

Product Overview

FOD0721: High CMR, 25Mbit/sec Logic Gate Optocoupler

For complete documentation, see the data sheet.

The FOD0721/0720/0710 family utilizes Fairchild's proprietary coplanar packaging technology, Optoplanar, and optimized IC design to guarantee minimum 20kV/μs Common Mode Noise Rejection (CMR) rating. These high-speed logic gate optocouplers consist of a high-speed AlGaAs LED driven by a CMOS IC coupled to a CMOS detector IC, comprising an integrated photodiode, a high-speed transimpedance amplifier and a voltage comparator with an output driver. The CMOS technology coupled to the high efficiency of the LED achieves low power consumption as well as very high speed (40ns propagation delay, 6ns pulse width distortion). These devices are available in a compact 8-pin small outline package.

Features

- 20kV/μs minimum CMR
- 40ns max. propagation delay
- Data Rate, Non-Return Zero Coding
- 25Mbit/sec (FOD0721 and FOD0720)
- 12.5Mbit/sec (FOD0710)
- Pulse Width Distortion
- 6ns (FOD0721)
- 8ns (FOD0720 and FOD0710)
- +5V CMOS compatibility
- Extended industrial temperature range

For more features, see the data sheet

Applications

- Energy Generation & Distribution
- Industrial Motor
- Uninterruptible Power Supply

Part Electrical Specifications

Product	Compliance	Status	Data Rate (Mbps)	V _{CC} (Max) (V)	V _{CC} (Min) (V)	Channels	I _{FT} (Max) (mA)	V _{OL} (Max) (V)	I _{CCL} (Max) (mA)	t _{PHL} (Max) (ns)	t _{PLH} (Max) (ns)	PWD (Max) (ns)	CMR (Max) (kV/μs)	V _{ISO} (Min) (V)	T _{OPR} (Min) (°C)	T _{OPR} (Max) (°C)	Package Type
FOD0721	Pb-free	Active	25	5.5	4.5	1	-	0.1	9	40	40	6	20	3750	-40	100	SOIC-8
FOD0721R2	Pb-free	Active	25	5.5	4.5	1	-	0.1	9	40	40	6	20	3750	-40	100	SOIC-8

For more information please contact your local sales support at www.onsemi.com.

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