



SANYO Semiconductors DATA SHEET

2SA1179N / 2SC2812N — PNP / NPN Epitaxial Planar Silicon Transistors Low-Frequency General-Purpose Amp Applications

Features

- Miniature package facilitates miniaturization in end products.
- High breakdown voltage.

Specifications () : 2SA1179N

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(-) \leq 55	V
Collector-to-Emitter Voltage	V _{CEO}		(-) \leq 50	V
Emitter-to-Base Voltage	V _{EBO}		(-) \leq 5	V
Collector Current	I _C		(-) \leq 150	mA
Collector Current (Pulse)	I _{CP}		(-) \leq 300	mA
Base Current	I _B		(-) \leq 30	mA
Collector Dissipation	P _C		200	mW
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} =(-)35V, I _E =0A			(-) \leq 0.1	μ A
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0A			(-) \leq 0.1	μ A
DC Current Gain	h _{FE}	V _{CE} =(-)6V, I _C =(-)1mA	200		400	
Gain-Bandwidth Product	f _T	2SC2812N : V _{CE} =6V, I _C =1mA		100		MHz
		2SA1179N : V _{CE} =-6V, I _C =-10mA		(180)		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)6V, f=1MHz		(4.0)3.0		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)50mA, I _B =(-)5mA		(-0.15)0.1	(-) \leq 0.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)50mA, I _B =(-)5mA			(-) \leq 1.0	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10 μ A, I _E =0A	(-) \leq 55			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)1mA, R _{BE} = ∞	(-) \leq 50			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10 μ A, I _C =0A	(-) \leq 5			V

Marking : 2SA1179N : M / 2SC2812N : L

* : The 2SA1179N / 2SC2812N are classified by 1mA h_{FE} as follows:

