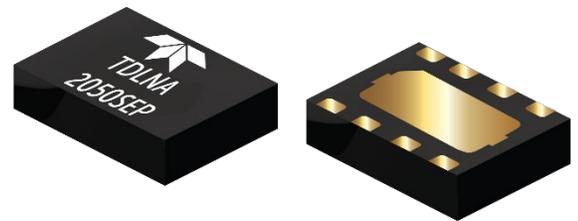


Teledyne e2v HiRel Releases Catalog Radiation Tolerant S-Band (2 GHz to 5 GHz) Ultra-Low Noise Amplifier for Space Applications

Off-the-shelf S-Band RF LNA for the most challenging high-reliability space applications

MILPITAS, CA – March 6, 2024 – [Teledyne e2v HiRel](#) announces the availability of a rad-tolerant S-Band low noise amplifier, model [TDLNA2050SEP](#) 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 a 90 nm enhancement-mode pseudomorphic High Electron Mobility Transistor (pHEMT) process, is available in an 8-pin dual-flat no-lead (DFN) 2 mm x 2 mm x 0.75 mm plastic surface mount package, and is qualified per MIL-PRF-38534 Class K.

The TDLNA2050SEP LNA leverages monolithic microwave integrated circuit (MMIC) design techniques that deliver exceptional performance in the S-band communication channel. The TDLNA2050SEP amplifier delivers a gain of 17.5 dB from 2 GHz to 5 GHz while maintaining a noise figure of less than 0.4 dB and an output power (P1dB) of 19.5 dBm. The device should be biased at a V_{DD} of +5.0 volts and I_{DDQ} of 60 mA and an evaluation kit is also available for customer evaluation.



“Today, we’re releasing our latest 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 0.4 dB coupled with ease of use from a positive single supply voltage, we believe this new product will provide system designers with a superior solution for both space-based communication, phased array radar and communications system applications.”

The TDLNA2050SEP 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 distortion which can degrade digital signals. 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 Defense Electronics 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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Teledyne e2v HiRel’s innovations lead developments in space, transportation, defense and industrial markets. Teledyne 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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Serving Defense, Space and Commercial sectors worldwide, Teledyne Defense Electronics offers a comprehensive portfolio of highly engineered solutions that meet your most demanding requirements in the harshest environments. Manufacturing both custom and off-the-shelf product offerings, our diverse product lines meet emerging needs for key applications for avionics, energetics, electronic warfare, missiles, radar, satcom, space and test and measurement. www.teledynedefelec.com.

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