



2SA608N / 2SC536N

Low-Frequency General-Purpose Amplifier Applications

Applications

- Capable of being used in the low frequency to high frequency range.

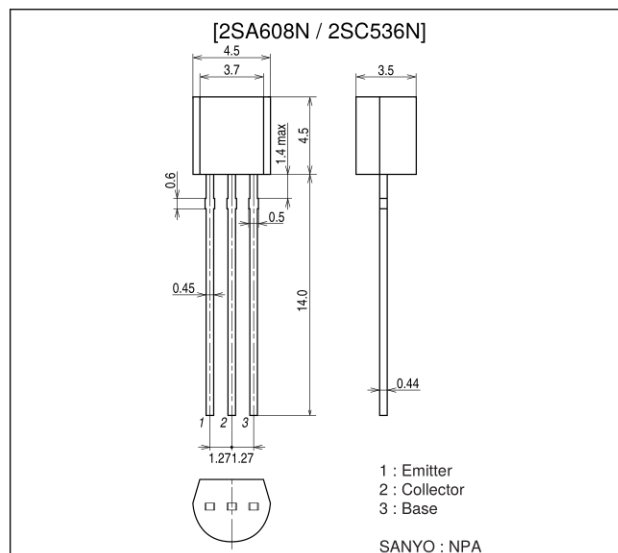
Features

- Large current capacity and wide ASO.

Package Dimensions

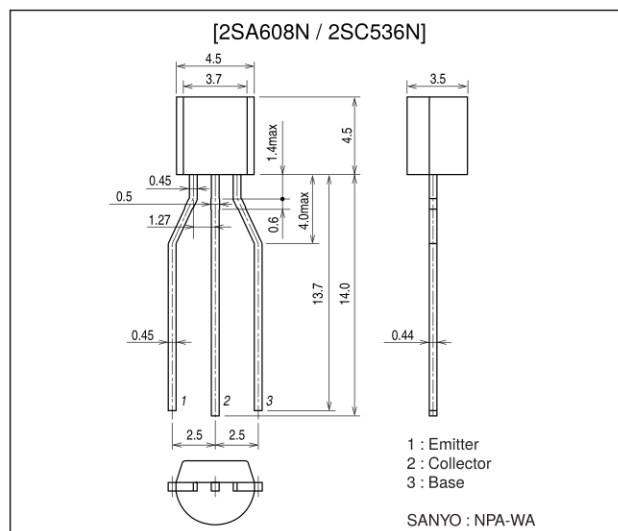
unit : mm

2205



unit : mm

2164



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42503 TS IM TA-100055, 100056 / 10700 TS (KOTO) TA-2543 No.6324-1/4

