

# AN608P

## Wide bandwidth video amplifier IC (in-phase amplifier)

### Overview

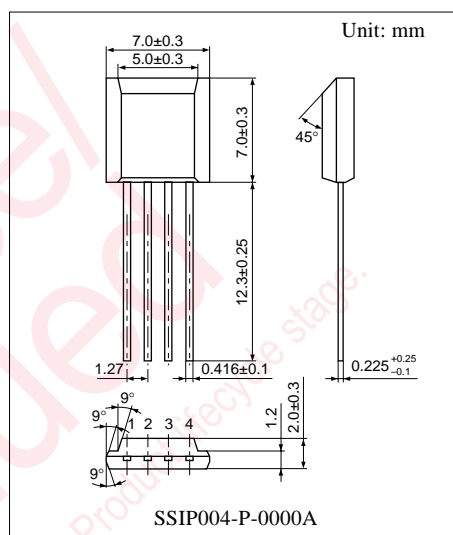
The AN608P is an amplifier IC with a 20 dB gain, a non-inverted output and a wide bandwidth (10MHz). It is best suited to video amplifier and sense amplifier.

### Features

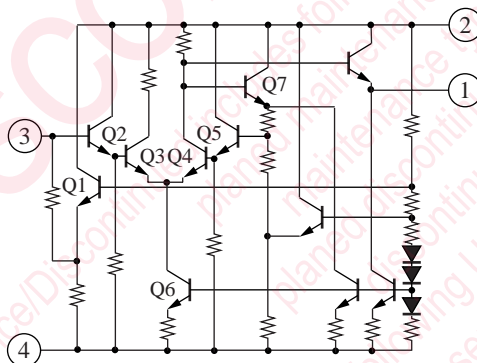
- Wide bandwidth (10 MHz)
- 20 dB non-inverting amplifier
- 4-pin SIP plastic package

### Applications

- Video amplifier, sense amplifier



### Equivalent Circuit



### Pin Descriptions

Pin No.	Description
1	Output
2	Supply voltage
3	Input
4	GND

■ Absolute Maximum Ratings at T<sub>a</sub> = 25°C

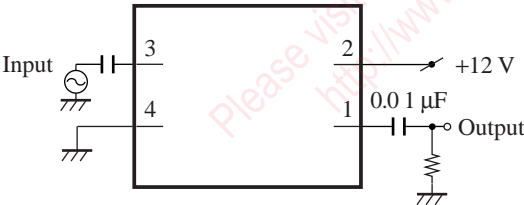
Parameter	Symbol	Rating	Unit
Supply voltage	V <sub>2-4</sub>	14.4	V
Circuit voltage	V <sub>3-4</sub>	V <sub>2-4</sub> to -1	V
Total consumption current	I <sub>2</sub>	11	mA
Circuit current	I <sub>3</sub>	+1 to -0.5	mA
	I <sub>1</sub>	0 to -5	
Total power dissipation	P <sub>TOT</sub>	160	mW
Operating ambient temperature	T <sub>opr</sub>	-20 to +70	°C
Storage temperature	T <sub>stg</sub>	-40 to +125	°C

Note) Do not apply current and voltage to the pins not described. The mark '+' means the current flowing into the IC and the mark '-' means the current flowing out of the IC.

■ Electrical Characteristics at T<sub>a</sub> = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Circuit current	I <sub>2</sub>	V <sub>CC</sub> = 12 V	5.0		9.0	mA
Video signal output pin voltage	V <sub>1-4</sub>	V <sub>CC</sub> = 12 V	5.0		8.0	V
Video signal input pin voltage	V <sub>3-4</sub>	V <sub>CC</sub> = 12 V	1.9		3.5	V
Maximum output voltage	V <sub>OM</sub>	f = 10 kHz, R <sub>L</sub> = 1.5 kΩ	2			V[p-p]
Output voltage 1	V <sub>O(1)</sub>	f = 10 kHz, V <sub>I</sub> = 0.1 V[p-p]	0.8		1.1	V[p-p]
Output voltage 2	V <sub>O(2)</sub>	V <sub>I</sub> = 0.2 V[p-p]	1.5		2.2	V[p-p]
Frequency characteristics	ΔV <sub>O(f1)</sub>	V <sub>I</sub> = 0.1 V[p-p], f = 1 MHz to 5 MHz	-1		+1	dB
Frequency characteristics	ΔV <sub>O(f2)</sub>	V <sub>I</sub> = 0.1 V[p-p], f = 1 MHz to 10 MHz	-1		+2	dB
Total harmonics distortion ratio	THD	V <sub>O</sub> = 1 V[p-p], f = 10 kHz			1	%

■ Basic Circuit



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