



## 2SA1179N / 2SC2812N

### Low-Frequency General-Purpose Amp Applications

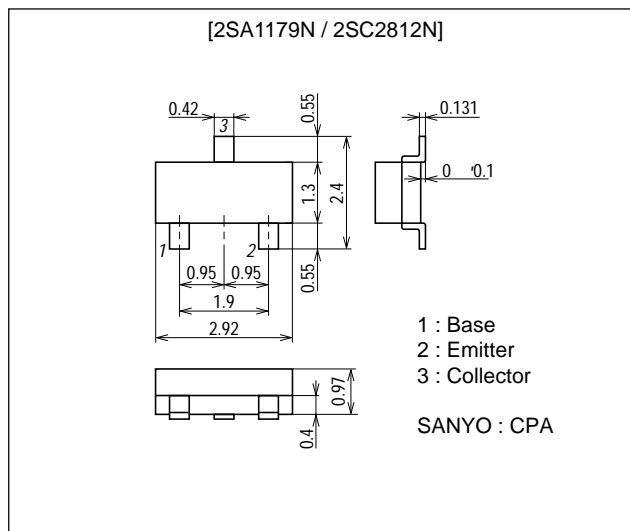
#### Features

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

#### Package Dimensions

unit : mm

2204



#### Specifications

( ) : 2SA1179N

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		(-)55	V
Collector-to-Emitter Voltage	$V_{CEO}$		(-)50	V
Emitter-to-Base Voltage	$V_{EB0}$		(-)5	V
Collector Current	$I_C$		(-)150	mA
Collector Current (Pulse)	$I_{CP}$		(-)300	mA
Base Current	$I_B$		(-)30	mA
Collector Dissipation	$P_C$		200	mW
Junction Temperature	$T_J$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

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**SANYO Electric Co.,Ltd. Semiconductor Company**

