

Product Brief

LOW POWER LOW OFFSET VOLTAGE DUAL COMPARATORS

AZ393/393C

Description

The AZ393/393C series consists of two independent precision voltage comparators with an offset voltage specification as low as 1mV. The input common mode voltage range of these comparators includes ground, even when operated from a single power supply voltage. 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.

The AZ393/393C series is designed to directly interface with TTL and CMOS.

Features

- Wide Supply Voltage Range - Single Supply: 2.0V to 18V
 - Dual Supplies: $\pm 1.0V$ to $\pm 9V$
- Very Low Supply Current Drain: 0.4mA - Independent of Supply Voltage
- Low Input Bias Current: 25nA
- Low Input Offset Current: ±5nA
- Low Input Offset Voltage: 1mV Typical
- Input Common Mode Voltage Range Includes
 Ground
- Differential Input Voltage Range Equals to the Power Supply Voltage
- Low Output Saturation Voltage: 250mV at 4mA
- Open Collector Output

Applications

- Battery Charger
- Cordless Telephone
- Switching Power Supply
- DC-DC Module
- PC Motherboard
- Communication Equipment

Parametric Table

Supply Voltage (V)	20		
Supply Current (mA) (18V, 15kΩ)	0.4		
Differential Input Voltage (V)	20		
Input offset Voltage (mV)	1.0		
Input offset Current (nA)	5.0		
Large Signal Response Time (ns) (5.1kΩ)	300		
Output Sink Current (mA)	16		
Saturation Voltage (mV)	250		
Voltage Gain (V/mV)	200		

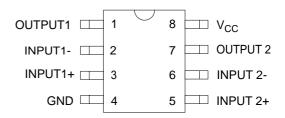


Additional Available Materials

- Samples
- Datasheet

Pin Configuration

SOIC-8/DIP-8





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Ordering Information Example

Package	Input Offset Voltage		Part Number		Marking ID		Packing Type
			Tin Lead	Lead Free	Tin Lead	Lead Free	Tacking Type
SOIC-8	Maximum Value	5mV	AZ393M	AZ393M-E1	AZ393M	AZ393M-E1	Tube
		5mV	AZ393MTR	AZ393MTR-E1	AZ393M	AZ393M-E1	Tape & Reel
		2mV	AZ393CM	AZ393CM-E1	393CM	393CM-E1	Tube
		2mV	AZ393CMTR	AZ393CMTR-	393CM	393CM-E1	Tape & Reel
DIP-8	Maximum Value	5mV	AZ393P	AZ393P-E1	AZ393P	AZ393P-E1	Tube
		2mV	AZ393CP	AZ393CP-E1	AZ393CP	AZ393CP-E1	Tube

Detailed information please refer to the relevant datasheet.



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