

Digital Isolator Logic 2-CH 50Mbps 8-Pin SOIC T/R**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** SOP8**Product Type:** Drivers**RoHS:** RoHS Compliant/Lead free **Lifecycle:** ActiveISO7421EDR Image

Images are for reference only

[Inquiry](#)**General Description**

ISO742x provide galvanic isolation up to 2500 VRMS for 1 minute per UL and 4242 VPK per VDE. These devices have two isolated channels. Each channel has a logic input and output buffer separated by a silicon dioxide (SiO₂) 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. ISO7420 has both channels in the same direction while ISO7421 has the two channels in opposite direction. In case of input power or signal loss, default output is 'low' for devices with suffix 'F' and 'high' for devices without suffix 'F'. ISO742x have no integrated noise filter and thus have fast propagation delays. These devices have TTL input thresholds and operate from 3-V to 5.5-V supplies. All inputs are 5-V tolerant when supplied from a 3.3-V supply.

Key Features

Signaling Rate > 50 Mbps

Default Output 'High' and 'Low' Options

Low Power Consumption: Typical ICC per Channel (3.3-V Supplies):
ISO7420: 1.4 mA at 1 Mbps, 2.5 mA at 25 Mbps

ISO7421: 1.8 mA at 1 Mbps, 2.8 mA at 25 Mbps

Low Propagation Delay: 7 ns Typical

Low Pulse Skew: 200 ps Typical

Wide TA Range Specified: -40°C to 125°C

50-KV/μs Transient Immunity, Typical

Isolation Barrier Life: > 25 Years

Operates from 3-V to 5.5-V Supply Levels

3.3-V and 5-V Level Translation

Narrow Body SOIC-8 Package

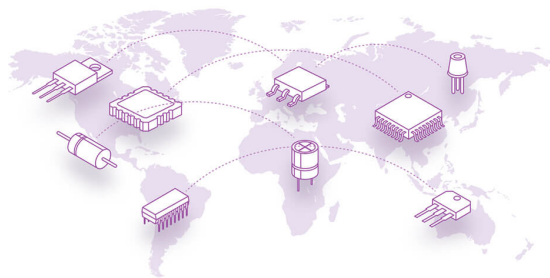
Safety and Regulatory Approvals:
4242 VPK Isolation per DIN V VDE V 0884-10 and DIN EN 61010-1

2500 VRMS Isolation for 1 minute per UL 1577

CSA Component Acceptance Notice 5A, IEC 60950-1 and IEC 61010-1 Standards

CQC Certification per GB4943.1-2011

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SOP8

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