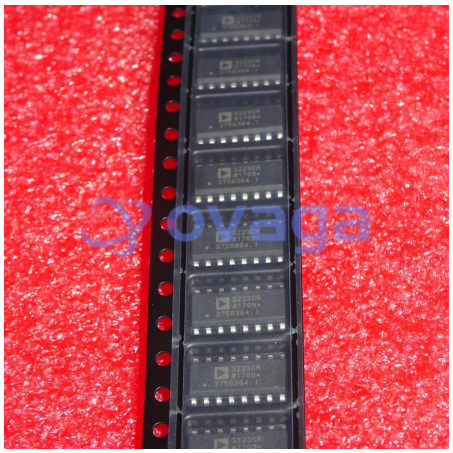
ADUM3223CRZ

Data Sheet

Isolator Interface IC Isolated Prec Half-Bridge Driver 4A Out

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-16
Product Type	Power Supplies
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADUM3223CRZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The ADuM3223/ADuM4223 are 4 A isolated, half-bridge gatedrivers that employ the Analog Devices, Inc., iCoupler® technology to provide independent and isolated high-side and low-sideoutputs. The ADuM3223 provides 3000 V rms isolation in thenarrow body, 16-lead SOIC package, and the ADuM4223 provides 5000 V rms isolation in the wide body, 16-lead SOIC package.Combining high speed CMOS and monolithic transformer technology, these isolation components provide outstanding performance characteristics superior to the alternatives, such as the combination of pulse transformers and gate drivers.

The ADuM3223/ADuM4223 isolators each provide two independent isolated channels. They operate with an inputsupply ranging from 3.0 V to 5.5 V, providing compatibility with lower voltage systems. In comparison to gate drivers employinghigh voltage level translation methodologies, the ADuM3223/ADuM4223 offer the benefit of true, galvanic isolation between the input and each output. Each output may be continuously operated up to 537 V peak relative to the input, thereby supporting low-side switching to negative voltages. The differential voltagebetween the high-side and low-side may be as high as 800 V peak.

As a result, the ADuM3223/ADuM4223 provide reliable controlover the switching characteristics of IGBT/MOSFET configurations over a wide range of positive or negative switching voltages.Applications
Switching power supplies

