

## ADUM152N1BRZ

Data Sheet

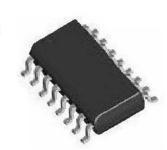
Digital Isolator, 3kV, 5 Channel, 7.2 ns, 1.7 V, 5.5 V, NSOIC, 16 Pins

Manufacturers Analog Devices, Inc

Package/Case SOIC-16

Product Type Interface ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for ADUM152N1BRZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Lifecycle

The ADuM150N/ADuM151N/ADuM152N1 are 5-channel digital isolators based on Analog Devices, Inc., iCoupler® technology. Combining high speed, complementary metal-oxide semiconductor (CMOS) and monolithic air core transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives such as optocoupler devices and other integrated couplers. The maximum propagation delay is 13 ns with a pulse width distortion of less than 4.5 ns at 5 V operation. Channel to channel matching of propagation delay is tight at 4.0 ns maximum.

The ADuM150N/ADuM151N/ADuM152N data channels are independent and are available in a variety of configurations with a withstand voltage rating of 3.0 kV rms (see the Ordering Guide). The devices operate with the supply voltage on either side ranging from 1.7 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling voltage translation functionality across the isolation barrier.

Unlike other optocoupler alternatives, dc correctness is ensured in the absence of input logic transitions. Two different fail-safe options are available by which the outputs transition to a predetermined state when the input power supply is not applied.

**Features** 

High common-mode transient immunity:  $100 \, kV/\mu s$ 

High robustness to radiated and conducted noise

Low propagation delay

13 ns maximum for 5 V operation

15 ns maximum for 1.8 V operation

150 Mbps maximum guaranteed data rate

Safety and regulatory approvals (pending)

UL recognition: 3000 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A

VDE certificate of conformity

DIN V VDE V 0884-10 (VDE V 0884-10):2006-12>

CQC certification per GB4943.1-2011

Low dynamic power consumption

1.8 V to 5 V level translation

High temperature operation: 125°C

Fail-safe high or low options

16-lead, RoHS compliant, narrow-body SOIC package

## **Related Products**



ADV7181CBSTZ

Analog Devices, Inc
LQFP-64



Analog Devices, Inc SOIC-16

AD724JR



ADV7391WBCPZ
Analog Devices, Inc
LFSCP-3



General-purpose multichannel isolation

SPI interface/data converter isolation

Industrial field bus isolation



AD8170AR
Analog Devices, Inc
SOP8



ADV7393BCPZ
Analog Devices, Inc
LFCSP-VQ-40



ADV7390BCPZ
Analog Devices, Inc
QFN32



ADV7341BSTZ
Analog Devices, Inc
LQFP-64



Analog Devices, Inc SOIC-16