



# LOW POWER LOW OFFSET VOLTAGE QUAD COMPARATORS

## AZ339

### Description

The AZ339 series consists of four independent precision voltage comparators with an offset voltage specification as low as 2mV. 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 AZ339 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: 0.8mA
  - Independent of Supply Voltage
- Low Input Bias Current: 25nA (Typical)
- Low Input Offset Current:  $\pm 5nA$  (Typical)
- Low Input Offset Voltage:  $\pm 2mV$  (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

### Benefits

- Easier to Use
- Very Competitive Price

### Parametric Table

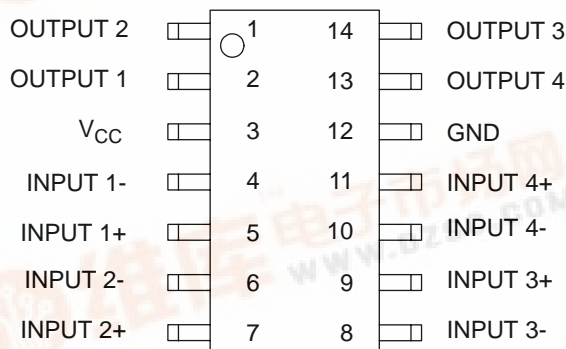
Supply Voltage (V)	20
Supply Current (mA) (18V, 15k $\Omega$ )	0.8
Differential Input Voltage (V)	20
Input offset Voltage (mV)	2.0
Input offset Current (nA)	5.0
Large Signal Response Time (ns) (5.1k $\Omega$ )	300
Output Sink Current (mA)	16
Saturation Voltage (mV)	250
Voltage Gain (V/mV)	200

### Additional Available Materials

- Samples
- Data Sheet

### Pin Configuration

M/P/G Package  
SOIC-14/DIP-14/TSSOP-14



**LOW POWER LOW OFFSET VOLTAGE QUAD COMPARATORS****AZ339****Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	
SOIC14	-40 to 85 °C	AZ339M	AZ339M-E1	AZ339M	AZ339M-E1	Tube
		AZ339MTR	AZ339MTR-E1	AZ339M	AZ339M-E1	Tape & Reel
DIP-14		AZ339P	AZ339P-E1	AZ339P	AZ339P-E1	Tube

Detailed information please refer to the relevant datasheet.

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