Specifications

() : 2SA608N

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

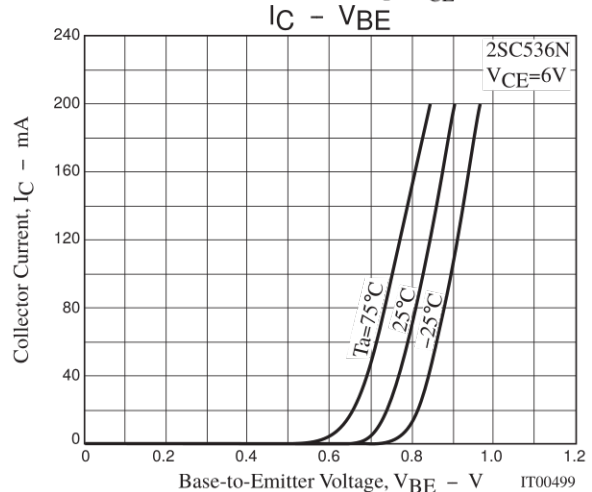
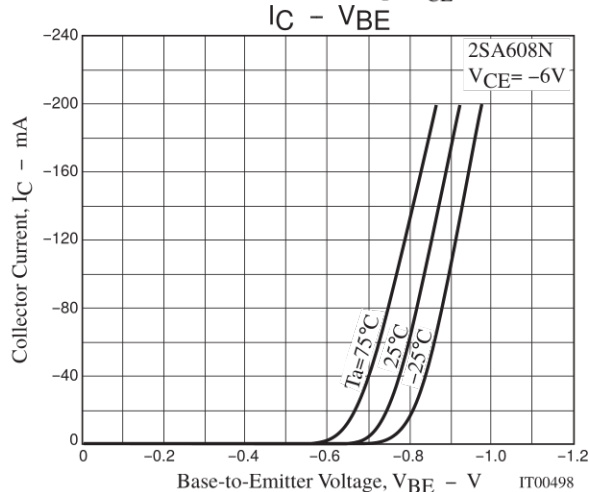
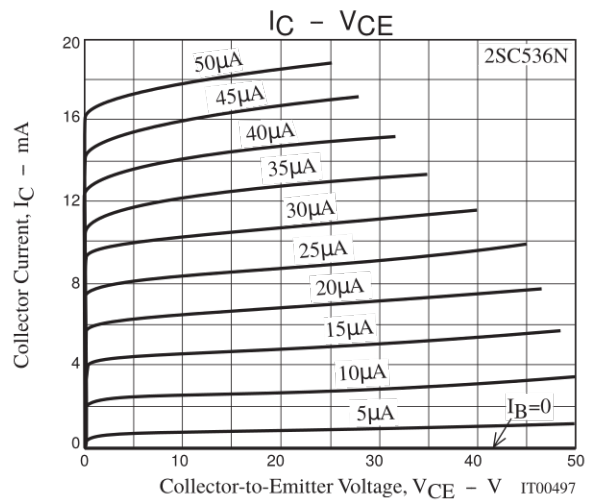
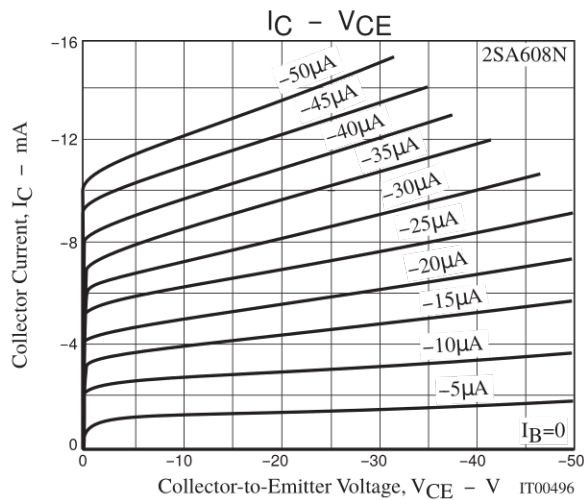
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(-50)60	V
Collector-to-Emitter Voltage	V_{CEO}		(-)50	V
Emitter-to-Base Voltage	V_{EBO}		(-)6	V
Collector Current	I_C		(-)150	mA
Collector Current (Pulse)	I_{CP}		(-)400	mA
Collector Dissipation	P_C		500	mW
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

