



ZC90E

ZC90E Millimeter Wave Converters

Part-No.: 09000021

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] | 60 to 90 |
| Port Type | WR12 (UG387/UM) |
| Output Power [dBm (typ.)] | >+7, +10 dBm (typ.) |
| Output Power Attenuation [dB] | 0 to 60 |
| 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] | 10 to 15 |
| Port Type | 2.92 mm, female |
| Input Power Range [dBm] | +5 to +10 |

Local Oscillator Input (LO IN)

| | |
|-------------------------|-----------|
| Frequency Range [GHz] | 10 to 15 |
| Port Type | +5 to +10 |
| Input Power Range [dBm] | +5 to +10 |

Measurement Output (MEAS OUT)

| | |
|-----------------------|----------------|
| Frequency Range [MHz] | 5 to 2000 |
| Port Type | 3.5 mm, female |

Reference Output (REF OUT)

| | |
|-----------------------|----------------|
| Frequency Range [MHz] | 5 to 2000 |
| Port Type | 3.5 mm, 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] | > 100, 115 |

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.