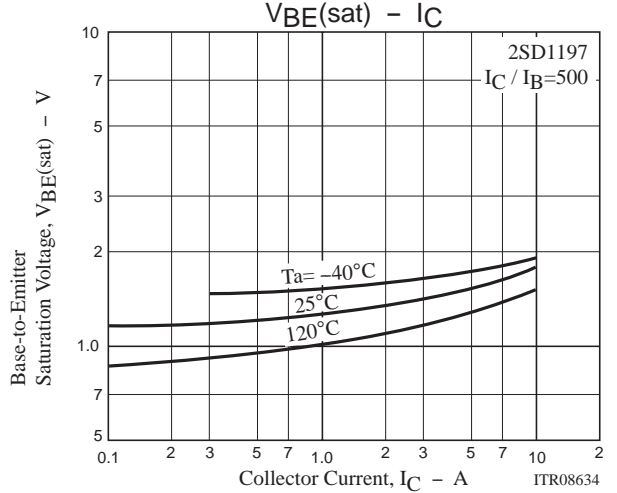
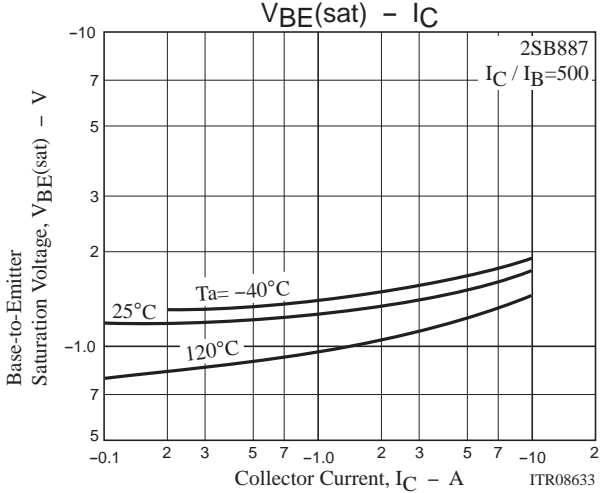
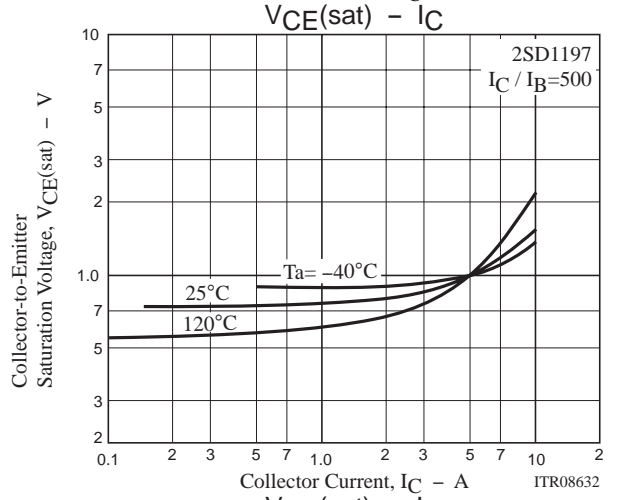
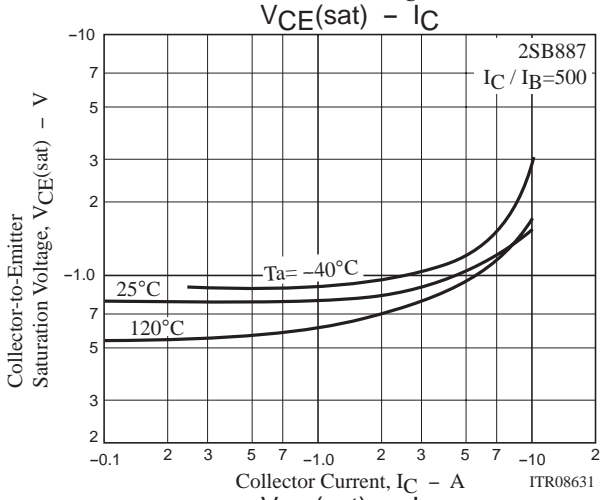
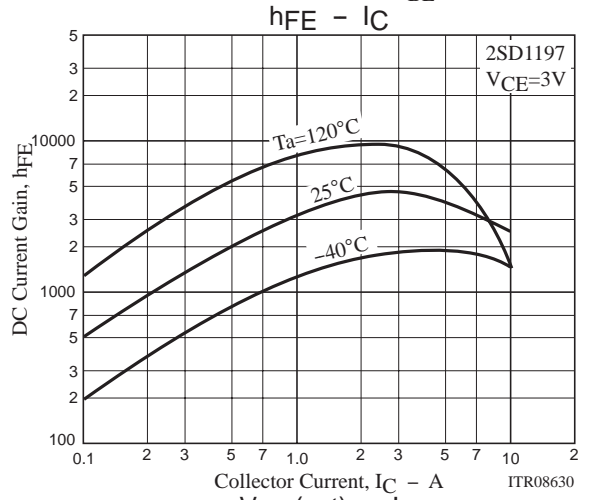
