

# Sub-Terahertz components

## ➤ High-power high-bandwidth multipliers

Based on planar GaAs **Schottky diodes** technology

State-of-the-art performances

High-power components

300 GHz and 600 GHz

High bandwidth >12%

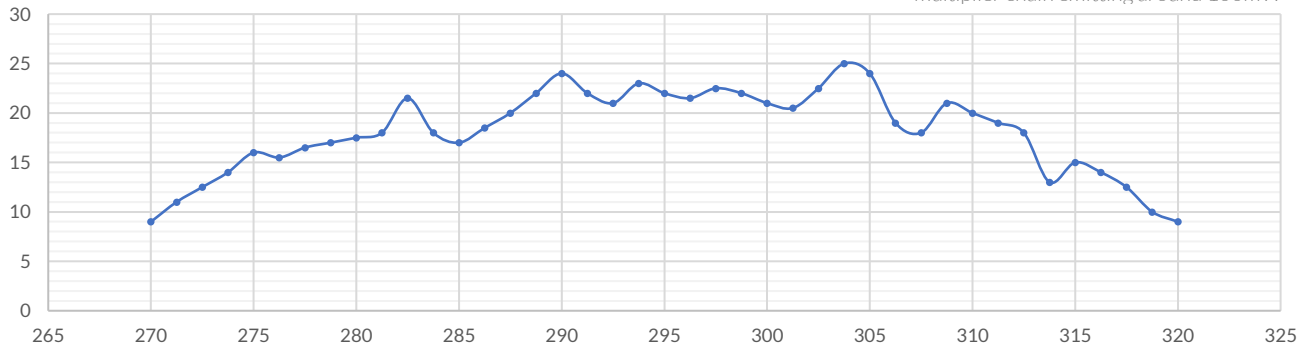


Lytid's range of high power frequency multipliers provide state-of-the-art performances across the sub-terahertz band. These frequency doublers are commonly used to extend the frequency range of microwave and mmW sources towards higher frequencies. The doublers are based on planar GaAs Schottky

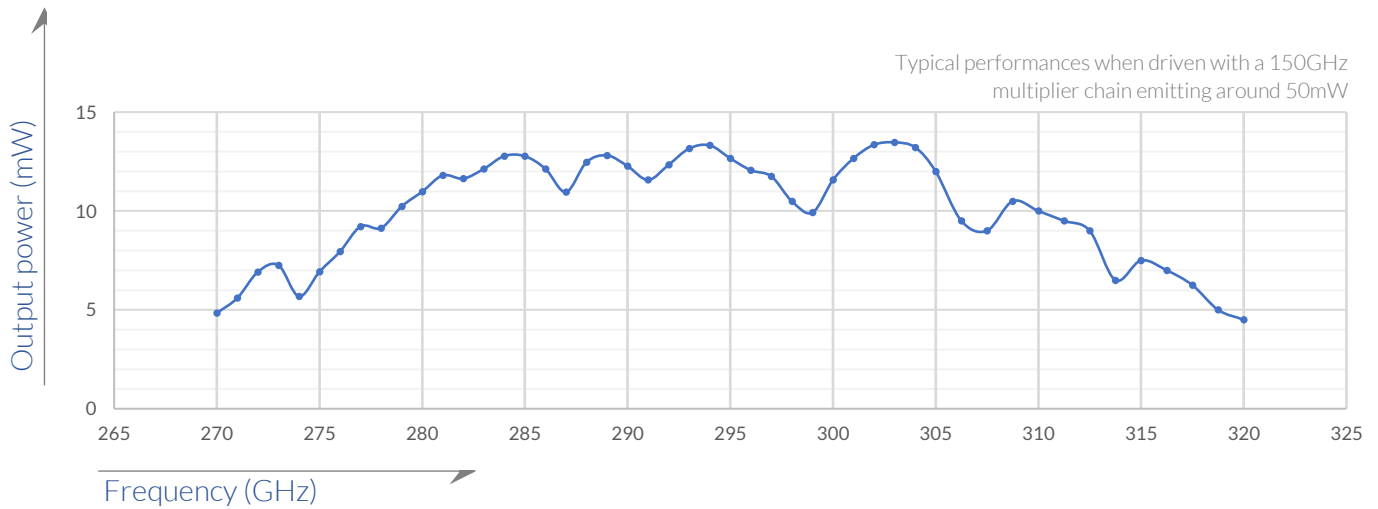
diode technology derived from European Space Programs. The frequency coverage of more than 12% of the central frequency and the conversion efficiencies are unmatched on the market. These cutting edge sub-terahertz components will help you extend your current setup by providing unparalleled performances and possibilities.

# 300 GHz doubler

Typical performances when driven with a 150GHz multiplier chain emitting around 100mW



Typical performances when driven with a 150GHz multiplier chain emitting around 50mW



## Features:

- Fullband operation
- Planar GaAs Schottky diode technology
- No mechanical tuners
- Bias required for optimum performances

## Applications:

- Frequency extension of microwave and mmW sources
- Detector characterization in the sub-THz range
- High spectral purity spectroscopy

Technical specifications	300GHz doubler
<b>Electrical data</b>	
Bias	3-6V DC typ.
Connector	SMA
<b>Input port data</b>	
Frequency	135 - 160 GHz
Port	WR6.5 (UG387/UM)
Power	<100mW
<b>Output port data</b>	
Frequency	270 - 320 GHz
Port	WR3.4(UG387/UM)
Power	Typ. up to 25mW
<b>Performances</b>	
Conversion Efficiency	25%