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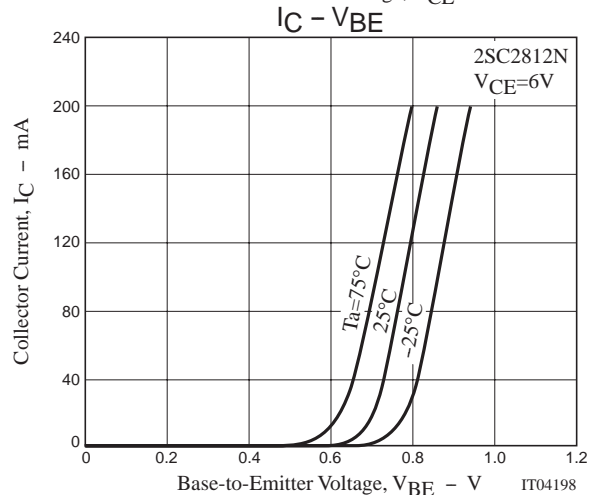
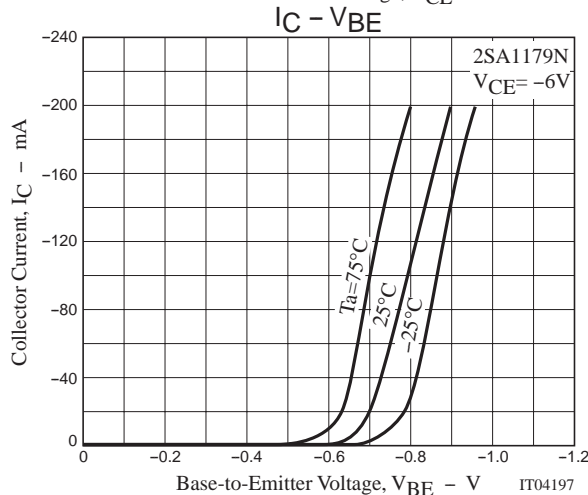
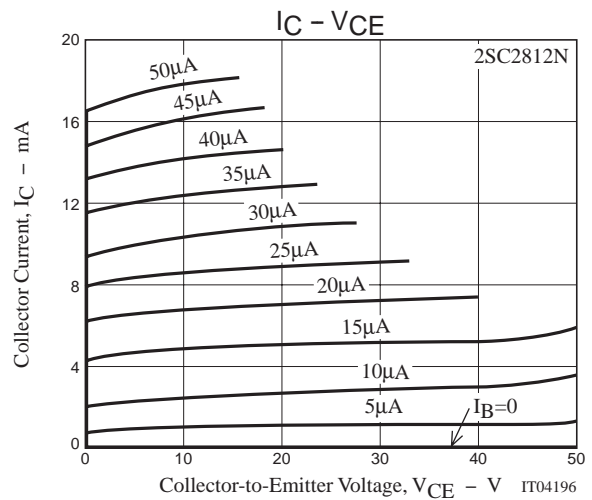
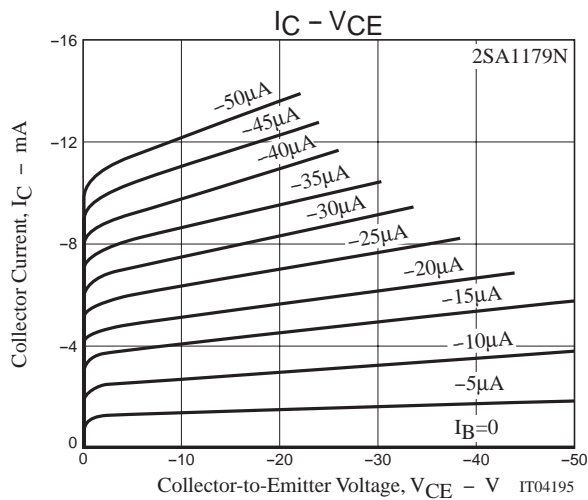
### Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=(-)35\text{V}$ , $I_E=0$			$(-)0.1$	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)4\text{V}$ , $I_C=0$			$(-)0.1$	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=(-)6\text{V}$ , $I_C=(-)1\text{mA}$	200		400	
Gain-Bandwidth Product	$f_T$	2SC2812 : $V_{CE}=6\text{V}$ , $I_C=1\text{mA}$		100		MHz
		2SA1179 : $V_{CE}=-6\text{V}$ , $I_C=-10\text{mA}$		(180)		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=(-)6\text{V}$ , $f=1\text{MHz}$		(4.0)3.0		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)50\text{mA}$ , $I_B=(-)5\text{mA}$		$(-0.15)0.1$	$(-)0.5$	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)50\text{mA}$ , $I_B=(-)5\text{mA}$			$(-)1.0$	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu\text{A}$ , $I_E=0$	$(-)55$			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1\text{mA}$ , $R_{BE}=\infty$	$(-)50$			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu\text{A}$ , $I_C=0$	$(-)5$			V

