

#### **Product Brief**

#### 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 ٠

### **Parametric Table**

Input Voltage Range (V)	3 to 18	
input voltage Kange (V)	$\pm$ 1.5 to $\pm$ 9	
Input Offset Voltage (Typ/Max) (mA)	2.0/5.0	
Quiescent Current Over Full Tem- perature 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 ( <sup>o</sup> C)	-40 to 85	

## **Additional Available Materials**

- Samples
- Datasheet

## **Pin Configuration**

#### OUTPUT 1 🗆 1 14 OUTPUT 4 INPUT 1-2 13 **INPUT 4-**Π INPUT 1+ INPUT 4+ 3 12 Π 4 11 GND V<sub>CC</sub> INPUT 2+ 5 10 INPUT 3+ Π INPUT 2- 🗆 9 **INPUT 3-**6 OUTPUT 2 III 7 8 OUTPUT 3

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# **Applications**

- Battery Charger
- **Cordless Telephone**
- Switching Power Supply

## **Benefits**

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

#### SOIC-14/DIP-14



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# **Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	Tacking 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.