

## Excelitas Technologies Announces C30645L-080 and C30662L-200 InGaAs SMD Avalanche Photodiodes

*New Compact, Cost-Effective Package Enables Easy Integration for High-Volume Range Finding and LiDAR Applications*



**WALTHAM, Mass., May 25, 2021 – [Excelitas](#)**

**[Technologies® Corp.](#)**, a global technology leader delivering innovative, customized photonic solutions, today announced its new high speed, large area [C30645L-080](#) and [C30662L-200](#) InGaAs SMD Avalanche Photodiodes (APDs). With high quantum efficiency, high responsivity and low noise in the spectral range between 1000 nm and 1700 nm, Excelitas' latest high-performance InGaAs APDs are optimized for a wavelength of 1550 nm. The ceramic surface mount

package of only 3 x 3 mm<sup>2</sup> size allows for easy integration into high-volume commercial and industrial applications, including eye-safe laser range finding systems and LiDAR time of flight systems.

C30645L-080 and C30662L-200 InGaAs SMD APD features include:

- Compact, robust ceramic 3 x 3 mm<sup>2</sup> SMT package provides a cost-effective option, compatible with robotics pick and place tool, and enables easier integration into various system designs
- High responsivity gives maximum signal to enable better signal to noise ratio (SNR)
- Low dark current and noise maximizes SNR
- Large detection active area of 80 µm and 200 µm facilitates the integration of optics
- Spectral response of 1000 nm – 1700 nm makes the APDs well suited to commonly available lasers in the 1300 nm – 1600 nm range

“As systems become more and more compact, smaller packages as offered by the C30645L-080 and C30662L-200 become critical to system integration. In addition, as volumes increase and new applications in time of flight are unlocked, more economical, high-volume manufacturing capabilities are also required to meet market needs in this area,” said Denis Boudreau, Product Leader, Photon Detection at Excelitas. “Our new highly compact surface mount InGaAs APDs were designed with this in mind, providing design engineers with a cost-efficient package where filters can be integrated, for the development of a variety of high-volume commercial and industrial applications.”

The package design and assembly processing techniques for the C30645L-080 and C30662L-200 are such that the die positioning is well controlled to the reference surfaces. This aids in the alignment of optical elements to the package and is superior to many of the commercially available plastic lead frame TO packages.

Additional information about Excelitas' wide array of high-performance InGaAs APDs is available at: <https://www.excelitas.com/product-category/high-performance-ingaas-apds>.



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**About Excelitas Technologies**

Excelitas Technologies® Corp. is a photonics technology leader focused on delivering innovative, high-performance, market-driven solutions to meet the lighting, optronics, detection and optical technology needs of our OEM customers. Serving a vast array of applications across biomedical, scientific, safety, security, consumer products, semiconductor, industrial manufacturing, defense and aerospace sectors, Excelitas stands committed to enabling our customers' success in their end-markets. Our photonics team consists of 7,000 professionals working across North America, Europe and Asia, to serve customers worldwide. Connect with Excelitas on [Facebook](#), [LinkedIn](#) and [Twitter](#).

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