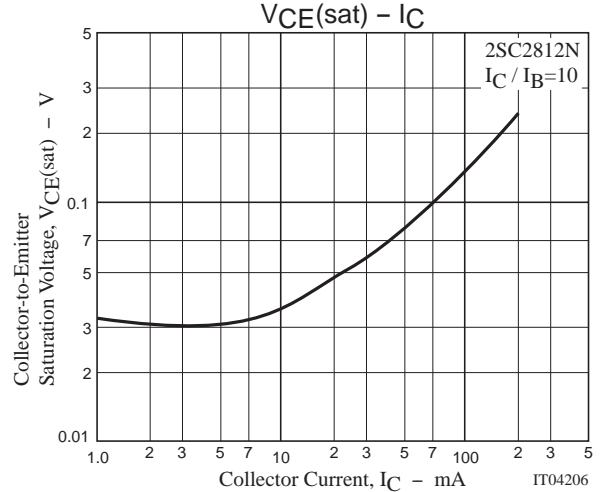
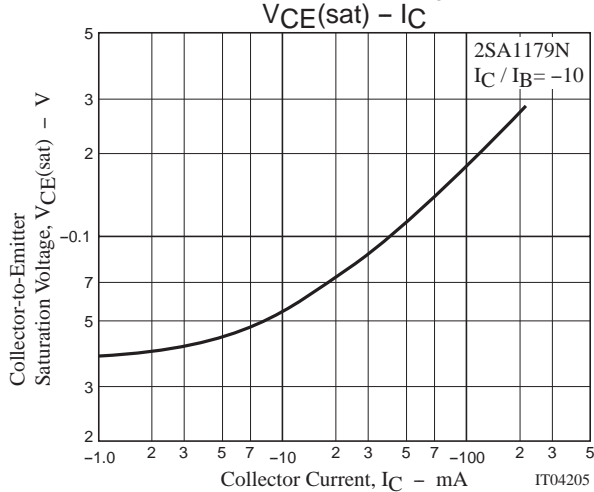
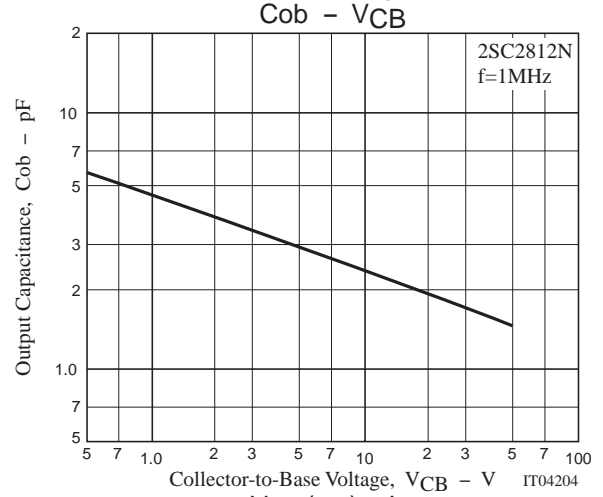
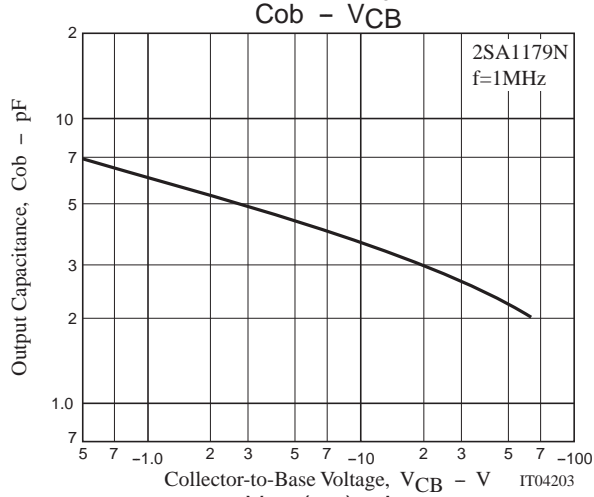
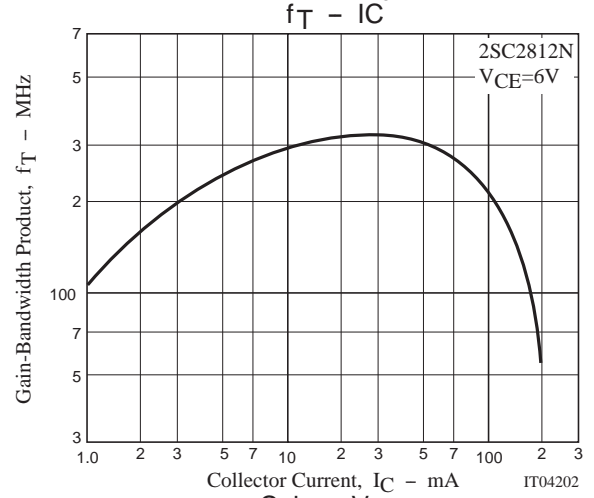
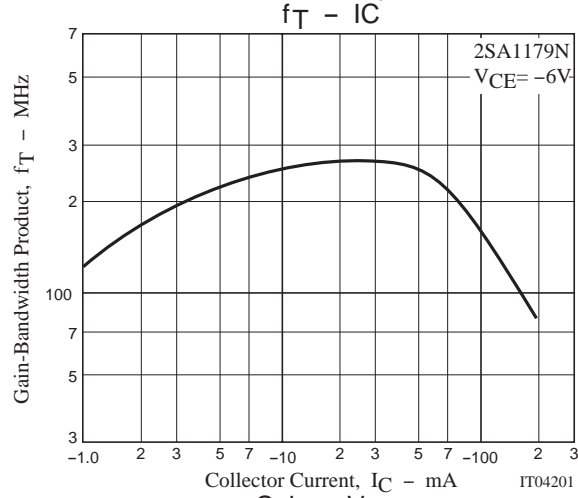
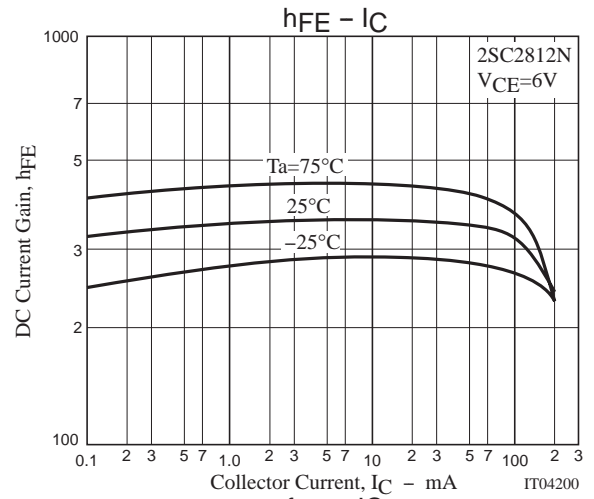
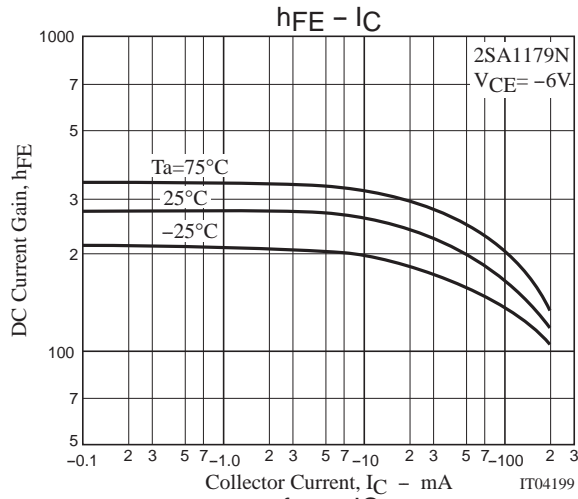
Marking : 2SA1179N M