Rank	6
h _{FE}	200 to 400

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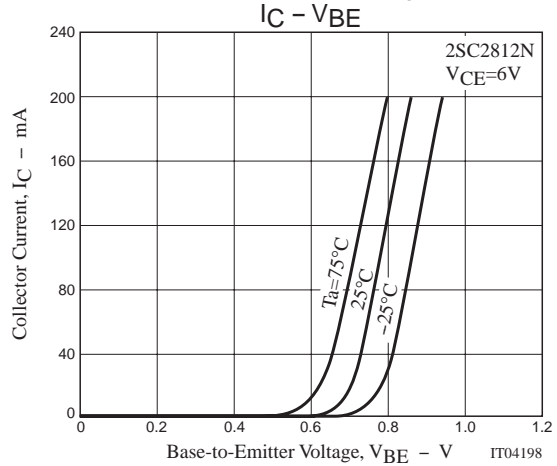
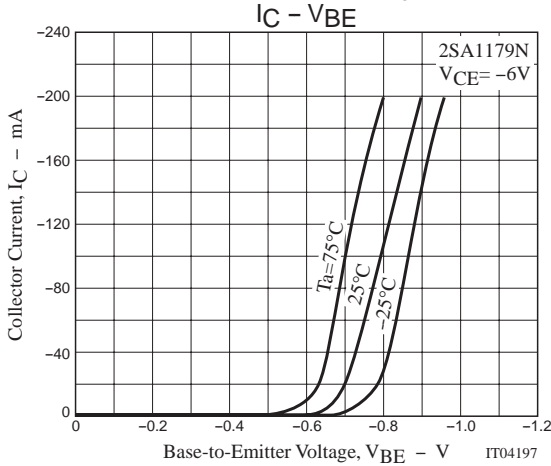
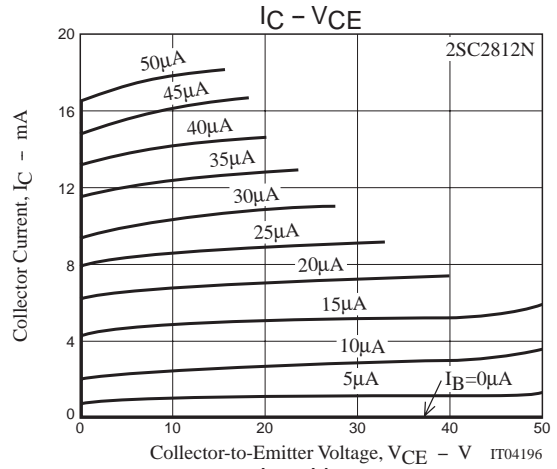
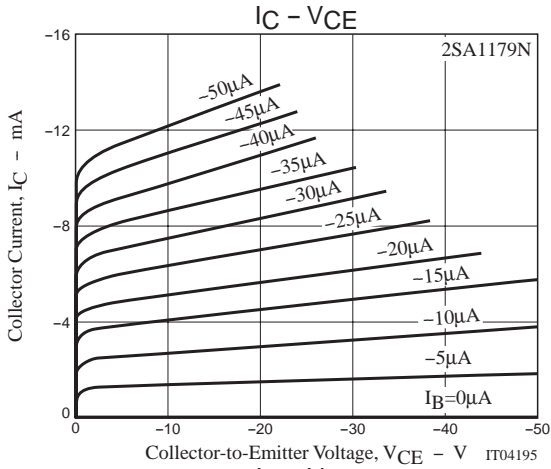
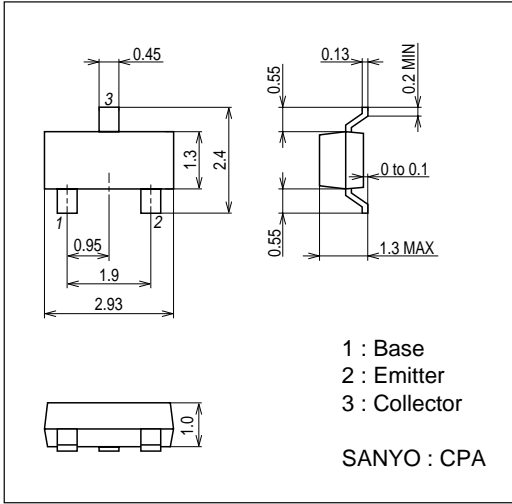
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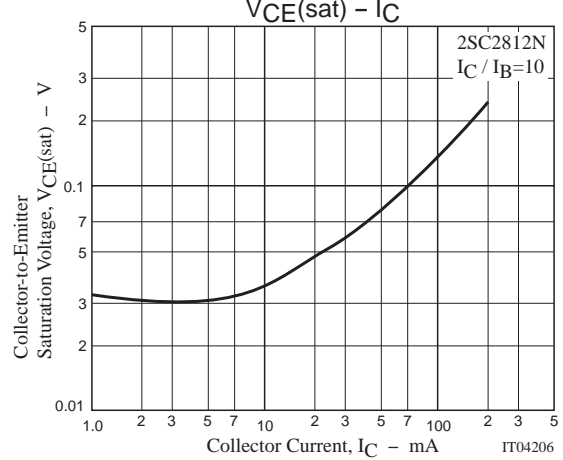
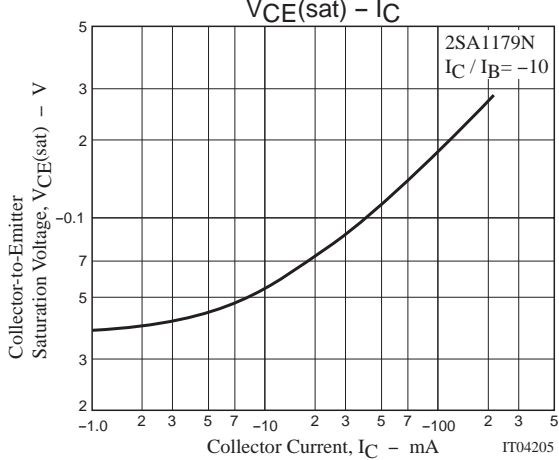
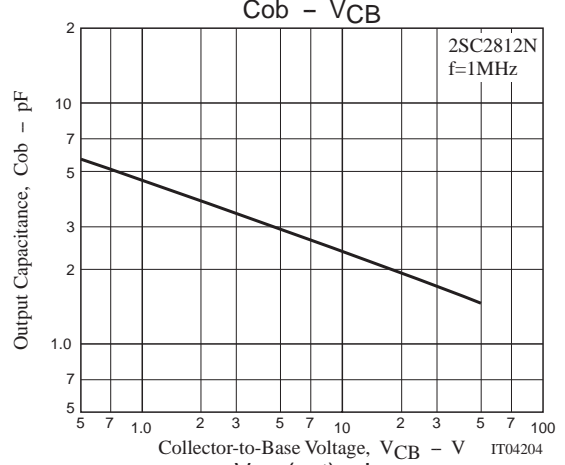
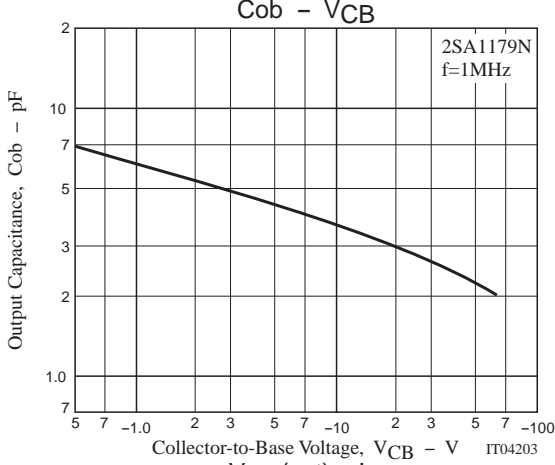
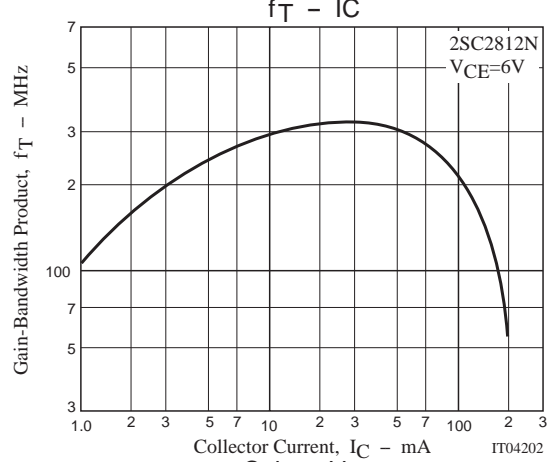
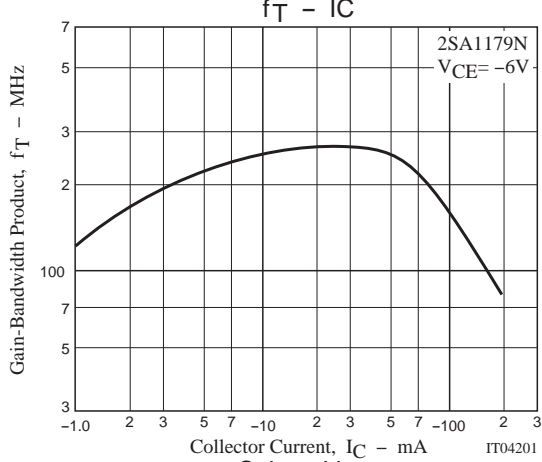
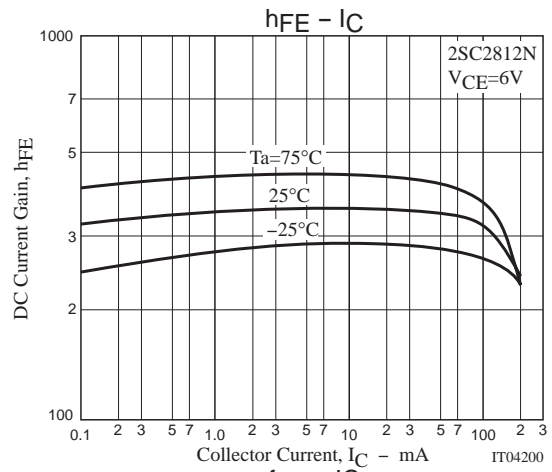
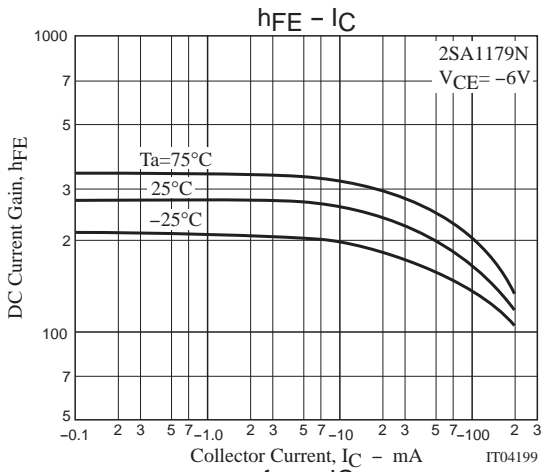
Package Dimensions

