



Vishay Intertechnology Automotive Grade Ambient Light Sensors Deliver Accurate Visible Light Measurement with no IR Bump

June 23, 2026

AEC-Q102 Qualified Devices Feature Spectral Sensitivity Matched to Human Eye and Improved Spectral Angular Performance in Compact 0805 and Top-View QFN Packages

MALVERN, Pa., June 23, 2026 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today expanded its optoelectronics portfolio with the introduction of two Automotive Grade PIN photodiode ambient light sensors that deliver enhanced optical accuracy and long term reliability in harsh environments. AEC-Q102 qualified, the Vishay Semiconductors [VEMD4210FX02](#) and [VEMD5525FX02](#) feature spectral sensitivity closely matched to the human eye response — with a peak wavelength of 530 nm — and no infrared (IR) bump.

The devices released today are designed for automotive applications including automatic light control in center information displays (CID), head-up displays (HUD), and rain light tunnel (RLT) systems, as well as backlight dimming in industrial equipment. By eliminating the IR bump in the spectral sensitivity curve, the devices ensure precise visible light measurement without unwanted IR influence in these applications. In addition, the devices' superior angular characteristics ensure stable spectral accuracy — regardless of the angle of incoming lighting — for consistent and reliable light measurement performance.

For space-constrained applications, the VEMD4210FX02 offers typical reverse light current of 0.014 μA and a sensitivity range from 470 nm to 610 nm in a compact 0805 package with a radiant sensitive area of just 0.42 mm^2 . For applications requiring enhanced sensitivity — particularly in low light conditions — the VEMD5525FX02 offers a reverse light current of 0.11 μA and a sensitivity range from 480 nm to 590 nm in a top-view QFN package with a large 7.5 mm^2 radiant sensitive area. Both parts also feature wettable flanks for optical solder joint inspection.

RoHS-compliant, halogen-free, and Vishay Green, the sensors feature a moisture sensitivity level (MSL) of 4 in accordance with J-STD-020 for a floor life of 72 hours. The devices support lead (Pb)-free reflow soldering and operate over an ambient temperature range of -40 °C to +110 °C.

Device Specification Table:

Part number	VEMD4210FX02	VEMD5525FX02
Typical reverse light current at $E_v = 100 \text{ lx}$ (μA)	0.014	0.11
Angle of half sensitivity (°)	± 52	± 58
Range of spectral bandwidth (nm)	470 to 610	480 to 590
Wavelength of peak sensitivity (nm)	530	530
Package	0805	Top-view QFN
Dimensions (mm)	2.0 x 1.25 x 0.7	5.0 x 4.0 x 0.9
Radiant sensitive area (mm^2)	0.42	7.5

Samples and production quantities of the new ambient light sensors are available now, with lead times of eight weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech**.[®] Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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Links to product datasheets:

<http://www.vishay.com/ppg?80537> (VEMD4210FX02)

<http://www.vishay.com/ppg?80560> (VEMD5525FX02)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72177720334288111>

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