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

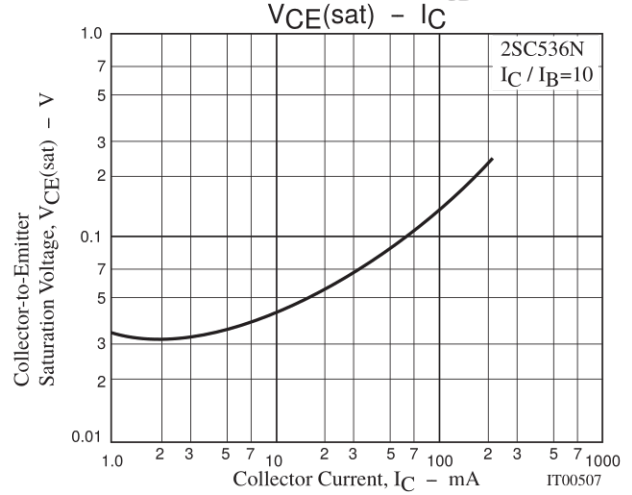
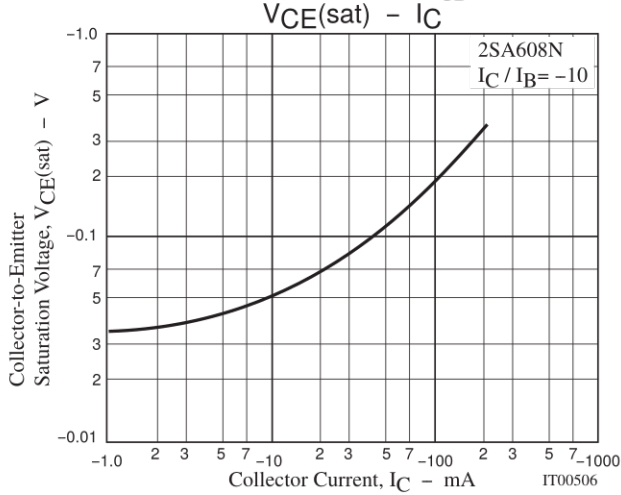
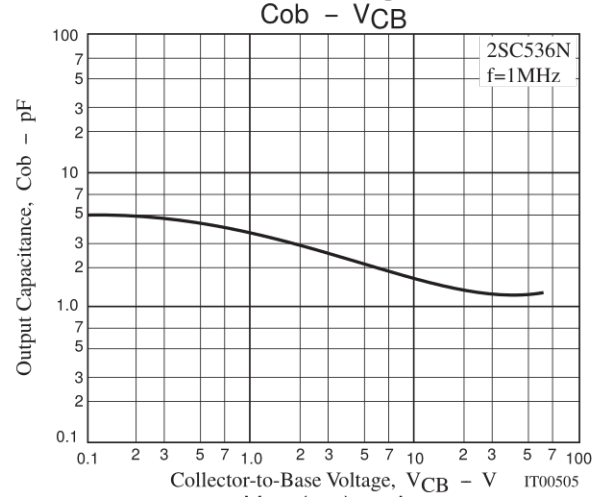
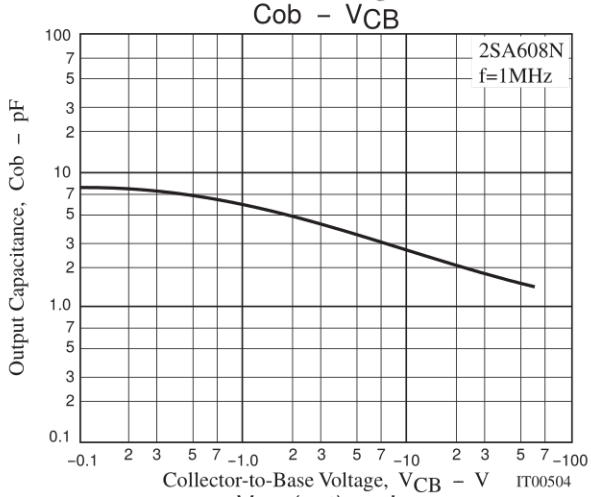
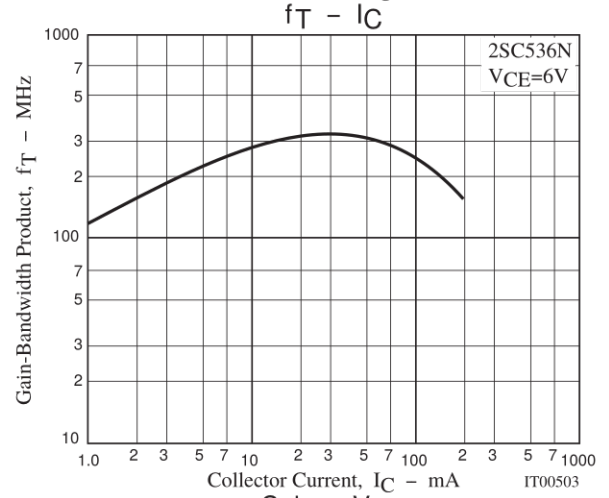
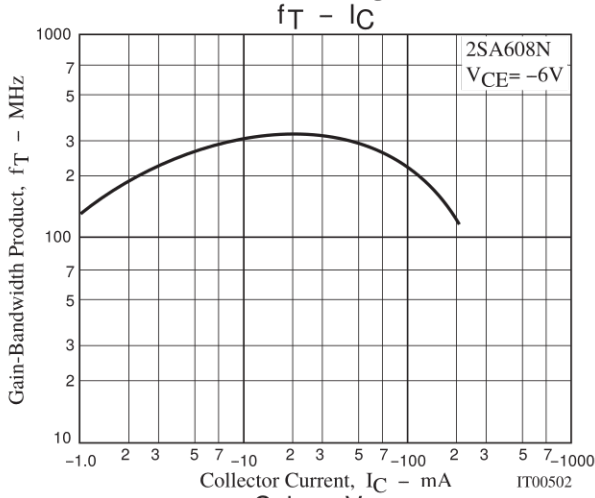
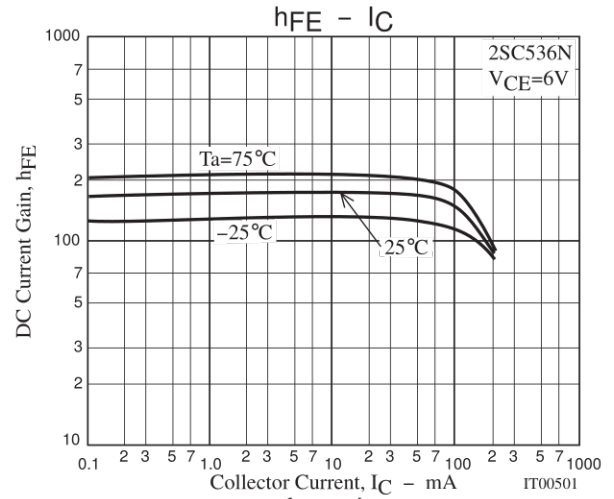
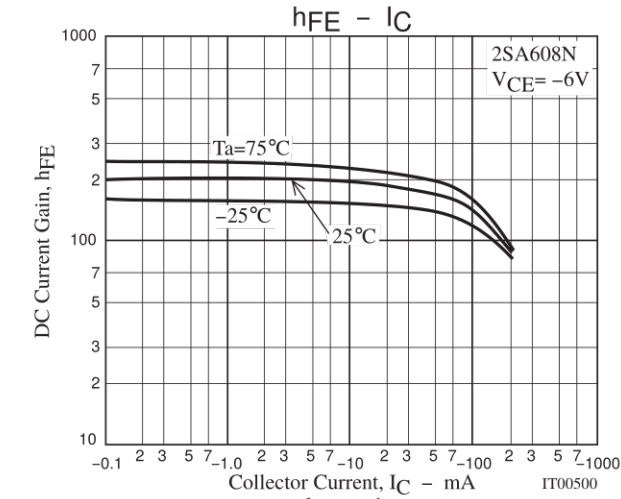
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)40\text{V}, I_E=0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)5\text{V}, I_C=0$			(-)0.1	μA
DC Current Gain	h_{FE1}	$V_{CE}=(-)6\text{V}, I_C=(-)1\text{mA}$	160*		560*	
	h_{FE2}	$V_{CE}=(-)6\text{V}, I_C=(-)0.1\text{mA}$	70			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)6\text{V}, I_C=(-)10\text{mA}$		200		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)6\text{V}, f=1\text{MHz}$		(4.5)3.0		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)100\text{mA}, I_B=(-)10\text{mA}$			(-)0.3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)100\text{mA}, I_B=(-)10\text{mA}$			(-)1.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu\text{A}, I_C=0$	(-)6			V

