

Teledyne e2v HiRel Releases Catalog Radiation Tolerant 20 GHz SPDT Absorptive RF Switch for Space Applications

New product provides the Space RF engineering and design community with an off-the-shelf high frequency RF switch for the most challenging high-reliability space applications.

MILPITAS, CA – December 14th, 2021 – [Teledyne e2v HiRel](#) announces the availability of a rad-tolerant 20 GHz, Single Pole Double Throw (SPDT) absorptive RF switch, model TDSW020A2T, that is ideal for use in demanding high reliability, space and defense applications and is now available with qualified material off-the-shelf. This new RF switch, developed on 0.15 μm InGaAs pHEMT technology, will be available as die and is qualified per MIL-PRF-38534 Class K-equivalent for space applications.

The [TDSW020A2T](#) leverages monolithic microwave integrated circuit (MMIC) design techniques that deliver superior performance in the Ku and K microwave and millimeter-wave bands. The switch delivers low insertion loss, high isolation, fast switching times, and high linearity across a wide frequency band from dc to 20 GHz and attains an input power 1 dB compression of 28 dBm (typical). Class K equivalent element evaluation is performed per wafer.

“We continue to expand our portfolio of high reliability RF products for Ku and K bands and beyond,” said Mont Taylor, Vice President and Business Development Manager at Teledyne e2v HiRel. “This new product is the first 20 GHz switch qualified to 100 krad, and joins our growing product lines of amplifiers, low noise amplifiers, power amplifiers, DVGAs, digital step attenuators, limiters, mixers, pre-scalers, phase-locked loops, and switches.”

The TDSW020A2T is TID radiation tolerant to 100 krad (Si), making it an excellent choice for satellites and other high-altitude, high reliability applications. For more information on all of Teledyne e2v HiRel’s space offerings, review our portfolio of semiconductors, converters and 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](#), with the option of Classes H- or K-equivalent screening. They are shipped from our DoD Trusted Facility in Milpitas, California.

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ABOUT TELEDYNE e2v HIREL ELECTRONICS

Teledyne HiRel’s innovations lead developments in space, transportation, defense, and industrial markets. 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 <http://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.teledynedefenseelectronics.com/.

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