

## ADG438FBNZ

Data Sheet

 $\pm 15$  V, Fault Protected, 8-Channel High Performance Analog Multiplexer; Package: PDIP; No of Pins: 16; Temperature Range: Industrial

Manufacturers

Analog Devices, Inc

Package/Case

DIP16

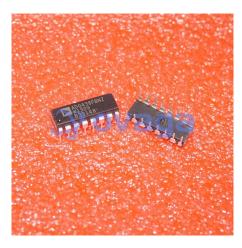
Product Type

Switches

RoHS

Green

Lifecycle



Images are for reference only

Please submit RFQ for ADG438FBNZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADG438F switches one of eight inputs to a common output as determined by the 3-bit binary address lines, A0, A1, and A2. The ADG439F switches one of four differential inputs to a common differential output as determined by the 2-bit binary address lines, A0 and A1. An EN input on each device is used to enable or disable the device. When disabled, all channels are switched off.

Product Highlights

Fault Protection. The ADG438F and ADG439F can with-stand continuous voltage inputs up to -40 V or +55 V. When a fault occurs due to the power supplies being turned off, all the channels are turned off and only a leakage current of a few nanoamperes flows.

On channel saturates while fault exists.

Low RON.

Fast Switching Times.

Break-Before-Make Switching. Switches are guaranteed break-before-make so that input signals are protected against momentary shorting.

Trench Isolation Eliminates Latch-Up. A dielectric trench separates the p-channel and n-channel MOSFETs thereby preventing latch-up.

Improved Off Isolation. Trench isolation enhances the channel-to-channel isolation of the ADG438F/ADG439F.

## **Features**

All switches off with power supply off

Analog Output of ON Channel Clamped within Power Supplies If an Overvoltage Occurs

Latch-up proof construction

Fault and Overvoltage Protection (-40 V, +55 V)

Fast switching times

tON 250 ns max

tOFF150 ns max

Break-Before-Make Switching Action

TTL and CMOS Compatible inputs

## **Application**

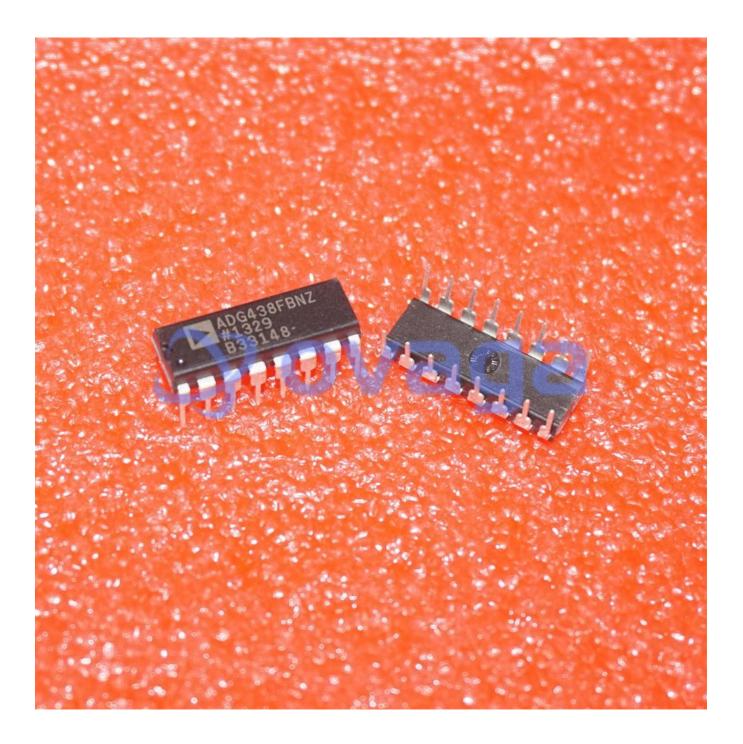
Data acquisition systems

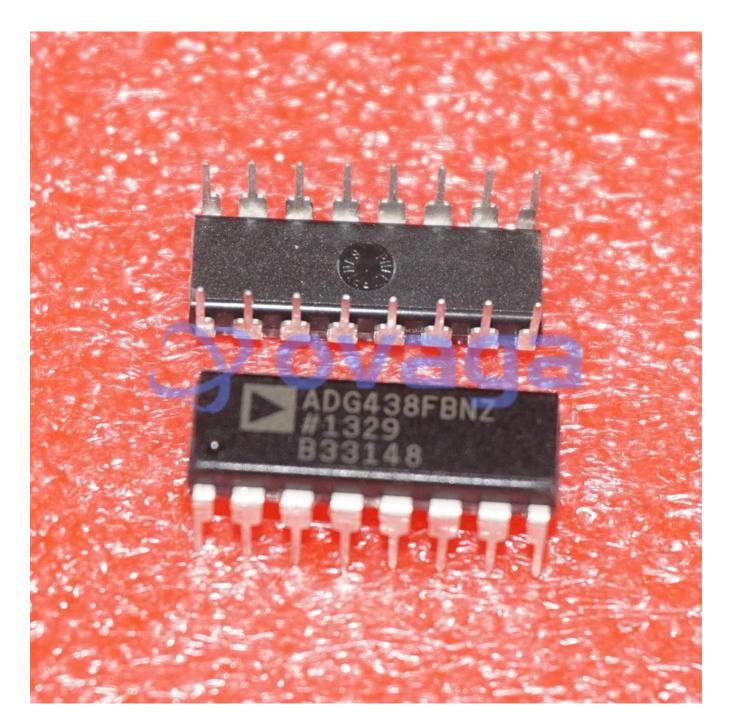
Industrial and process control systems

Avionics test equipment

Signal routing between systems

High reliability control systems





**Related Products** 



ADG467BRSZ Analog Devices, Inc SSOP-20



ADP3050AR-3.3
Analog Devices, Inc
SOP-8



ADG201ABQ
Analog Devices, Inc
DIP-16



ADG512BR
Analog Devices, Inc
SOP-16



ADG467BRSZ-REEL

Analog Devices, Inc SSOP-20



ADG888BCBZ-REEL7

Analog Devices, Inc 16 ball WLCSP



ADG852BCPZ-REEL7

Analog Devices, Inc

LFCSP10



ADG467BRZ

Analog Devices, Inc SOIC-18