FOUR OPERATIONAL AMPLIFIER-YD324

DESCRIPTION AND FEATURES

These devices consist of four independent high-gain, phase –compensated operational amplifiers. A suitable recorder and Audio System for tone control. Can also used for telecom and instrument.

*Built-in phase-compensated circuit

*Operating supply voltage range : V_{CC} =3.0～30.0V or V_{CC}=±1.5～±15V

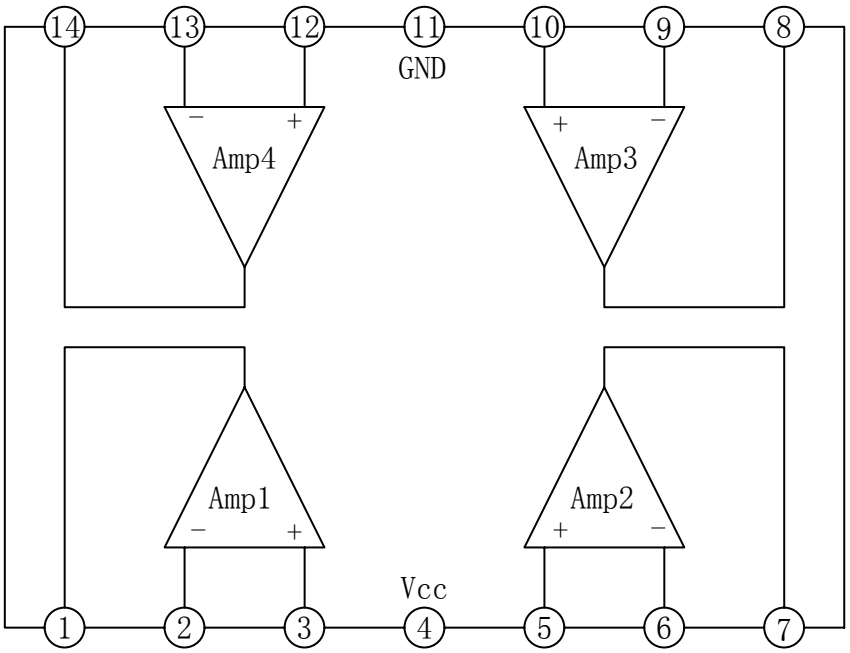
*Input voltage can low to 0V

*Output voltage range :0V～V_{CC}-1.5V

*Supply current : I_{CC}=0.6mA (R_L=∞)

*DIP14 and SOP14

BLOCK DIAGRAM



WuXi YouDa Electronics Co., Ltd

Add: No.5 Xijin Road, National Hi-Tech Industrial Development Zone, Wuxi Jiangsu China

Tel: 86-510-5205117 86-510-5205106 Fax: 86-510-5205110 Website: www.e-youda.com

SHENZHEN OFFICE Tel：86-755-83740369 Fax：86-755-83741418

PIN DESCRIPTION

PIN NO.	CONTENT	SYMBOL	PIN NO.	CONTENT	SYMBOL
1	Output of CH1	OUT_1	**8**	Output of CH3	OUT_3
2	Inverting Input of CH1	1N-(1)	**9**	Inverting Input of CH3	1N-(3)
3	Non-inverting Input of CH1	1N+(1)	**10**	Non-inverting Input of CH3	1N+(3)
4	Supply Voltage	V_{CC}	**11**	Ground	GND
5	Non-inverting Input of CH2	1N+(2)	**12**	Non-inverting Input of CH4	1N+(4)
6	Inverting Input of CH2	1N-(2)	**13**	Inverting Input of CH4	1N-(4)
7	Output of CH2	OUT_2	**14**	Output of CH4	OUT_4

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE		UNIT
		MIN	MAX	
Supply Voltage	V_{CC}		32	V
Differential Input Voltage	V_{ID}		32	V
Input Voltage	V_I	-0.3	32	V
Total Dissipation(DIP14)	P_{D1}		720	mW
Total Dissipation(SOP14)	P_{D2}		300	mW
Operating Temperature Range	Topr	-30	85	℃
Storage Temperature Range	Tstg	-55	125	℃

