

DUAL GENERAL PURPOSE LOW VOLTAGE COMPARATOR

Description

The AZV393 is a low voltage 2.5V to 5.5V, dual comparator, which has a very low supply current of $100\mu A$, making the part an excellent choice for portable electronic systems. The device is pin-for-pin compatible replacement of the LMV393.

The AZV393 is built with BiCMOS process with bipolar input and output stages for improved noise performance. It is a cost-effective solution for portable consumer products where space, low voltage, low power and price are the primary specification in circuit design.

The AZV393 is available in standard SOIC-8 and space saving TSSOP-8 and MSOP-8 packages.

Features

- Guaranteed 2.7V to 5.5V Performance
- Industrial Temperature Range: -40°C to 85°C
- Low Supply Current: 100μA Typical
- Input Common Mode Voltage Range Includes Ground
- Low Output Saturation Voltage: 200mV Typical
 Open Collector Output for Maximal Flexibility

Applications

- Notebook and PDA
- Low Power, Low Voltage Applications
- General Purpose Portable Devices
- Mobile Communications
- Battery Powered Electronics

Benefits

- Low Supply Voltage
- Low Supply Current
- Wide Input Common-Mode Voltage Range
- Low Output Saturation Voltage
- Small Package
- Very Competitive Price

Parametric Table

V_{CC}=5V, typical, unless otherwise specified

Supply Voltage Range (V)	2.5 to 5.5
Supply Current (µA)	100
Input Offset Voltage (mV)	1.7
Input Offset Current (nA)	2
Input Bias Current (nA)	25
Voltage Gain (V/mV)	50
Input Common-Mode Voltage (V)	-0.1 to V _{CC} -0.8
Output Saturation Voltage (mV)	200
Propagation Delay (High to Low) (Input Overdrive=100mV) (ns)	200
Propagation Delay (Low to High) (Input Overdrive=100mV) (ns)	300
Operating Junction Temperature (°C)	-40 to 85
Package	SOIC-8 TSSOP-8 MSOP-8

Additional Available Materials

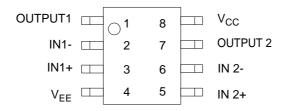
- Samples
- Preliminary Datasheet
- Reliability Report
- ESD Report



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Pin Configuration

SOIC-8/TSSOP-8/MSOP-8



Ordering Information Example

Package	Temperature Range	Part Number	Marking ID	Packing Type
		Lead Free	Lead Free	
SOIC-8	-40 to 85°C	AZV393M-E1	AZV393M-E1	Tube
		AZV393MTR-E1	AZV393M-E1	Tape & Reel
TSSOP-8	-40 to 85°C	AZV393G-E1	EG3D	Tube
		AZV393GTR-E1	EG3D	Tape & Reel
MSOP-8	-40 to 85°C	AZV393MM-E1	AZV393MM-E1	Tube
		AZV393MMTR-E1	AZV393MM-E1	Tape & Reel

Detailed information please refer to the relevant datasheet.

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Nov. 2007 BCD Semiconductor Manufacturing Limited