

# **Product Data Sheet**

#### **ZC1100**

### **ZC1100 Millimeterwave Converters**

Part-No.: 21000089

#### **Product Description**

#### **Key Features:**

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





## **Product Data Sheet**

Technical Specifications	
Test Port	
Frequency Range [GHz]	750 to 1100
Port Type	WM-250 (UG387/U flange compatible)
Output Power [dBm (typ.)]	750 to 1100 GHz > -40 dBm, typ25 dBm
Output Power Attenuation [dB]	n.A.
Input Power Damage Level [dBm]	+0
Stability (Magnitude [dB] / Phase [°] (typ.) )	typ. < 0.5 dB and typ. < 6°
Source Input (RF IN)	
Frequency Range [GHz]	13.88 to 20.37
Port Type	2.92 mm, female
Input Power Range [dBm]	+5 to +10
Local Oscillator Input (LO IN)	
Frequency Range [GHz]	15.62 to 22.91
Port Type	SMA, 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)	> 15 dB (n.trc.) <sup>1</sup>
•	> 15 dB (n.trc.) <sup>1</sup>
Dynamic Range [dB]	> 40, typ. 65
Local Oscillator Input (LO IN)  Frequency Range [GHz]  Port Type  Input Power Range [dBm]  Measurement Output (MEAS OUT)  Frequency Range [MHz]  Port Type  Reference Output (REF OUT)  Frequency Range [MHz]  Port Type  System Characteristics  Source match (without system error correction)  Directivity (without system error correction)	15.62 to 22.91  SMA, female  +5 to +10  5 to 2000  SMA, female  5 to 2000  SMA, female  > 15 dB (n.trc.) <sup>1</sup> > 15 dB (n.trc.) <sup>1</sup>

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.

#### **Typical Performance**

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  Without consideration of measurement uncertainty.