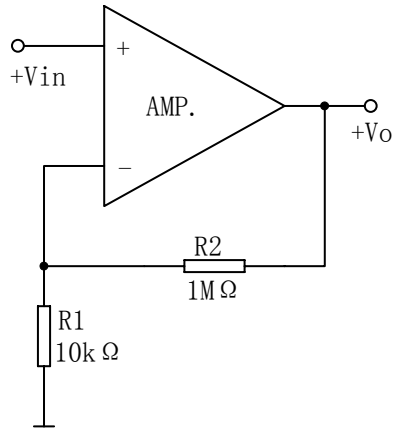
ELECTRICAL CHARACTERISTICS (Tamb=25℃, V_{CC}=9V, Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Input Offset Voltage	V_{IO}			±2	±7	mv
Input Offset Current	I_{IO}			±5	±50	nA
Input Bias Current	I_{IB}			45	250	
Common-mode Input Voltage Range	V_{ICM}		0		V_{CC}-1.5	V
Common-mode Rejection Ratio	K_{CmR}		65	80		dB
Open Loop Voltage Gain	A_{VO}	V_{CC}=15V, R_L≥2kΩ	88	100		
Output Voltage Range	V_O		0		V_{CC}-1.5	V

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Supply Voltage Rejection Ratio	K_{SVR}		65	100		dB
Output Current	I_{OS}		20	40		mA
Output Current Of Sink	Iosink		10	20		
Supply Current	I_{CCQ}			0.6	2	
Supply Current	I_{CCQ}	V_{CC}=30V		1.5	3	
Channel Separation	C_S	f=1k～20kHz		120		dB

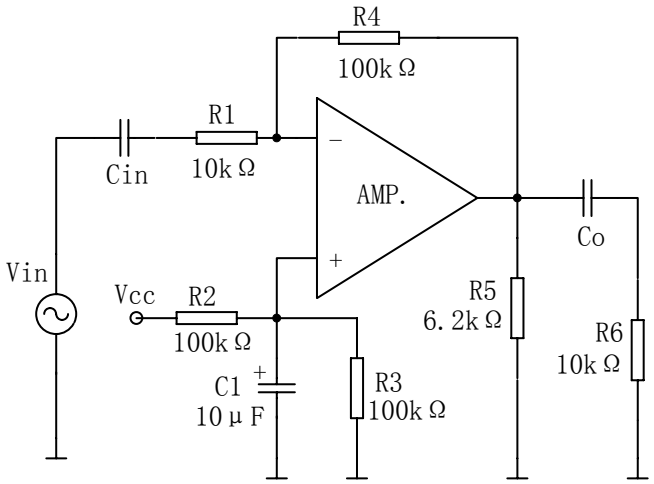
APPLICATION CIRCUIT

DC AMPLIFICATION



Av=1+R2/R1

AC AMPLIFICATION

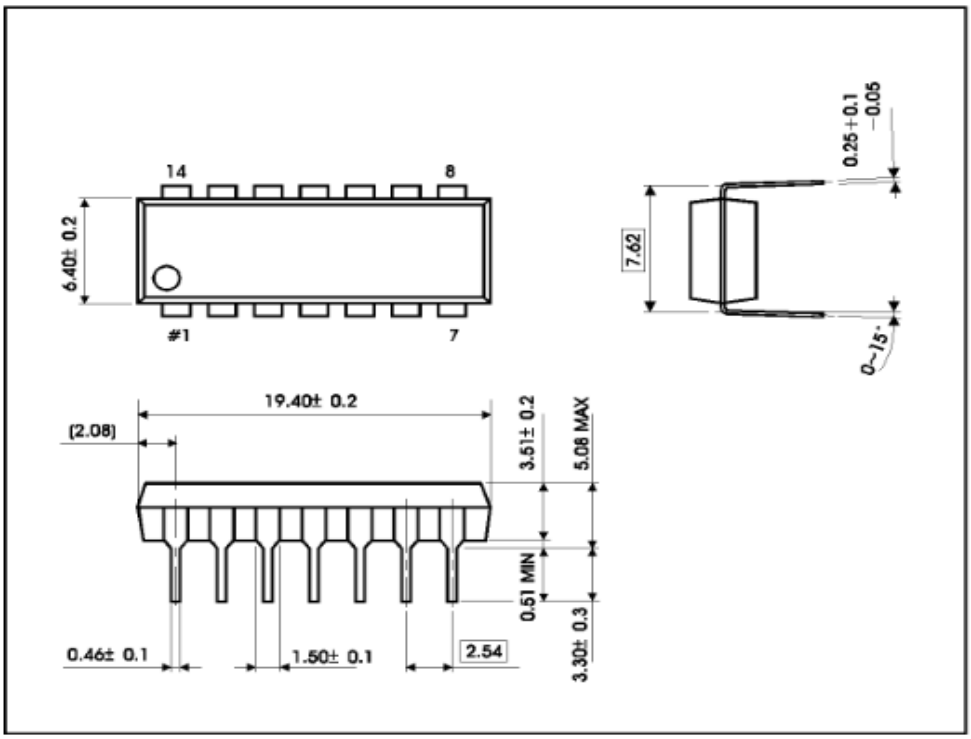


Av=R4/R1

OUTLINE DRAWING

DIP-14

unit:mm



SOP-14

unit:mm

