

## The Industry's Smallest Isolated Voltage-Current Detectors With 8mm Creepage and Clearance

Avago Technologies (Nasdaq: AVGO), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced two new miniature voltage/current threshold detection optocouplers for use in a wide range of industrial control applications. The ACPL-K370/K376 optocouplers are designed to detect AC/DC sources and convert the voltage to a logic interface across an optical coupling barrier to provide safe isolation in electronically noisy environments found in industrial applications. These voltage/current sensing optocouplers are ideal for use in applications such as limit switch sensors, low voltage detectors, relay contact monitors, relay coil voltage monitors, and current sensors.

The new ACPL-K370/K376 series, which are an upgrade from Avago's HCPL-0370/3700/3760 optocoupler family, utilizes threshold sensing input buffer ICs which permit control of threshold levels over a wide range of input voltages up to 1140 V<sub>peak</sub>, with a single external resistor. Some of the key benefits provided by this new optocoupler series include a smaller stretched SO-8 (SSO-8) package which meets 8mm clearance and creepage requirements, and requires 30 percent less printed circuit board space compared to dual-inline packages (DIP-8). Additionally, the input buffer of these optocouplers offer several key features to enhance threshold sensing such as hysteresis for extra noise and switching immunity, a diode bridge for easy use with AC input signals, and internal clamping diodes to protect the buffer and light emitting diode (LED) from a wide range of over-voltage and over-current transients.

With the addition of the ACPL-K370/K376 series, Avago can offer another SSO-8 package option in addition to existing DIP packages to provide customers with more optocoupler options for higher voltage industrial applications. The ACPL-K376 is a low-current version of the ACPL-K370. To obtain lower current operation, the ACPL-K376 uses a high-efficiency aluminum gallium arsenide (AlGaAs) LED which provides higher light output at lower drive currents.

±5 percent voltage detection accuracy

- Wide AC or DC detection range up to 1140 V<sub>peak</sub>
- User configurable single/dual detection levels
- Built-in hysteresis improves noise immunity
- 1.32 mA very low threshold current (ACPL-K376)
- Logic compatible output
- 2 V to 18 V wide output supply voltage
- Operating temperature range: -40 to +105 degrees C
- SSO-8 package with 8 mm creepage and clearance
- Safety approvals for reinforced insulation (pending): IEC/EN/DIN EN 60747-5-5/UL

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## Pricing and Availability

Avago's ACPL-K370/K376 optocouplers are available now. Pricing starts at \$1.80 and \$3.25 each for the ACPL-K370 and ACPL-K376, respectively in minimum quantities of 10,000. Samples and production quantities are available now through Avago's direct sales channel and worldwide distribution partners. More information on Avago's digital optocouplers can be found at [www.avagotech.com/optocouplers](http://www.avagotech.com/optocouplers).

## About Avago Technologies

Avago Technologies is a leading supplier of analog interface components for communications, industrial and consumer applications. By leveraging its core competencies in III-V compound and silicon semiconductor design and processing, the company provides an extensive range of analog, mixed signal and optoelectronics components and subsystems to approximately 40,000 end customers. Backed by strong customer service support, the company's products serve four diverse end markets: wireless communications, wired infrastructure, industrial and automotive electronics, and consumer and computing peripherals. Avago has a global employee presence and heritage of technical innovation dating back 40 years to its Hewlett-Packard roots. Information about Avago is available on the Web at [www.avagotech.com](http://www.avagotech.com)

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