

29 November – Los Angeles: APIC Corporation announces its latest addition to their high fidelity RF over fiber product line, the 40 GHz, 25 mW photo detector (PD). This technology is a byproduct of an advanced and challenging research and development effort sponsored by DARPA and the US Navy.

The InGaAs PD, which operates in the 1550 nm band, is optimized for high input optical power and maximum output current linearity. This device is designed to work for RF over fiber links (DC to 40 GHz) that require high dynamic range, low noise figure and high RF gain such as: fiber to the antenna (FTTA) (i.e. microwave links; radio telescopes; SATCOM terminals: X, Ku and Ka Bands (to 40 GHz)); wireless communications (i.e. 5G RAN and DAS); electronic sensors and electronic warfare systems; and tethered remotely operated vehicles/sensors (i.e. aerostats, underwater vehicles, oil and gas). The internal components are soldered and laser welded, ensuring maximum durability and performance stability through high vibrations and dynamic ambient temperatures. To ensure maximum flatness in the RF output, the photodiode has 50 Ohm on-chip termination and DC coupled output. The design allows integration inside the package of an optional wide bandwidth distributed low noise amplifier. The photodiode uses high performance RF K-connector for minimal coupling loss.

APIC Corporation is a small business whose core competency is in high performance photonics technologies. Every product is expertly designed by an exceptionally qualified team; fabricated and manufactured by craftsmen using state of the art tools and equipment; and quality tested to assure optimal performance.



*APIC's 40 GHz, 25 mW photo detector*