

# **Compact direct detection Schottky receiver modules for sub-terahertz wireless communications**

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## **Abstract**

In this paper we present 1Gb/s wireless data reception at different sub-THz carrier wave frequencies, using a single quasi-optic Schottky receiver module. The module employs a Log-Spiral broadband antenna patterned on silicon. In this paper we present the performances at carrier wave frequencies ranging from 90 GHz to 330 GHz, demonstrating for the first time the flexibility of the module as versatile receiver for future multi-band THz communication links.