

## Broadband 50 – 75 GHz Frequency Doubler Type 216D

### Product Description

Broadband Frequency Doubler based on ACST high-power multiplier technology. No bias required.



*Fig. 1: Optical view of the product*

### Application Areas

- Laboratory instrumentation
- MM-wave FMCW-Radar
- Active imaging
- LO Source for MM/SubMM wave heterodyne receivers

### Product Features

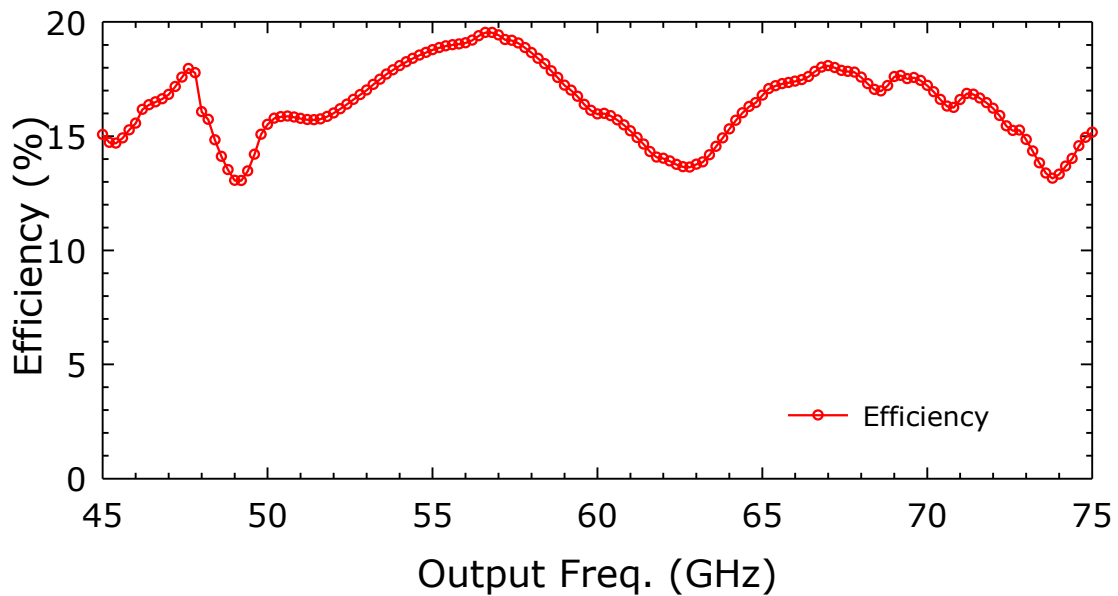
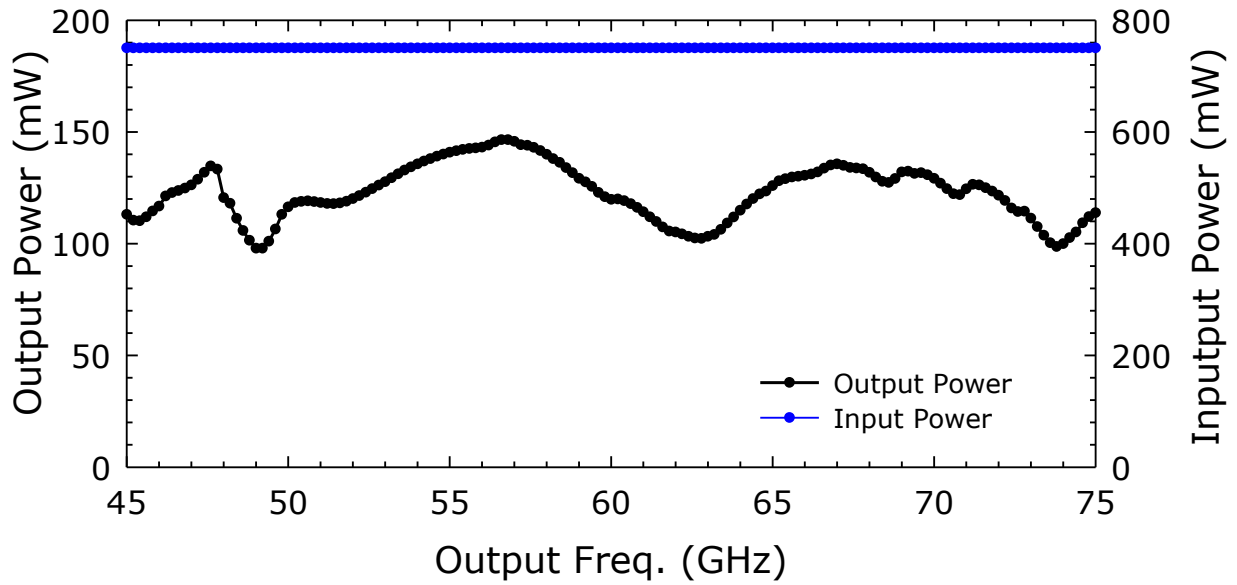
- High-Power & Efficiency
- Full band
- Flat response

Tab. 1: Technical Specifications

Technical Specifications	Minimum	Typ.	Maximum
Input Port (Coaxial)		K-Type Connector	
Input Frequency (GHz)	25		37.50
Input Power (mW)	50		700
Output Port (UG 387/U-M)		WR-15	
Output Frequency (GHz)	50		75
Output Power (mW)			110
Conversion Efficiency* (%)	8	12	15

\* Lower Efficiency may be expected at input power lower than specified and near the band edges.

Typical Performance



## Product Overview

### Notes

- All plotted data represent typical values. The actual data may vary from unit to unit.
- ACST Dedicated Bias Box included (requires DC voltage input).
- All tests are carried out at a room temperature of 24 °C.

### Caution

- Absolute maximum ratings should not be used under normal operating conditions. Exceeding maximum ratings may lead to permanent failure.
- Any foreign body inserted into the waveguide will cause a loss of performance and may damage the device.
- Bias Port is extremely ESD sensitive.

ACST GmbH reserves the right to make changes to the product or information contained herein without notice. Visit [www.acst.de](http://www.acst.de) for additional data sheets and product information.

