

Product Data Sheet

ZC140

ZC140 Millimeter-Wave Converters

Part-No.: 1323.7623.02

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]	110 to 140
Port Type	WM-2032 (UG387/U flange compatible)
Output Power [dBm (typ.)]	90 to 95 GHz >+5, +7 dBm (typ.), 95 to 135 GHz >+7, +9 dBm (typ.), 135 to 140 GHz >+5, +7 dBm (typ.)
Output Power Attenuation [dB]	0 to 40
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]	15 to 23.33
Port Type	2.92 mm, female
Input Power Range [dBm]	-15 to +10
Local Oscillator Input (LO IN)	
Frequency Range [GHz]	11.21 to 17.46
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)	> 25 dB (n.trc.) ¹
Directivity (without system error correction)	> 25 dB (n.trc.) ¹
Dynamic Range [dB]	> 105, typ. 120

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.