

## ADUM5401ARWZ-RL

Data Sheet

Isolator Interface IC Quad Channel Isolators w/Int DC/DC Conv

Manufacturers Analog Devices, Inc

Package/Case SOIC-16

Product Type Interface ICs

RoHS Rohs

Lifecycle

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Images are for reference only

Please submit RFQ for ADUM5401ARWZ-RL or <a href="mailto:sales@ovaga.com"><u>Emailto:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADuM5401/ADuM5402/ADuM5403/ADuM5404 are quad-channel digital isolators with isoPower®, an integrated, isolated dc-to-dc converter. Based on the Analog Devices, Inc.,iCoupler® technology, the dc-to-dc converter provides up to 500 mW of regulated, isolated power at either 5.0 V or 3.3 V from a 5.0 V input supply, or at 3.3 V from a 3.3 V supply at the power levels shown in Table 1. These devices eliminate the need for a separate, isolated dc-to-dc converter in low power, isolated designs. The iCoupler chip scale transformer technology is used to isolate the logic signals and for the power and feedback paths in the dc-to-dc converter. The result is a small form factor, total isolation solution.

The ADuM5401/ADuM5402/ADuM5403/ADuM5404 isolatorsprovide four independent isolation channels in a variety of channel configurations and data rates (see the Ordering Guidefor more information).

isoPower uses high frequency switching elements to transfer power through its transformer. Special care must be taken during printed circuit board (PCB) layout to meet emissionsstandards. See the AN-0971 Application Note for board layout recommendations.

**Features** 

isoPower integrated, isolated dc-to-dc converter

Regulated 3.3 V or 5.0 V output

Up to 500 mW output power

Quad dc-to-25 Mbps (NRZ) signal isolation channels

16-lead SOIC package with 7.6 mm creepage

High temperature operation: 105°C maximum

High common-mode transient immunity: >25 kV/μs

Safety and regulatory approvals

UL recognition

2500 V rms for 1 minute per UL 1577

CSA Component Acceptance Notice 5A

VDE certificate of conformity

IEC 60747-5-2 (VDE 0884, Part>

## **Application**

RS-232/RS-422/RS-485 transceivers

Industrial field bus isolation

Power supply startup bias and gate drives

Isolated sensor interfaces

Industrial PLCs

## **Related Products**



ADV7181CBSTZ
Analog Devices, Inc
LQFP-64



AD724JR
Analog Devices, Inc
SOIC-16



ADV7391WBCPZ
Analog Devices, Inc
LFSCP-3



ADV7341BSTZ

Analog Devices, Inc
LQFP-64



AD8170AR
Analog Devices, Inc
SOP8



ADV7393BCPZ
Analog Devices, Inc
LFCSP-VQ-40



Analog Devices, Inc QFN32

ADV7390BCPZ



Analog Devices, Inc SOIC-16