

# High-Efficiency High-Power 475 – 540 GHz Frequency Tripler Type 215BX

## **Product Description**

Biasable High-Efficiency Frequency Tripler based on ACST high-power multiplier technology.



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
- Large bandwidth
- Flat response

Datasheet High-Efficiency High-Power 475 – 540 GHz Frequency Tripler | Type 215BX Rev. V2.0 Page 1 of 2 ACST GmbH | Josef-Bautz-Str. 15 | DE-63457 Hanau Phone: +49-6181-9669 860 | E-Mail: sales@acst.de http://www.acst.de



#### Tab. 1: Technical Specifications

Technical Specifications	Minimum	Тур.	Maximum
Input Port (UG 387/U-M)		WR-5.1	
Input Frequency (GHz)	158.33		180
Input Power (mW)	80		300
Output Port (UG 387/U-M)		WR-1.9	
Output Frequency (GHz)	475		540
Output Power (mW)			20
Conversion Efficiency* (%)	6	8	12

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

#### Notes

- All values presented are based on preliminary estimations.
- 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 <u>www.acst.de</u> for additional data sheets and product information.



ACST GmbH | Josef-Bautz-Str. 15 | DE-63457 Hanau Phone: +49-6181-9669 860 | E-Mail: sales@acst.de http://www.acst.de