# ISO7421AQDRQ1

**Digital Isolator Logic 2-CH 50Mbps Automotive 8-Pin SOIC T/R**

| | |
|---|---|
| **Manufacturer:** | Texas Instruments, Inc |
| **Package/Case:** | SOP8 |
| **Product Type:** | Drivers |
| **RoHS:** | RoHS Compliant/Lead free |
| **Lifecycle:** | Active |

ISO7421AQDRQ1 Image

Images are for reference only

Inquiry

## General Description

The ISO7421A-Q1 provides galvanic isolation up to 2.5 kVrms for 1 minute per UL. This digital isolator has two isolated channels with bidirectional channel configuration. Each isolation channel has a logic input and output buffer separated by a silicon dioxide ($SiO_2$) insulation barrier. Used in conjunction with isolated power supplies, these devices prevent noise currents on a data bus or other circuit from entering the local ground and interfering with or damaging sensitive circuitry.

The devices have TTL input thresholds and require two supply voltages from 3 V to 5.5 V, or any combination. All inputs are 5-V tolerant when supplied from a 3-V supply.

## Key Features

Qualified for Automotive Applications

AEC-Q100 Qualified With the Following Results:
Device Temperature Grade 1: –40°C to 125°C Ambient Operating Temperature Range

Device HBM ESD Classification Level H3A

Device CDM ESD Classification Level C5

High Signaling Rate: 50 Mbps

Low Power Consumption

Low Propagation Delay – 9 ns (Typical)

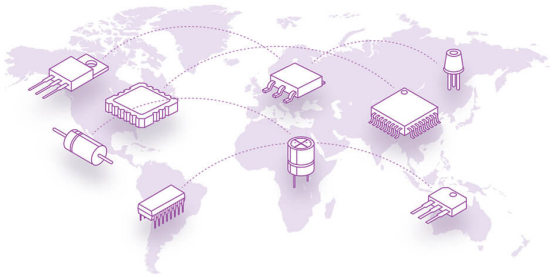
Low Skew – 300 ps (Typical)

4-kVpeak Maximum Isolation, 2.5 kVrms per UL 1577, IEC/VDE and CSA Approved, IEC 60950-1, IEC 61010-1 End Equipment Standards Approved. All Approvals Pending.

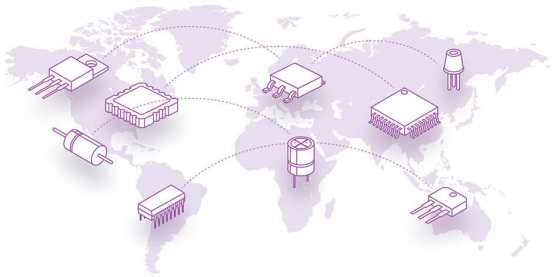
50 kV/μs Transient Immunity (Typical)

Over 25-Year Isolation Integrity at Rated Voltage

Operates From 3-V to 5.5-V Supply and Logic Levels



AVAQ



AVAQ

## Recommended For You

**ISO7221BDR**

Texas Instruments, Inc

SOP8

**ISO7740FDWR**

Texas Instruments, Inc

SOIC-16

**ISO1432BDWR**

Texas Instruments, Inc

SOIC16

**ISO7341CQDWRQ1**

Texas Instruments, Inc

SOP-16

**ISO7760FQDBQRQ1**

Texas Instruments, Inc

SSOP-16

**ISO7421EDR**

Texas Instruments, Inc

SOP8

**ISO7720DR**

Texas Instruments, Inc

SOP8

**ISO7720FQDRQ1**

Texas Instruments, Inc

SOP8

**ISO6721FBQDRQ1**

Texas Instruments, Inc

SOIC-8

**ISO7721FQDRQ1**

Texas Instruments, Inc

SOP8

**ISO7721FDR**

Texas Instruments, Inc

SOP8

**ISO1540QDRQ1**

Texas Instruments, Inc

SOP8

**ISO7760DBQR**

Texas Instruments, Inc

SSOP-16

**ISO7731FQDWRQ1**

Texas Instruments, Inc

SOIC-16

**ISO7710FQDRQ1**

Texas Instruments, Inc

SOP8