

Analog Switch ICs Octal Channel Protector I.C.

Manufacturers	<u>Analog Devices, Inc</u>
Package/Case	SSOP-20
Product Type	Switches
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADG467BRSZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADG467 is an octal channel protector. The channel protector is placed in series with the signal path. The channel protector protects sensitive components from voltage transients in the signal path regardless if the power supplies are present or not. For this reason, the channel protectors are ideal for use in applications where correct power sequencing cannot always be guaranteed (for example, hot insertion rack systems) to protect analog inputs.

Each channel protector has an independent operation and consists of an N-channel MOSFET, a P-channel MOSFET, and an N-channel MOSFET, connected in series. The channel protector behaves just like a series resistor during normal operation, that is,  $(V_{SS} + 1.5 V) < V_{IN} < (V_{DD} - 1.5 V)$ . When a channel's analog input exceeds the power supplies (including VDD and

The ADG467 can operate off both bipolar and unipolar supplies. The channels are normally on when power is connected and open circuit when power is disconnected. With power supplies of  $\pm 15 V$ , the on resistance of the ADG467 is  $62 \Omega$  typical with a leakage current of  $\pm 1 nA$  maximum. When power is disconnected, the input leakage current is approximately  $\pm 0.5 nA$  typical.

The ADG467 is available in an 18-lead SOIC package and a 20-lead SSOP package.

### Product Highlights

**Fault Protection.** The ADG467 can withstand continuous voltage inputs from  $-40 V$  to  $+40 V$ . When a fault occurs due to the power supplies being turned off or due to an overvoltage being applied to the ADG467, the output is clamped. When power is turned off, current is limited to the microampere level.

**Low Power Dissipation.**

**Low RON.**  $62 \Omega$  typical.

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

## Features

Fault and overvoltage protection up to  $\pm 40$  V

Signal paths open circuit with power off

Signal path resistance of  $R_{on}$  with power on

44 V supply maximum ratings

Low on resistance:  $62 \Omega$  typical

Low RON match ( $5 \Omega$  maximum)

Low power dissipation  $0.8 \mu\text{W}$  typical

Latch-up proof construction

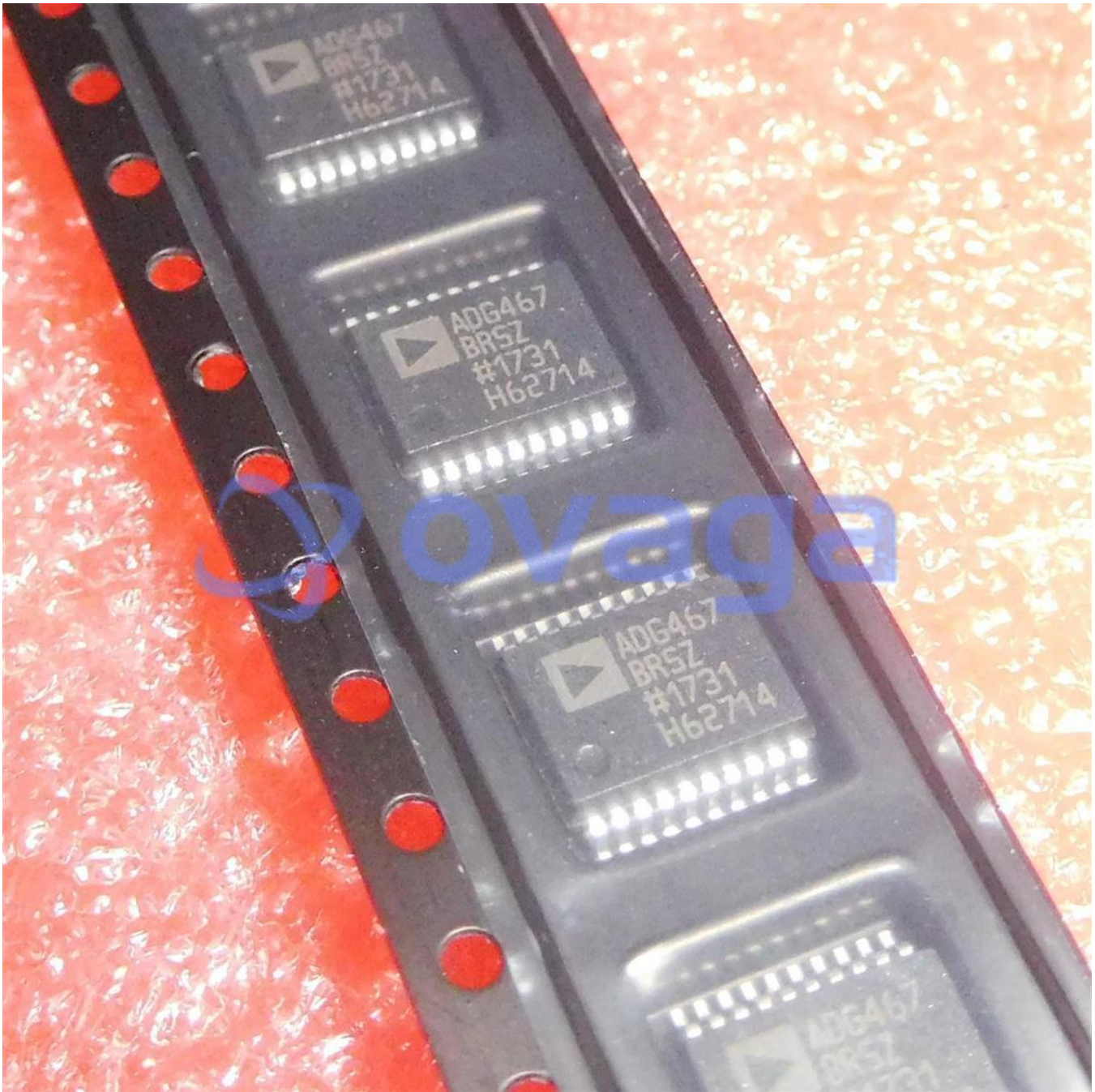
## Application

ATE equipment

Sensitive measurement equipment

Hot insertion rack systems





### Related Products



#### [ADG201ABQ](#)

Analog Devices, Inc  
DIP-16



#### [ADP3050AR-3.3](#)

Analog Devices, Inc  
SOP-8



#### [ADG512BR](#)

Analog Devices, Inc  
SOP-16



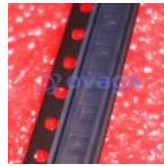
#### [ADG467BRSZ-REEL](#)

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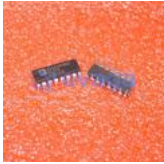
[ADG888BCBZ-REEL7](#)

Analog Devices, Inc  
16 ball WLCSP



[ADG852BCPZ-REEL7](#)

Analog Devices, Inc  
LFCSP10



[ADG438FBNZ](#)

Analog Devices, Inc  
DIP16



[ADG467BRZ](#)

Analog Devices, Inc  
SOIC-18