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# ADG5208BRUZ-RL7

Data Sheet

Analog Switch ICs Latchup Proof 20V  $15V\,{+}12V\,{+}36V$  8-1MUX

Manufacturers	Analog Devices, Inc
Package/Case	16-TSSOP (0.173, 4.40mm Width)
Product Type	Analog Switch ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADG5208BRUZ-RL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

### **General Description**

The ADG5208/ADG5209 are monolithic CMOS analog multiplexers comprising eight single channels and four differential channels, respectively. The ADG5208 switches one of eight inputs to a common output, as determined by the 3-bit binary address lines, A0, A1, and A2. The ADG5209 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 both devices enables or disables the device. When EN is disabled, all channels switch off. The ultralow capacitance and charge injection of these switches make them ideal solutions for data acquisition and sample-and-hold applications, where low glitch and fast settling are required. Fast switching speed coupled with high signal bandwidth make these devices suitable for video signal switching.

Each switch conducts equally well in both directions when on, and each switch has an input signal range that extends to the power supplies. In the off condition, signal levels up to the supplies are blocked.

The ADG5208/ADG5209 do not have VL pins; instead, the logic power supply is generated internally by an on-chip voltage generator.

Product Highlights

Trench Isolation Guards Against Latch-Up.A dielectric trench separates the P and N channel transistors prevent latch-up even under severe overvoltage conditions.

0.4 pC Charge Injection.

Dual-Supply Operation. For applications where the analog signal is bipolar, the ADG5208/ADG5209 can be operated from dual supplies of up to  $\pm 22$  V.

Single-Supply Operation. For applications where the analog signal is unipolar, the ADG5208/ADG5209 can be operated from a single rail power supply of up to 40 V.

3 V Logic-Compatible Digita⊳

No VL Logic Power Supply Required.

#### **Ovaga Technologies Limited**

## Features

Latch-up proof 2.9 pF off source capacitance

17 pF off drain capacitance

0.4 pC charge injection

Low on resistance: 160  $\Omega$  typical

9 V to 40 V single-supply operation

48 V supply maximum ratings

Fully specified at  $\pm 15$  V,  $\pm 20$  V,  $\pm 12$  V, and  $\pm 36$  V

See data sheet for additional features

ADG5208-EP supports defense and aerospace applications (AQEC standard)

Download(pdf)

Military temperature range: -55°C to +125°C

Controlled manufacturing baseline

One assembly and test site

One fabrication site

Enhanced product change notification

Qualification data available on request

# Application

Automatic test equipment

Data acquisition

Instrumentation

Avionics

Audio and video switching

Communication systems



#### **Related Products**



Analog Devices, Inc LQFP-64

ADV7181CBSTZ



AD724JR Analog Devices, Inc

SOIC-16



<u>AD8170AR</u>

Analog Devices, Inc SOP8

#### ADV7393BCPZ

Analog Devices, Inc LFCSP-VQ-40



#### ADV7391WBCPZ

Analog Devices, Inc LFSCP-3



#### ADV7390BCPZ

Analog Devices, Inc QFN32



#### ADV7341BSTZ

Analog Devices, Inc LQFP-64



#### ADUM4160BRIZ

Analog Devices, Inc SOIC-16