*The 2SA608N / 2SC536N are classified by 1mA h_{FE} as follow.

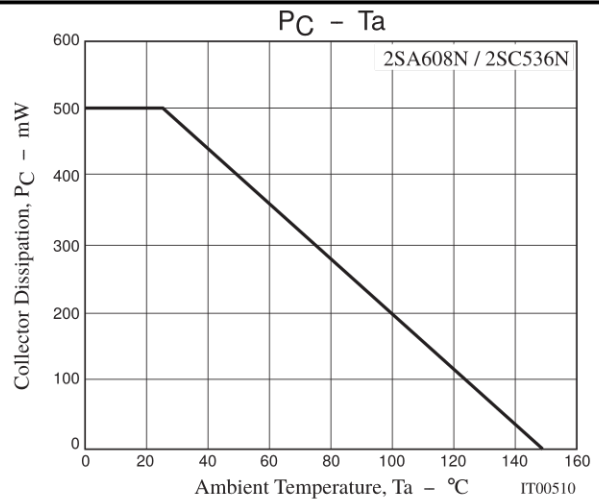
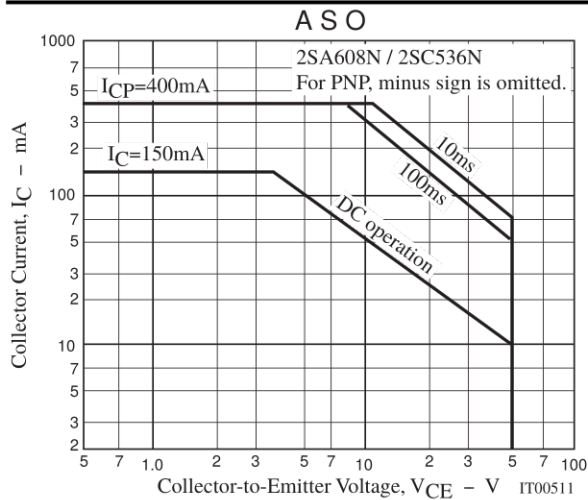
Rank	F	G
h_{FE}	160 to 320	280 to 560



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