

## LOW POWER QUAD OPERATIONAL AMPLIFIERS

AZ324

## **Description**

The AZ324 consists of four independent, high gain and internally frequency compensated operational amplifiers. It is specifically designed to operate from a single power supply. Operation from split power supply is also possible and the low power supply current drain is independent of the magnitude of the power supply voltages.

### **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 18V Dual Supplies: ±1.5V to ±9V

 Input Common Mode Voltage Range Includes Ground

Large Output Voltage Swing: 0V to V<sub>CC</sub>-1.5V

• Power Drain Suitable for Battery Operation

### **Parametric Table**

Input Voltage Range (V)	3 to 18		
input voltage Range (v)	$\pm$ 1.5 to $\pm$ 9		
Input Offset Voltage (Typ/Max) (mA)	2.0/5.0		
Quiescent Current Over Full Temperature Range (mA/Typ)	1.0		
Large Signal Voltage Gain (dB)(Typ)	100		
CMRR (dB)(Typ)	85		
PSRR (dB)(Typ)	90		
Output Current Source (mA)(Typ)	45		
Output Current Sink (mA)(Typ)	20		
Operating Temperature Range (°C)	-40 to 85		

## **Additional Available Materials**

- Samples
- Datasheet

# **Applications**

- · Battery Charger
- Cordless Telephone
- Switching Power Supply

# Benefits

- Easier to use
- Meet most application requirements of the industrial standard 324
- Very competitive price

# **Pin Configuration**

#### SOIC-14/DIP-14

OUTPUT 1	1	14	OUTPUT 4
INPUT 1-	2	13	INPUT 4-
INPUT 1+	3	12	INPUT 4+
$V_{CC}$	4	11	GND
INPUT 2+	5	10	INPUT 3+
INPUT 2-	6	9	INPUT 3-
OUTPUT 2	7	8	OUTPUT 3



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## **Ordering Information Example**

Package *	Temperature	Temperature Part Nu		Marking ID		Packing Type
	Range	Tin Lead	Lead Free	Tin Lead	Lead Free	racking Type
SOIC-14 -40 to 85 °C		AZ324M	AZ324M-E1	AZ324M	AZ324M-E1	Tube
	AZ324MTR	AZ324MTR-E1	AZ324M	AZ324M-E1	Tape & Reel	
DIP-14		AZ324P	AZ324P-E1	AZ324P	AZ324P-E1	Tube

Detailed information please refer to the relevant datasheet.



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