

# 2SA608N / 2SC536N

# Low-Frequency General-Purpose Amplifier Applications

## **Applications**

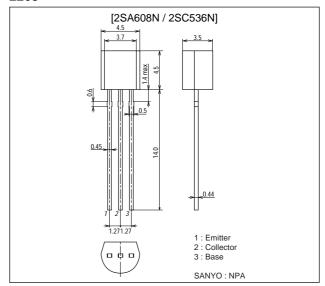
• Capable of being used in the low frequency to high frequency range.

#### **Features**

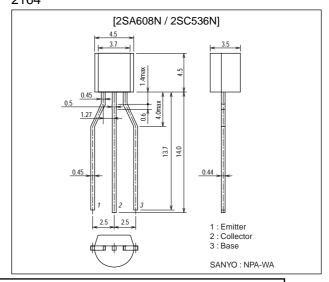
· Large current capacity and wide ASO.

## **Package Dimensions**

unit : mm 2205



unit : mm 2164



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# **Specifications**

():2SA608N

# Absolute Maximum Ratings at Ta=25°C

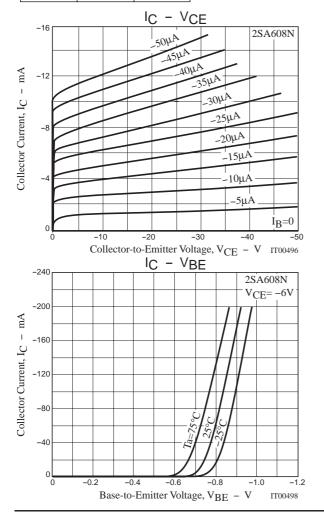
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		(-50)60	V
Collector-to-Emitter Voltage	VCEO		(-)50	V
Emitter-to-Base Voltage	VEBO		(-)6	V
Collector Current	IC		(-)150	mA
Collector Current (Pulse)	ICP		(-)400	mA
Collector Dissipation	PC		500	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

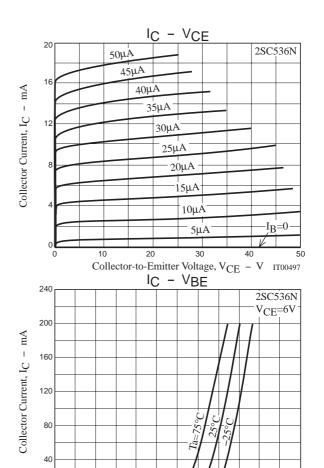
### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
Farameter			min	typ	max	Unit
Collector Cutoff Current	ICBO	V <sub>CB</sub> =(-)40V, I <sub>E</sub> =0			(-)0.1	μΑ
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =(-)5V, I <sub>C</sub> =0			(-)0.1	μΑ
DC Current Gain	hFE1	VCE=(-)6V, IC=(-)1mA	160*		560*	
	hFE2	V <sub>CE</sub> =(-)6V, I <sub>C</sub> =(-)0.1mA	70			
Gain-Bandwidth Product	fT	V <sub>CE</sub> =(-)6V, I <sub>C</sub> =(-)10mA		200		MHz
Output Capacitance	Cob	VCB=(-)6V, f=1MHz		(4.5)3.0		pF
Collector-to-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =(-)100mA, I <sub>B</sub> =(-)10mA			(-)0.3	V
Base-to-Emitter Saturation Voltage	VBE(sat)	IC=(-)100mA, IB=(-)10mA			(-)1.0	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	I <sub>C</sub> =(-)10μA, I <sub>E</sub> =0	(-)60			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =(-)1mA, R <sub>BE</sub> =∞	(-)50			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	IE=(-)10μA, IC=0	(-)6			V

<sup>\*</sup>The 2SA608N / 2SC536N are classified by 1mA hFE as follow.

Rank	F	G
hFE	160 to 320	280 to 560



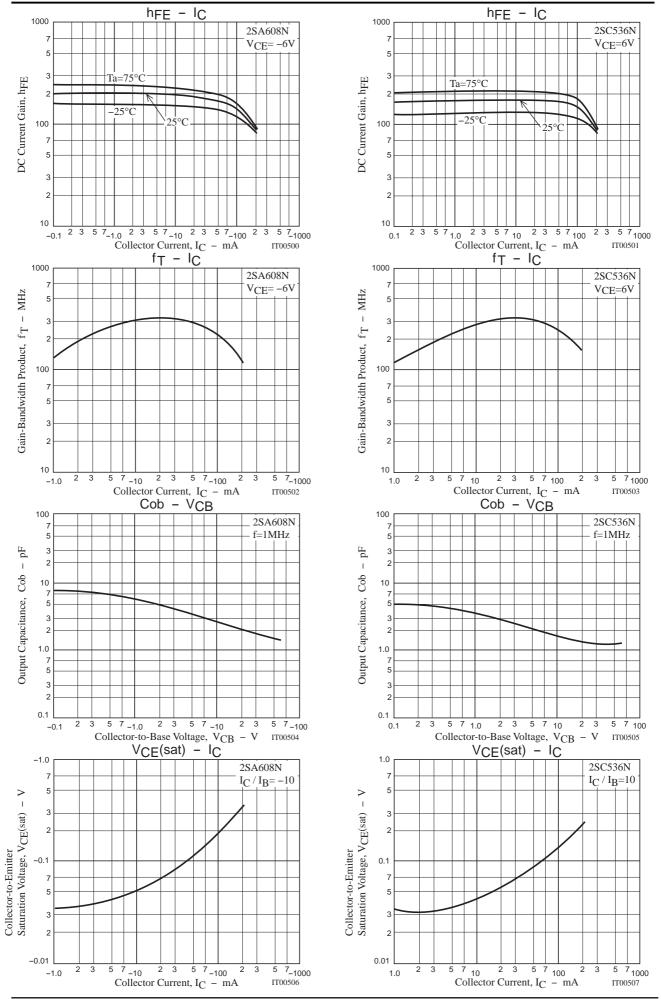


Base-to-Emitter Voltage,  $V_{\mbox{\footnotesize{BE}}}-V$ 

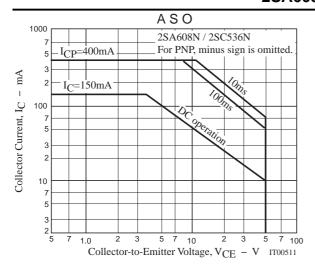
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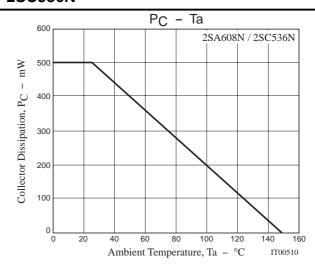
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