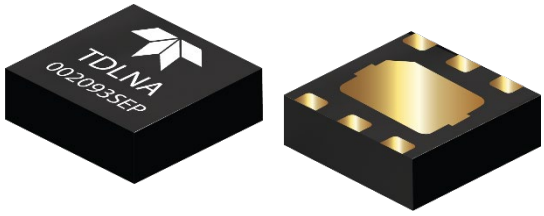
Press Release

Teledyne e2v HiRel Releases Best-in-Class, Ultra-Low Noise Amplifier for Space Applications

New product provides the Space RF engineering and design community with an off-the-shelf L- and S-band RF LNA for the most challenging high-reliability space applications.

MILPITAS, CA – September 19, 2023 – Teledyne e2v HiRel Electronics announces the availability of an industry leading, rad-tolerant, L- and S-band, low noise amplifier, model TDLNA002093SEP that is ideal for use in demanding high-reliability space and radar applications where low noise figure, minimal power consumption, and small package footprint are critical to mission success. This new LNA, developed on 0.15 µm, InGaAs, pHEMT technology, is available in a 6-pin dual-flat no-lead (DFN) 1.5 mm x 1.5 mm x 0.8 mm plastic surface mount package. It is now available for immediate shipment from our DoD Trusted Facility.



The TDLNA002093SEP LNA leverages monolithic microwave integrated circuit (MMIC) design techniques that deliver exceptional performance across both the L- and S-band communication channels. This amplifier delivers a gain of 21 dB from 1 GHz to 6 GHz while maintaining a noise figure of less than 0.37 dB and an output power (P1dB) of 19 dBm. The device utilizes application-specific biasing and can be biased over a V_{DD} range of 2.7 to 5.0 volts and an I_{DDQ} range of 30 mA to 100 mA. A Class-K evaluation kit is also available for customer evaluation.

"Today we're releasing our lowest noise figure LNA optimized for space and radar applications," said Mont Taylor, Vice President and Business Development Manager at Teledyne e2v HiRel. "With a noise figure of less than 0.37 dB coupled with ease of use from a positive single-supply voltage, we believe this new product will enable system designers with a superior solution for both space-based communication, phased array radar, and communications system applications."

The TDLNA002093SEP is TID radiation tolerant to 100 krad (Si) making it an excellent choice for satellite communication systems by increasing the power of radio signals with minimal noise and signal distortion. For more information on all of Teledyne e2v HiRel's space offerings, review our portfolio of semiconductors, converters, processors, and related services here on the Teledyne e2v HiRel website.

Devices are available for ordering and shipment today, from Teledyne e2v HiRel or an authorized distributor, in commercial versions and with the option of Classes H and K-equivalent screening. They are shipped from our DoD Trusted Facility in Milpitas, California.

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ABOUT TELEDYNE e2v HIREL ELECTRONICS
Teledyne e2v HiRel's innovations lead developments in space, transportation, defense and industrial markets. e2V HiRel's unique approach involves listening to the market and application challenges of customers and partnering with them to provide innovative standard, semi-custom or fully custom solutions, bringing increased value to their systems. For more information, visit www.tdehirel.com

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