

**LOW POWER QUAD OPERATIONAL AMPLIFIERS****AS324/324A****Description**

The AS324/324A consist of four independent, high gain and internally frequency compensated operational amplifiers. They are specifically designed to operate from a single power supply. Operation from split power supplies is also possible and the low power supply current drain is independent of the magnitude of the power supply voltage. Typical applications include transducer amplifiers, DC gain blocks and most conventional operational amplifier circuits.

The AS324/324A series are compatible with industry standard 324. AS324A has more stringent input offset voltage than AS324.

**Features**

- Internally Frequency Compensated for Unity Gain
- Large Voltage Gain: 100dB (Typical)
- Low Input Bias Current: 20nA (Typical)
- Low Input Offset Voltage: 2mV (Typical)
- Low Supply Current: 0.7mA (Typical)
- Wide Power Supply Voltage Range:  
Single Supply: 3V to 36V  
Dual Supplies:  $\pm 1.5V$  to  $\pm 18V$
- Input Common Mode Voltage Range Includes Ground
- Large Output Voltage Swing: 0V to  $V_{CC}-1.5V$
- Power Drain Suitable for Battery Operation

**Applications**

- Battery Charger
- Cordless Telephone
- Switching Power Supply

**Benefits**

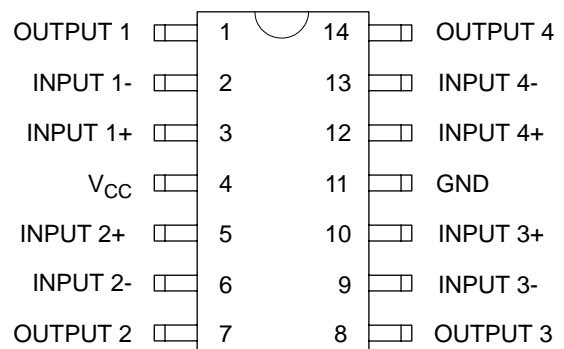
- Easier to Use
- Very Competitive Price

**Parametric Table**

Supply Voltage Range (V)		3 to 36
		$\pm 1.5$ to $\pm 18$
Input Offset Voltage (Typ/Max) (mV)	AS324	2.0/5.0
	AS324A	2.0/3.0
Quiescent Current Over Full Temperature Range ( $V_{CC}=5V$ ) (mA)		0.5
Large Signal Voltage Gain (dB)		100
CMRR (dB)		70
PSRR (dB)		100
Output Current Source (mA)		40
Output Current Sink (mA)		15
Operating Temperature Range ( $^{\circ}C$ )		-40 to 85

**Additional Available Materials**

- Samples
- Datasheet
- Reliability Report
- ESD Report

**Pin Configuration****SOIC-14/DIP-14/TSSOP-14**

**LOW POWER QUAD OPERATIONAL AMPLIFIERS****AS324/324A****Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	
SOIC-14	-40 to 85°C	AS324M	AS324M-E1	AS324M	AS324M-E1	Tube
		AS324MTR	AS324MTR-E1	AS324M	AS324M-E1	Tape & Reel
			AS324AM-E1		AS324AM-E1	Tube
			AS324AMTR-E1		AS324AM-E1	Tape & Reel
DIP-14		AS324P	AS324P-E1	AS324P	AS324P-E1	Tube
			AS324AP-E1		AS324AP-E1	Tube
TSSOP-14			AS324GTR-E1		EGS324	Tape & Reel
			AS324G-E1		EGS324	Tube

Detailed information please refer to the relevant datasheet.

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