unit : mm (typ)

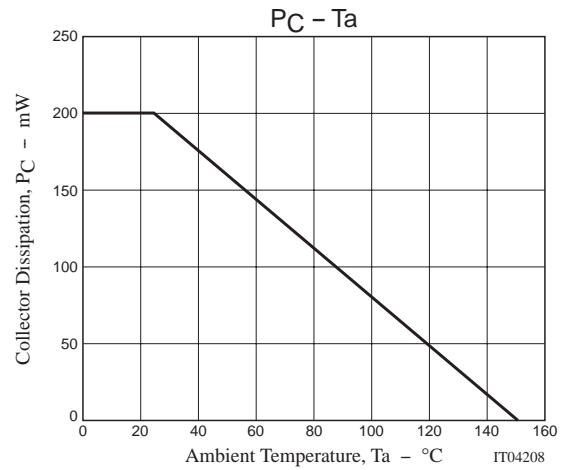
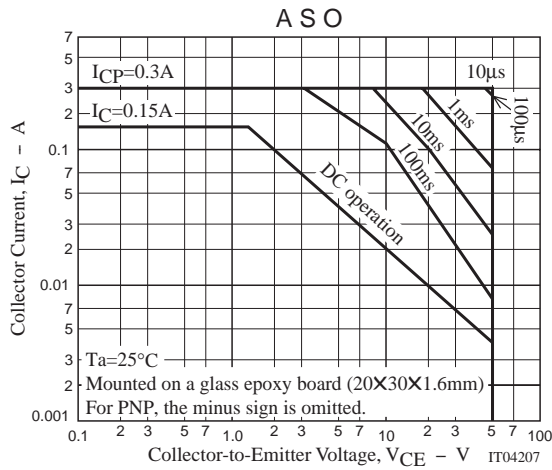
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