

# AN6410

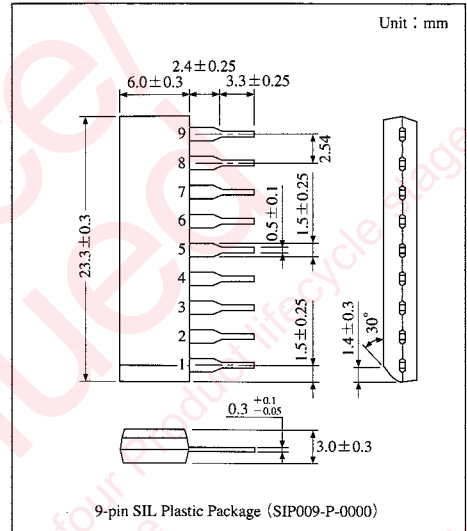
## Low Frequency Amplifier for Transmission Modulation Circuit

### Overview

The AN6410 is an integrated circuit designed for low frequency amplifier for transmission. It consists of three low frequency amplifiers and a voltage stabilizer.

### Features

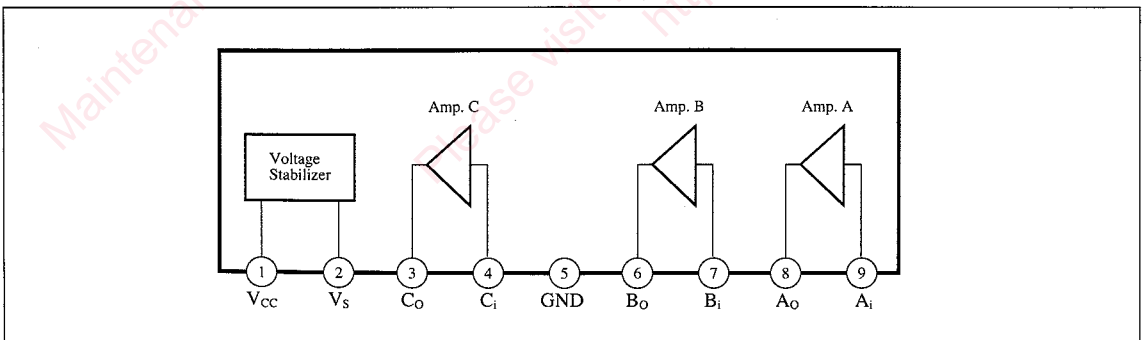
- Fewer peripheral components
- Built-in voltage stabilizer
- Wide range of operation voltages (6.2 to 17V)



### Pin Descriptions

Pin No.	Pin name
1	V <sub>CC</sub>
2	Stabilized voltage
3	C amp. output
4	C amp. input
5	GND
6	B amp. output
7	B amp. input
8	A amp. output
9	A amp. input

### Block Diagram



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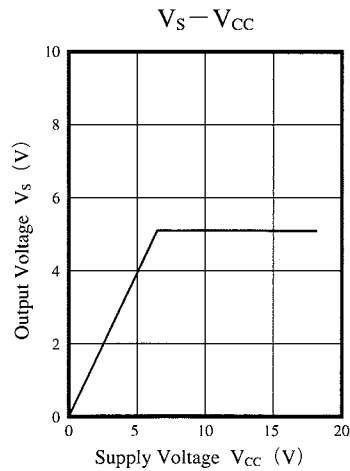
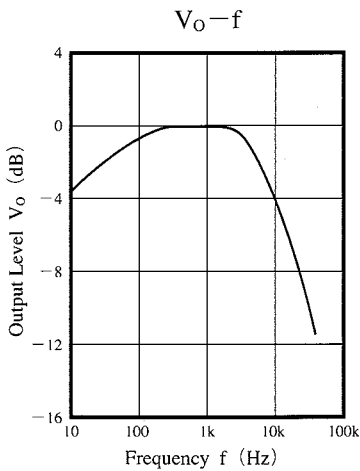
■ Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Rating		Unit
Voltage	Supply voltage	V <sub>CC</sub>	6.2	17	V
	Circuit voltage	V <sub>3-5</sub>	0	4.5	V
	Circuit voltage	V <sub>4-5</sub>	0	4.5	V
	Circuit voltage	V <sub>6-5</sub>	0	4.5	V
	Circuit voltage	V <sub>7-5</sub>	0	4.5	V
	Circuit voltage	V <sub>8-5</sub>	0	4.5	V
	Circuit voltage	V <sub>9-5</sub>	0	4.5	V
Current	Supply current	I <sub>CC</sub>	30		mA
Power dissipation (Ta=75°C)		P <sub>D</sub>	300		mW
Temperature	Operating ambient temperature	T <sub>opr</sub>	-30 to +75		°C
	Storage temperature	T <sub>stg</sub>	-55 to +125		°C

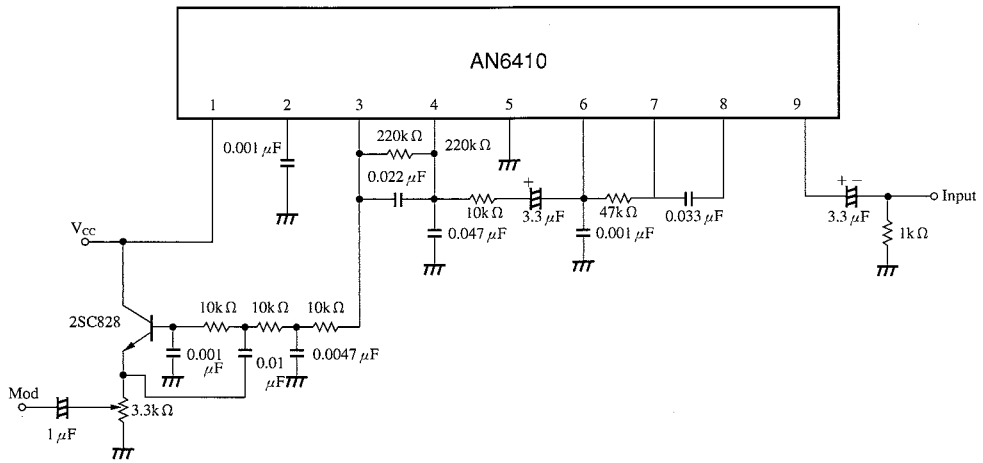
■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Total circuit current	I <sub>tot</sub>		—	11.4	—	mA
A amp. output voltage	V <sub>O(A-Amp.)</sub>	V <sub>i</sub> = 10mV, f = 1kHz	176	220	264	mV
B amp. output voltage	V <sub>O(B-Amp.)</sub>	V <sub>i</sub> = 1mV, f = 1kHz	176	220	264	mV
B amp. saturation output voltage	V <sub>O(sat. B-Amp.)</sub>	V <sub>i</sub> = 10mV, f = 1kHz	625	695	765	mV
C amp. output voltage	V <sub>O(C-Amp.)</sub>	V <sub>i</sub> = 1mV, f = 1kHz	130	163	195	mV
C amp. output noise voltage	V <sub>no(C-Amp.)</sub>		—	0.28	—	mV
Stabilized circuit output voltage	V <sub>REF</sub>		4.7	5.0	5.4	V

■ Characteristics Curve



■ Application Circuit



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