Isolated IGBT/MOSFET gate drives

Industrial inverters

Automotive

Features

4 A peak output current

Working voltage

Application

Switching power supplies

Isolated IGBT/MOSFET gate drives

High-side or low-side relative to input: 537 V peak

High-side to low-side differential: 800 V peak

High frequency operation: 1 MHz maximum

3.3 V to 5 V CMOS input logic

4.5 V to 18 V output drive

UVLO at 2.5 V VDD1

ADuM3223A/ADuM4223A UVLO at 4.1 V VDD2

ADuM3223B/ADuM4223B UVLO at 7.0 V VDD2

ADuM3223C/ADuM4223C UVLO at 11.0 V VDD2

Precise timing characteristics

54 ns maximum isolator and driver propagation delay

5 ns maximum channel-to-channel matching

CMOS input logic levels

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

Enhanced system-level ESD performance per IEC 61000-4-x

High junction temperature operation: 125°C

Thermal shutdown protection

Default low output

Safety and regulatory approvals

ADuM3223 narrow-body, 16-lead SOIC

UL recognition per UL 1577

3000 V rms for 1 minute SOIC long package

CSA Component Acceptance Notice 5A

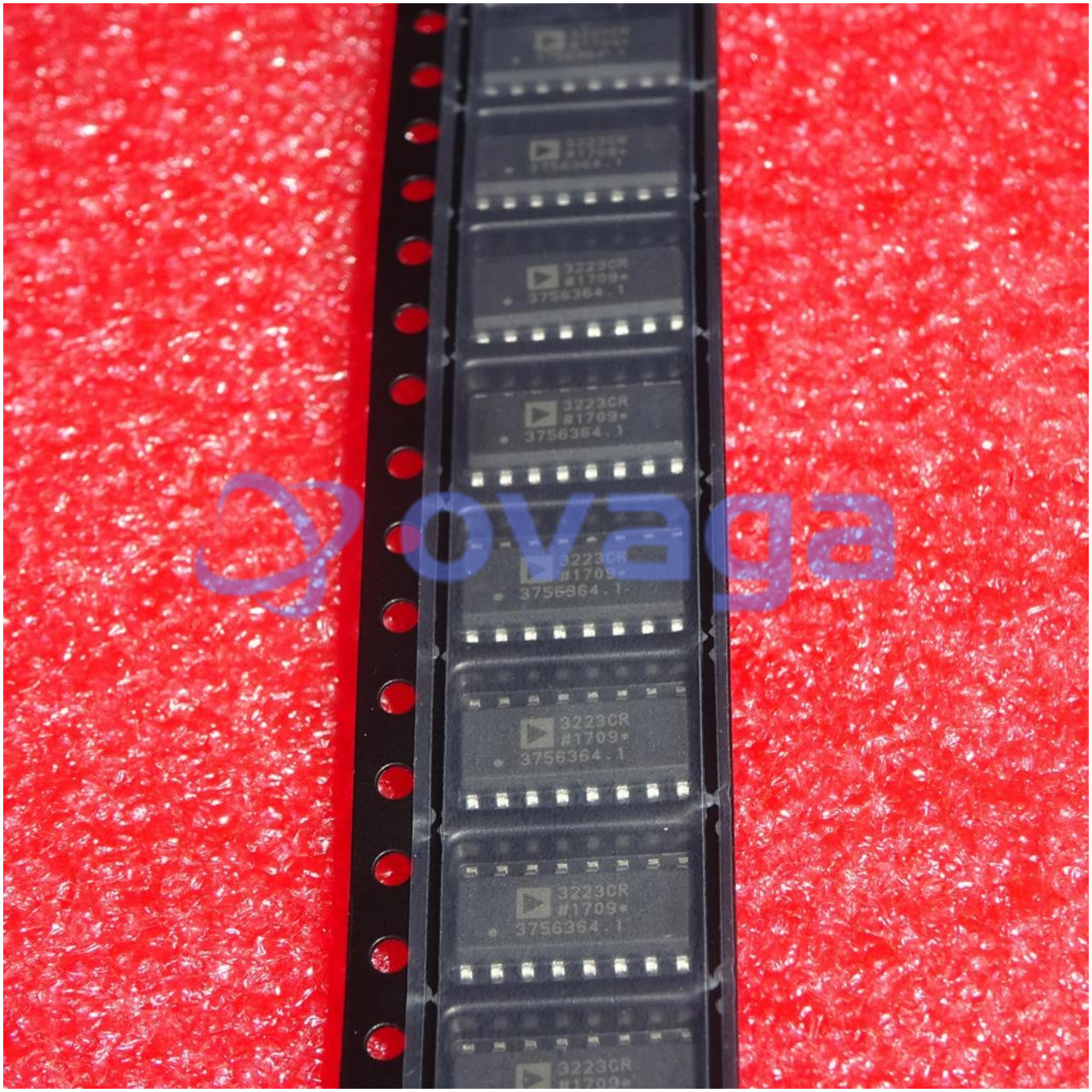
VDE certificate of conformity

DIN V VDE V 0884-10 (VDE V>

Qualified for automotive applications

Industrial inverters

Automotive



Related Products

[ADV7123KST140](#)

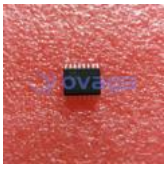
Analog Devices, Inc

QFP-48

[ADUM7223ACCZ](#)

Analog Devices, Inc

LGA-13



[ADUM1234BRWZ](#)

Analog Devices, Inc

SOIC-16

[ADV7171KSU](#)

Analog Devices, Inc

TQFP44

[AD6645ASQZ-80]

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QFP52

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SOP-16