



ZC500

ZC500 Millimeter-Wave Converters

Part-No.: 1323.7681.02

Product Description

Key Features:

- variable output power
- wide dynamic range
- wide frequency range
- highly stable measurement
- convenient handling





Technical Specifications

Test Port

Frequency Range [GHz]	325 to 500
Port Type	WM-570 (UG387/U flange compatible)
Output Power [dBm (typ.)]	325 to 440 GHz > -17 dBm (n.trc.), typ. -13 dBm 440 to 500 GHz > -24 dBm (n.trc.), typ. -18 dBm
Output Power Attenuation [dB]	0 to 40
Input Power Damage Level [dBm]	+10
Stability (Magnitude [dB] / Phase [°] (typ.))	typ. < 0.5dB and typ. < 6°

Source Input (RF IN)

Frequency Range [GHz]	9.02 to 13.88
Port Type	2.92 mm, female
Input Power Range [dBm]	-15 to +10

Local Oscillator Input (LO IN)

Frequency Range [GHz]	13.53 to 20.82
Port Type	2.92 mm, female
Input Power Range [dBm]	+5 to +10

Measurement Output (MEAS OUT)

Frequency Range [MHz]	5 to 2000
Port Type	SMA, female

Reference Output (REF OUT)

Frequency Range [MHz]	5 to 2000
Port Type	SMA, female

System Characteristics

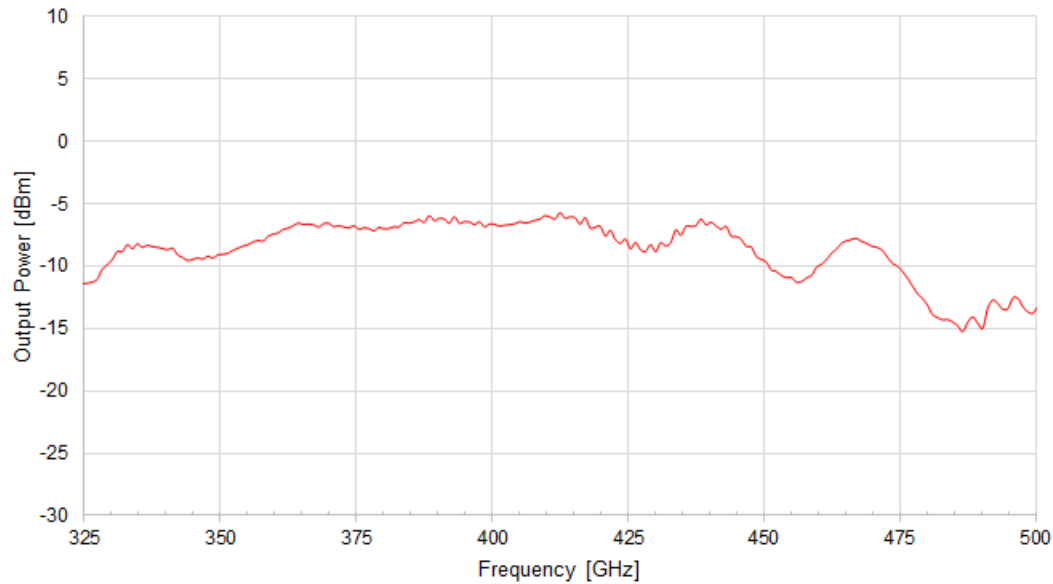
Source match (without system error correction)	> 20 dB (n.trc.) ¹
Directivity (without system error correction)	> 20 dB (n.trc.) ¹
Dynamic Range [dB]	> 85, typ. 100

Dynamic range is defined as the difference between the data trace of the transmission magnitude with maximum test port output power and both test ports through-connected on the one hand and the RMS value of the data trace of the transmission magnitude produced by noise and crosstalk with test ports short-circuited on the other. The specification is valid without system error correction and at 10Hz measurement bandwidth. The dynamic range can be increased by using a measurement bandwidth of 1Hz.

¹ Without consideration of measurement uncertainty.

Typical Performance

ZC500 – Output Power



ZC500 - Dynamic

