

Offering a Low Supply Current of 5 mA and a Wide Voltage Supply Range of 2.7 V to 5.5 V, New 10 MBd Optocouplers Save Energy in Industrial Applications While Enabling Usage With Low Voltage Microcontrollers and I²C and SPI Bus Systems

Product Benefits:

- Wide voltage supply range of 2.7 V to 5.5 V
- Open collector output
- Offered in single- and dual-channel configurations
- Available in DIP-8, SMD-8, and SOIC-8 packages
- Low supply current of 5 mA maximum per channel
- Low typical turn-on threshold current of 2 mA typical
- An internal shield provides a guaranteed common mode transient immunity (CMTI) of 15 kV/μs minimum
- Maximum rated withstand isolation voltage up to 5000 V_{RMS}
- Isolation distances from 5 mm to 10 mm
- RoHS-compliant



Market Applications:

- Data communications, high speed A/D and D/A conversion, level shifting, and providing high voltage safety in automation equipment, motor drives, and tools

The News:

Vishay Intertechnology introduces five new 10 MBd high speed optocouplers that provide low power consumption to save energy in industrial applications. Featuring a wide voltage supply range of 2.7 V to 5.5 V and an open collector output, the single-channel VOH260A, VOIH060A, and VOWH260A and dual-channel VOH263A and VOIH063A enable usage with low voltage microcontrollers and I²C and SPI bus systems.

- The devices utilize a highly efficient input LED coupled to an integrated photodetector logic gate with a strobable output
- The optocouplers' combination of a low supply current and low typical turn-on threshold current simplifies designs by eliminating the need for an additional driver stage for a direct microcontroller connection
- Combined with their low turn-on threshold and supply current, the devices' guaranteed common mode transient immunity (CMTI) of 15 kV/μs minimum makes them ideal for noise isolation and breaking up ground loops
- The optocouplers' isolation distances cover a wide range of requirements, including applications with working voltages exceeding 1000 V

The Key Specifications:

Part #	VOH260A	VOIH060A	VOWH260A	VOH263A	VOIH063A
Channels	Single	Single	Single	Dual	Dual
Typ. I _{TH} (mA)	2	2	2	2	2
Max. supply current (mA)	5	5	5	10	10
V _{ISO} (V _{RMS})	5000	3750	5000	5000	3750
Isolation distance (mm)	7, 8	5	10	7, 8	5



NEW PRODUCT INFORMATION



Product Group: Vishay Semiconductors, Optocouplers / December 2023

Availability:

Samples and production quantities of the high speed optocouplers are available now, with lead times of six weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?80354> (VOH260A)

<http://www.vishay.com/ppg?80355> (VOH263A)

<http://www.vishay.com/ppg?80356> (VOIH060A)

<http://www.vishay.com/ppg?80357> (VOIH063A)

<http://www.vishay.com/ppg?84126> (VOWH260A)

Contact Information:

THE AMERICAS

Mr. Jim Toal

jim.toal@vishay.com

EUROPE

Mr. Kai Rottenberger

kai.rottenberger@vishay.com

ASIA/PACIFIC

Mr. Jason Soon

jason.soon@vishay.com