

**LOW POWER LOW OFFSET VOLTAGE DUAL COMPARATORS****AS393/393A****Description**

The AS393/393A consist of two independent precision voltage comparators with a typical offset voltage of 1.0mV and high gain. They are specifically designed to operate from a single power supply over wide range of voltages. Operation from split power supply is also possible and the low power supply current drain is independent of the magnitude of the power supply voltage.

The AS393/393A series are compatible with industry standard 393. AS393A has more stringent input offset voltage than AS393.

Features

- Wide Supply Voltage Range
 - Single Supply: 2.0V to 36V
 - Dual Supplies: $\pm 1.0V$ to $\pm 18V$
- Low Supply Current Drain: 0.6mA
- Low Input Bias Current: 25nA (Typical)
- Low Input Offset Current: $\pm 5.0nA$ (Typical)
- Low Input Offset Voltage: 1.0mV (Typical)
- Input Common Mode Voltage Range Includes Ground
- Differential Input Voltage Range Equals to the Power Supply Voltage
- Low Output Saturation Voltage: 200mV at 4mA
- Open Collector Output

Applications

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

Benefits

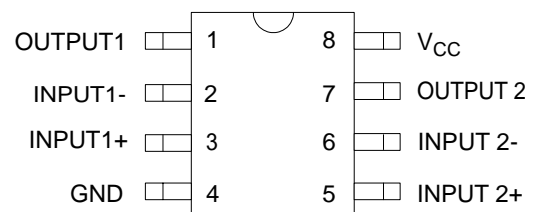
- Easier to Use
- Very Competitive Price

Parametric Table

Supply Voltage Range (V)		2 to 36
		± 1.0 to ± 18
Input Offset Voltage (Typ/Max) (mV)	AS393	1.0/5.0
	AS393A	1.0/3.0
Supply Current ($V_{CC}=5V$) (mA)		0.6
Differential Input Voltage (V)		40
Input Offset Current (nA)		5
Large Signal Response Time ($R_L=5.1k\Omega$) (ns)		200
Output Sink Current (mA)		16
Saturation Voltage (mV)		200
Voltage Gain (V/mV)		200

Additional Available Materials

- Samples
- Datasheet
- Reliability Report
- ESD Report

Pin Configuration**SOIC-8/DIP-8/TSSOP-8**

**LOW POWER LOW OFFSET VOLTAGE DUAL COMPARATORS****AS393/393A****Ordering Information Example**

Package	Input Offset Voltage		Part Number		Marking ID	
			Tin Lead	Lead Free	Tin Lead	Lead Free
SOIC-8	-40 to 85°C	AS393M	AS393M-E1	AS393M	AS393M-E1	Tube
		AS393MTR	AS393MTR-E1	AS393M	AS393M-E1	Tape & Reel
			AS393AM-E1		AS393AM-E1	Tube
			AS393AMTR-E1		AS393AM-E1	Tape & Reel
DIP-8		AS393P	AS393P-E1	AS393P	AS393P-E1	Tube
			AS393AP-E1		AS393AP-E1	Tube
TSSOP-8			AS393G-E1		EG3C	Tube
			AS393GTR-E1		EG3C	Tape & Reel

Detailed information please refer to the relevant datasheet.

Sales Office:**USA**

3170 De La Cruz Blvd, Suite # 105 Santa Clara, CA 95054-2411,
U.S.A
Tel : +1-408-988 6388
Fax : +1-408-988 6386

Shanghai

8F, B Zone, 900 Yi Shan Road, Shanghai 200233,
China
Tel : 86-21-6495 9539
Fax : 86-21-6485 9673

Taiwan

4F, 298-1 Rui Guang Road, Nei-Hu District, Taipei,
Taiwan
Tel : 886-2-2656-2808
Fax : 886-2-2656-2806

Shenzhen

Room 27B, Tower C, No. 2070, Shennanzhong Road, Shenzhen
518031, China
Tel : 86-755-8368 3987
Fax : 86-755-8368 3166