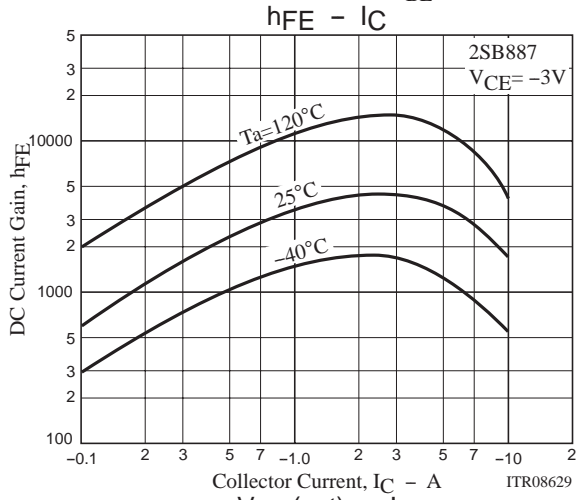
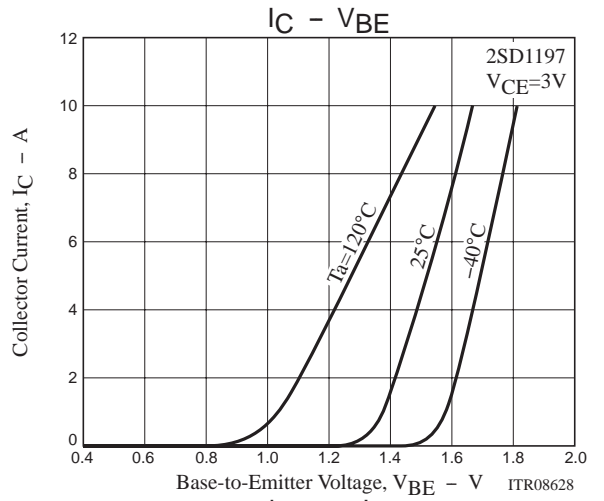
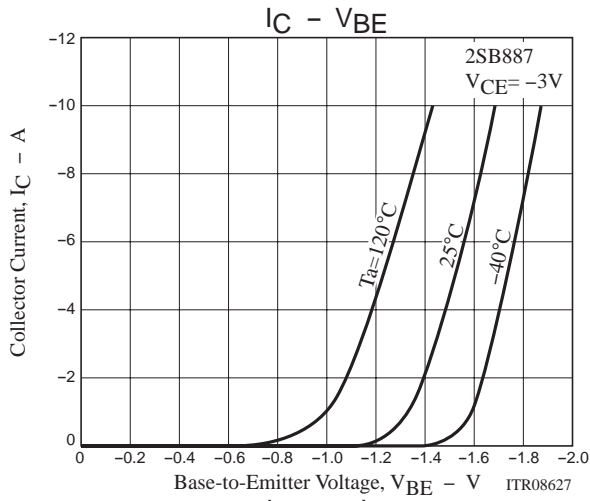
Package Dimensions

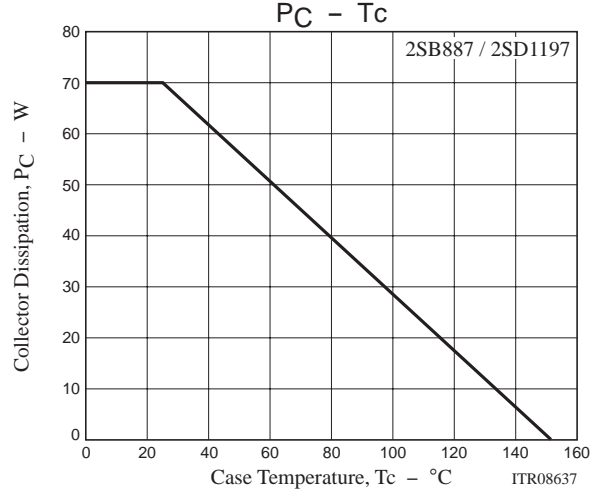
