



Automotive Grade VOWA617A and VOWA618A Optocouplers with ≥ 11 mm Creepage and Clearance for EVs and Solar Inverters

Product Benefits:

- High galvanic isolation for signal transmission in EV and solar inverter systems
- AEC-Q102 qualified
- Creepage and clearance distances of ≥ 11 mm for increased safety margin in high voltage designs
- V_{IORM} of 1500 V_{peak} and V_{IOWM} of 1060 V_{RMS} to meet reinforced insulation requirements
- High isolation voltage of 5300 V_{RMS} and V_{IOTM} of 8000 V_{peak}
- Wide operating temperature range of -40 °C to $+125$ °C, with junction temperature capability up to $+145$ °C
- Wide CTR range from 50 % to 600 % at low input currents (5 mA for VOWA617A, 1 mA for VOWA618A)
- Phototransistor output with 80 V collector-emitter voltage rating for more design flexibility
- RoHS-compliant, halogen-free, and [Vishay Green](#)



Market Applications:

- Signal transmission with galvanic and noise isolation in grid-connected on-board chargers, BMS, DC/DC converters, solar inverters, industrial applications, and energy metering

The News:

Vishay Intertechnology introduces two new Automotive Grade optocouplers with phototransistor output in a widebody package featuring a CTI of 600.

- Designed to deliver signal transmission with high galvanic isolation for electric vehicles (EV) and solar inverters
- Offer the highest creepage distance in their class, delivering a ≥ 38 % higher safety margin than typical 8 mm solutions
- Intended for grid-connected on-board chargers (OBC), DC/DC converters, and battery management system (BMS) isolation stages
- Provide a wide CTR range from 50 % to 600 % at low input currents of 5 mA (VOWA617A) and 1 mA (VOWA618A)
- Consist of an infrared emitting diode optically coupled to a silicon planar phototransistor detector in a widebody SMD-8 package



NEW PRODUCT INFORMATION

Product Group: Vishay Semiconductors, Optocouplers / May 2026



Availability:

Samples and production quantities of the VOWA617A and VOWA618A are available now, with lead times of eight weeks.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?80400> (VOWA617A, VOWA618A)

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