

NEWS RELEASE

OPTO DIODE CORPORATION

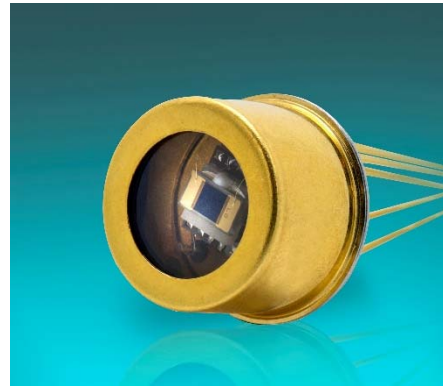
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For Immediate Release

Opto Diode Introduces Two-Stage, Cooled Mid-Infrared Detector

CAMARILLO, Calif. – March 11, 2021 - Opto Diode Corporation, an ITW company, introduces a high-performance, two-stage, cooled, lead selenide (PbSe) detector that operates in the mid-infrared (IR) spectral region with peak sensitivity between 4.3 and 4.5 μm . The cooler on the **BXT2S-28T** allows the detector element to operate as low as $-45\text{ }^{\circ}\text{C}$ to maximize detectivity (D^*). The device also features excellent responsivity of $7.5 \times 10^4\text{ V/W}$ (typical). The exceptionally reliable detector provides the highest sensitivity when monitoring small changes in gas mixtures.



Real-time measurements are easily supported with BXT2S-28T's fast response time. The cooled unit delivers additional sensitivity for very low-level signal detection and enhanced stability for harsh environments where temperatures are in constant flux. It offers consistently high performance in gas analysis and monitoring tasks, which are key to vital medical, defense, and industrial applications.

The new mid-IR detector is packaged in a TO8 can with a 4 mm^2 active area, and a flat sapphire window. Absolute ratings for storage and operating temperatures range from $-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$.

To learn more about Opto Diode's full line of BXT2 Series of two-stage, cooled PbSe infrared detectors, please visit: <https://optodiode.com/ir-detectors-bxt2-series.html>.

To view the data sheet with typical detector response graphs, signal-to-noise ratios, packaging specifications, and package and Pin Out information, please go to:

https://optodiode.com/pdf/B-Series_IR-DetectorsDS.pdf.

For more information about Opto Diode's full line of photodetectors, sensors, optoelectronic modules, visible and/or infrared LEDs, and photonics assemblies for critical applications, visit: www.optodiode.com.

Opto Diode Corporation (Camarillo, CA - www.optodiode.com), an ITW Company, delivers industry-leading sensors, photodiodes, IR detectors, photonic modules, assemblies, and LEDs. Available in standard and custom designs, Opto Diode products have earned a reputation for high performance, superior quality and reliability for over 30 years. Opto Diode offers advanced performance sensors from the extreme ultraviolet (UV) to the mid-infrared (mid-IR). Our products provide unparalleled high-energy particle, electron, X-ray, and UV detection along with superior sensitivity to discriminate trace gases or detect heat, sparks, or flames in the mid-IR spectrum. Other products include high performance LEDs with radiometric emissions from 365 to 940 nm and IR emitters covering 1 to 10 microns.

In addition, Opto Diode can customize the entire product quality system to test, qualify, and document parts and write procedures to the customers' own internal guidelines and specifications. This includes a paper trail, every step of the way, when needed.

Opto Diode serves a variety of industries including aerospace, automotive, biotechnology, food processing, medical, military/defense, industrial, semiconductor equipment manufacturing, and test & measurement. Our manufacturing process is in a cleanroom environment, from start to finish. Opto Diode's domestic U.S. facility is optimized for design and manufacturing with an on-site wafer fabrication, class 1,000 to class 10,000 clean rooms, extensive assembly capabilities and packaging expertise. From prototyping to high-volume production, we manufacture wafers-to-components then package and assemble photonic modules-to-optoelectronic sub-systems. For more information, visit www.optodiode.com.

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