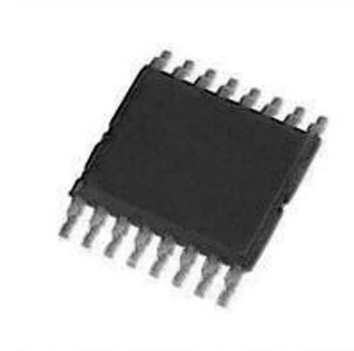


Fault Protection, -0.4 pC QINJ, 8:1 Multiplexer

Manufacturers	Analog Devices, Inc
Package/Case	16-Lead TSSOP
Product Type	Switches
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ADG5208FBRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADG5208F and ADG5209F are 8:1 and dual 4:1 analog multiplexers. The ADG5208F switches one of eight inputs to a common output, and the ADG5209F switches one of four differential inputs to a common differential output. An EN input on both devices enables or disables the device. Each channel conducts equally well in both directions when on, and each channel has an input signal range that extends to the supplies. The digital inputs are compatible with 3 V logic inputs over the full operating supply range.

When no power supplies are present, the channel remains in the off condition, and the switch inputs are high impedance. Under normal operating conditions, if the analog input signal levels on any S_x pin exceed positive fault voltage (VDD) or negative fault voltage (VSS) by a threshold voltage (VT), the channel turns off and that S_x pin becomes high impedance. If the fault channel is selected, the drain pin is pulled to the secondary supply voltage that was exceeded.

Input signal levels of up to -55 V or $+55$ V relative to ground are blocked, in both the powered and unpowered conditions.

The low capacitance and charge injection of these switches make them ideal solutions for data acquisition and sample-and-hold applications, where low glitch switching and fast settling times are required.

Product Highlights

The source pins are protected against voltages greater than the supply rails, up to -55 V and $+55$ V.

The source pins are protected against voltages between -55 V and $+55$ V in an unpowered state.

Trench isolation guards against latch-up.

Optimized for low charge injection and on capacitance.

The ADG5208F/ADG5209F can be operated from a dual supply of ± 5 V up to ± 22 V or a single power supply of 8 V up to 44 V.

Features

Overvoltage protection up to -55 V and $+55\text{ V}$

Power-off protection up to -55 V and $+55\text{ V}$

Overvoltage detection on source pins

Low charge injection (QINJ): -0.4 pC

Low on capacitance: 20 pF

Latch-up immune under any circumstance

Known state without digital inputs present

VSS to VDD analog signal range

8 V to 44 V single-supply operation

Fully specified at $\pm 15\text{ V}$, $\pm 20\text{ V}$, $+12\text{ V}$, and $+36\text{ V}$

Application

Analog input/output modules

Process control/distributed control systems

Data acquisition

Instrumentation

Avionics

Automatic test equipment

Communication systems

Relay replacement

Related Products



[ADG467BRSZ](#)

Analog Devices, Inc
SSOP-20



[ADG201ABQ](#)

Analog Devices, Inc
DIP-16



[ADP3050AR-3.3](#)

Analog Devices, Inc
SOP-8



[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



[ADG438FBZ](#)

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DIP16