

LMC7221

Tiny CMOS Comparator with Rail-To-Rail Input and Open Drain Output

General Description

The LMC7221 is a micropower CMOS comparator available in the space saving SOT23-5 package. This makes this comparator ideal for space and weight critical designs. For easy prototyping, the LMC7221 is available in a conventional 8-pin DIP package. The LMC7221 is supplied in two offset voltage grades, 4 mV and 9 mV.

The open drain output can be pulled up with a resistor to a voltage which can be higher or lower than the supply voltage—this makes the part useful for mixed voltage systems.

For a tiny comparator with a push-pull output, please see the LMC7211 datasheet.

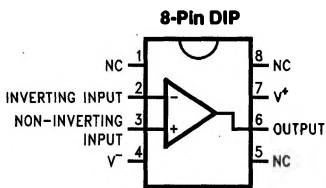
Features

- Tiny SOT 23-5 package saves space
- Package is less than 1.43 mm thick
- Guaranteed specs at 2.7V, 5V, 15V supplies
- Typical supply current 10 μ A at 5V
- Response time of 7 μ s at 5V
- LMC7221—open drain output
- Input common-mode range beyond V^- and V^+
- Low input current

Applications

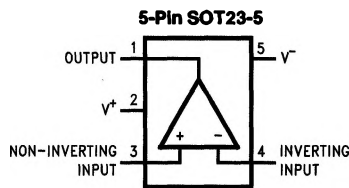
- Mixed voltage battery powered products
- Notebooks and PDAs
- PCMCIA cards
- Mobile communications
- Alarm and security circuits
- Driving low current LEDs
- Direct sensor interface

Connection Diagrams



Top View

TL/H/12346-1



Top View

TL/H/12346-2

Ordering Information

Package	Ordering Information	NSC Drawing Number	Package Marking	Transport Media
8-Pin DIP	LMC7221AIN	N08E	LMC7221AIN	Rails
8-Pin DIP	LMC7221BIN	N08E	LMC7221BIN	Rails
5-Pin SOT 23-5	LMC7221AIM5	MA05A	C01A	250 Units on Tape and Reel
5-Pin SOT 23-5	LMC7221BIM5	MA05A	C01B	250 Units on Tape and Reel
5-Pin SOT 23-5	LMC7221AIM5X	MA05A	C01A	3k Units Tape and Reel
5-Pin SOT 23-5	LMC7221BIM5X	MA05A	C01B	3k Units Tape and Reel