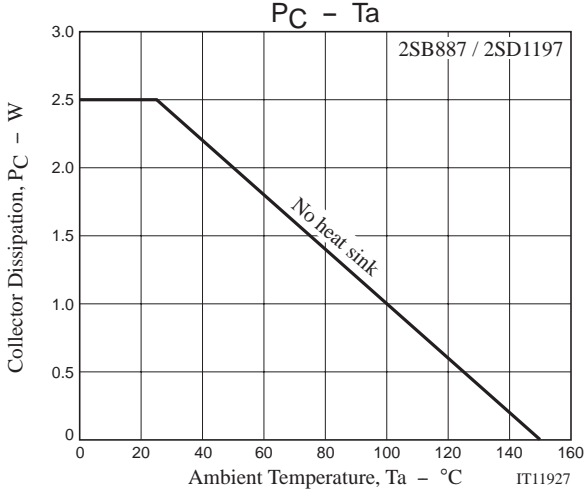
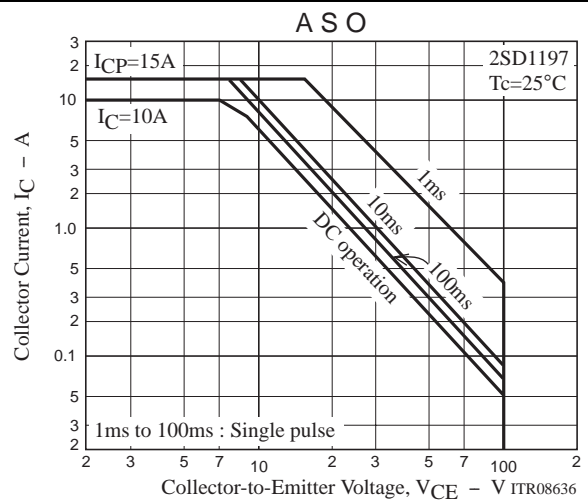
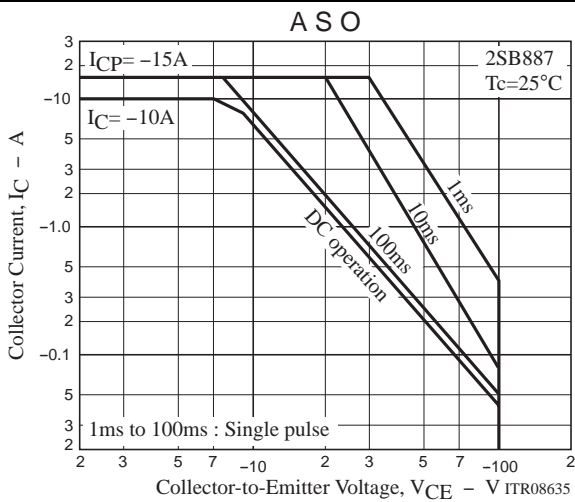
unit : mm (typ)

7503-003



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