

# **Product Data Sheet**

## **ZC118**

# **ZC118 Millimeter-Wave Converters**

Part-No.: 3626.5362.02

## **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]	78 to 118
Port Type	WR2.4 x 1.2 (UG387/U flange compatible)
Output Power [ dBm (typ.)]	>+6, +9 dBm (typ.)
Output Power Attenuation [dB]	n.A.
Input Power Damage Level [dBm]	+20
Stability (Magnitude [dB] / Phase [°] (typ.) )	typ.< 0.2 dB and typ. < 2°
Source Input (RF IN)	
Frequency Range [GHz]	13.00 to 19.66
Port Type	2.92 mm, female
Input Power Range [dBm]	-15 to +10
Local Oscillator Input (LO IN)	
Frequency Range [GHz]	13.00 to 19.66
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)	> 19 dB (n.trc.) <sup>1</sup> , typ. >30dB
Directivity (without system error correction)	> 23 dB (n.trc.) <sup>1</sup> , typ. >30dB
Dynamic Range [dB]	> 100, typ. 110

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.

<sup>&</sup>lt;sup>1</sup> Without consideration of measurement uncertainty.



### **Typical Performance**

78

83

88

93

# 

98

Frequency [GHz]

103

108

113

