

Broadband 55 – 85 GHz Frequency Doubler Type 216B

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

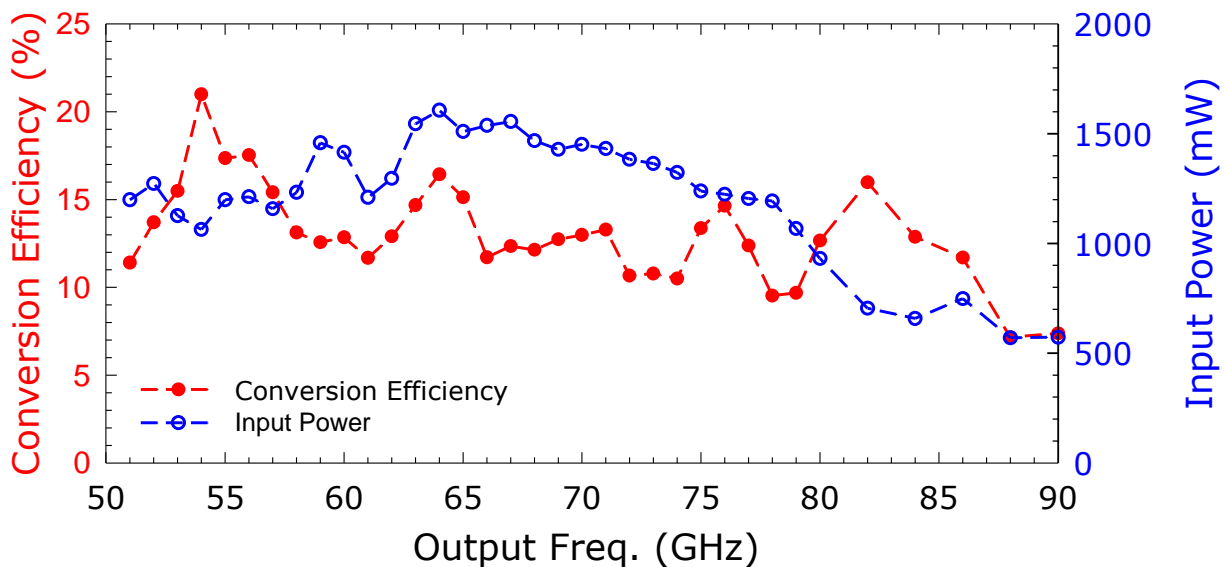
- High-Efficiency
- Full band
- Flat response

Tab. 1: Technical Specifications

Technical Specifications	Minimum	Typ.	Maximum
Input Port (Coaxial)		K-Type Connector	
Input Frequency (GHz)	27.5 (25)		43.5 (45)
Input Power (mW)	50	800	1400
Output Port (UG 387/U-M)		WR-12	
Output Frequency (GHz)	55 (50)		85 (90)
Output Power (mW)		100	250
Conversion Efficiency* (%)	8	10	15

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

Typical Performance



Product Overview

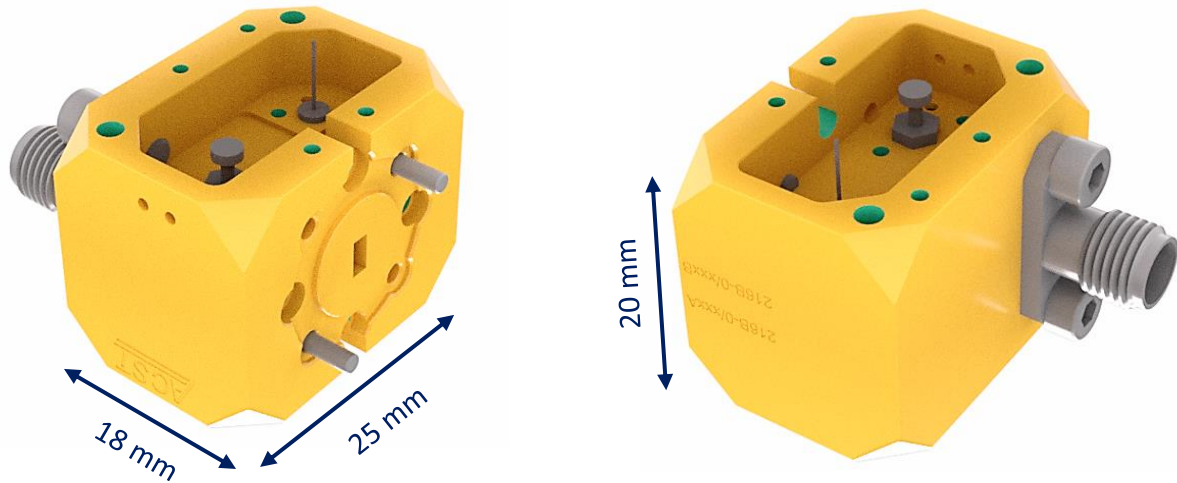


Fig. 2: Overall dimensions

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 for additional data sheets and product information.