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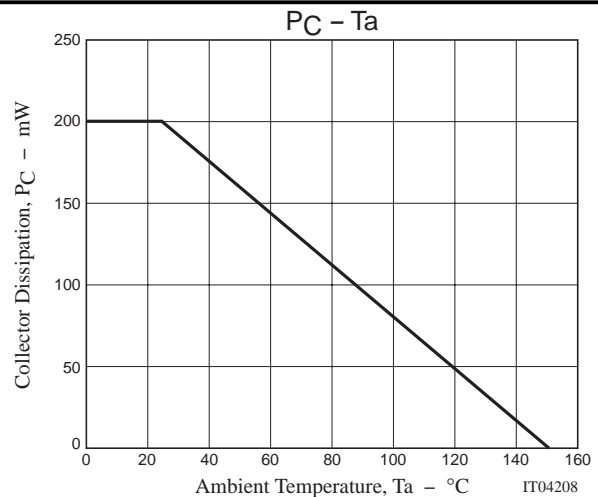
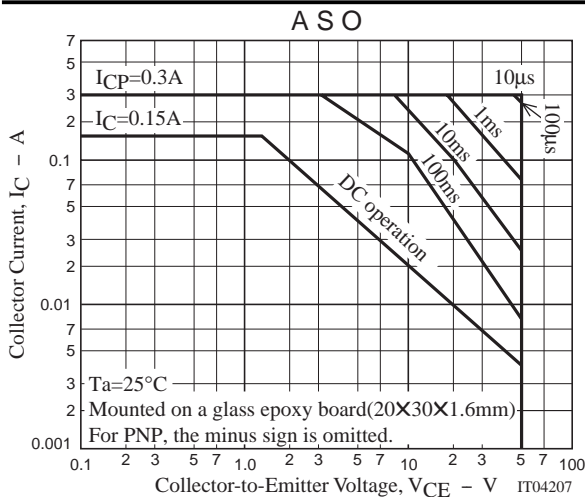
$h_{FE}$  Rank : 6



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