

Product Overview

HCPL0600: High Speed-10MBit/s Logic Gate Optocoupler

For complete documentation, see the data sheet.

The HCPL06XX optocouplers consist of an AlGaAs LED, optically coupled to a very high speed integrated photo-detector logic gate with a strobable output (single channel devices). The devices are housed in a compact small-outline package. This output features an open collector, thereby permitting wired OR outputs. The HCPL0600, HCPL0601 and HCPL0611 output consists of bipolar transistors on a bipolar process while the HCPL0637, HCPL0638, and HCPL0639 output consists of bipolar transistors on a CMOS process for reduced power consumption. The coupled parameters are guaranteed over the temperature range of -40°C to +85°C. An internal noise shield provides superior common mode rejection.

Features

- Compact SO8 package
- Very high speed-10 MBit/s
- Superior CMR
- Fan-out of 8 over -40°C to +85°C
- Logic gate output
- Strobable output (single channel devices)
- Wired OR-open collector
- U.L. recognized (File # E90700)
- VDE approval pending

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 _{OCL} (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
HCPL0600	Pb-free	Active	10	5.5	4.5	1	5	0.6	13	100	100	35	5	3750	-40	85	SOIC-8
HCPL0600R2	Pb-free	Active	10	5.5	4.5	1	5	0.6	13	100	100	35	5	3750	-40	85	SOIC-8

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

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