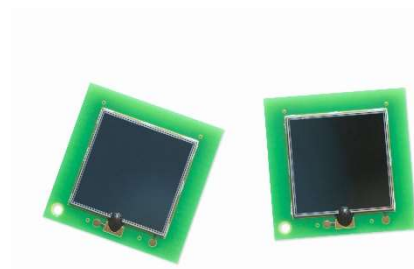




FOR IMMEDIATE RELEASE:

Excelitas Technologies Introduces VTH3020 Large Area Silicon Photodiode for Advanced Alpha Particle Detection

New photodiode delivers high reliability with a chip-on-board design for easy reflow assembly



Pittsburgh, Pa., January 21, 2025 – [Excelitas Technologies® Corp.](#), the leading provider of advanced, life-enriching technologies that make a difference, serving global market leaders in the life sciences, advanced industrial, next-generation semiconductor, aerospace and defense end markets, introduces the [VTH3020 Chip-on-Board \(CoB\) Large Area Silicon Photodiode](#). Offering an easy reflow assembly process with high reliability, the new large area photodiode is optimal for applications requiring precise and efficient alpha particle detection, such as radon gas detection.

The VTH3020 delivers high responsivity to alpha particles due to its advanced chip design and the elimination of absorption typically caused by window assemblies. Its large 10 mm x 10 mm active area further enhances performance by maximizing the collection of low-level radiation.

Key features of the VTH3020 include:

- Advanced CoB silicon photodiode design for enhanced integration and performance
- 10 mm x 10 mm active area for maximum radiation collection
- Reflow solderable for streamlined assembly processes
- Low dark current and noise, ensuring high signal integrity
- High breakdown voltage for robust operation
- Low capacitance, optimizing performance for sensitive detection
- RoHS Compliance

“The VTH3020 represents a significant advancement in alpha particle detection technology,” said Anand Pandey, Strategic Market Development & Applications Manager at Excelitas Technologies. “With its large active area, ease of assembly and exceptional reliability, this reflow mountable photodiode is an ideal solution for a variety of applications demanding high sensitivity and precision—from radon detection to alpha particle detection and ambient light sensing.”

Excelitas will debut the VTH3020 Chip-on-Board (CoB) Large Area Silicon Photodiode from January 28-30, 2025 at [SPIE Photonics West](#) in San Francisco, CA in Booth #641. For more information, visit.

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About Excelitas Technologies



Excelitas is the leading provider of advanced, life-enriching technologies that make a difference, serving global market leaders in the life sciences, advanced industrial, next-generation semiconductor, aerospace and defense end markets. Headquartered in Pittsburgh, PA, USA, Excelitas is an essential partner in the design, development and manufacture of photonic technologies, offering leading-edge innovation in sensing, detection, imaging, optics and specialty illumination for customers worldwide.

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PR Contacts:

Scott Orr
Senior Director of Global Marketing – Commercial
scott.orr@excelitas.com
+1 (781) 996-5925

Cheryl Reynhout or Jill Anderson
On behalf of Excelitas Technologies Corp.
SVM Public Relations
excelitas@svmmarcom.com
+1 (401) 490-9700