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Alice Messtechnik GmbH

**R&S®RT-Zxx**

**STANDARD PROBES**

Specifications



Data Sheet | Version 23.00

**ROHDE & SCHWARZ**

Make ideas real



Version 23.00, September 2022

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## Definitions

### General

Product data applies under the following conditions:

- Three hours storage at ambient temperature followed by 30 minutes warm-up operation
- Specified environmental conditions met
- Recommended calibration interval adhered to

### Specifications with limits

Represent warranted product performance by means of a range of values for the specified parameter. These specifications are marked with limiting symbols such as  $<$ ,  $\leq$ ,  $>$ ,  $\geq$ ,  $\pm$ , or descriptions such as maximum, limit of, minimum. Compliance is ensured by testing or is derived from the design. Test limits are narrowed by guard bands to take into account measurement uncertainties, drift and aging, if applicable.

### Specifications without limits

Represent warranted product performance for the specified parameter. These specifications are not specially marked and represent values with no or negligible deviations from the given value (e.g. dimensions or resolution of a setting parameter). Compliance is ensured by design.

### Typical data (typ.)

Characterizes product performance by means of representative information for the given parameter. When marked with  $<$ ,  $>$  or as a range, it represents the performance met by approximately 80 % of the instruments at production time. Otherwise, it represents the mean value.

### Measured values (meas.)

Characterize expected product performance by means of measurement results gained from individual samples.

Typical data as well as measured values are not warranted by Rohde & Schwarz.

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## Probe/oscilloscope chart

Base unit: R&S®	Probe interface	RTC1000	RTB2000	RTM3000	MXO 4	RTE	RTO	RTP	RTH	RT-ZA9	RT-Z1M	Page
<b>Probe: R&amp;S®</b>												
<b>Passive probes</b>												
RT-ZP03S	BNC, 1 MΩ	●	●									5
RT-ZP05S	BNC, 1 MΩ, readout			●								8
RTM-ZP10										●		14
RT-ZP10						●	●					14
RT-ZP11					●							17
RT-ZP1X		○	○	●	●	●	●					20
RT-ZI10	BNC, 1 MΩ, isolated								●			–
RT-ZL03	pin header	●	●									22
RT-ZL04	Rohde & Schwarz extension			●	●	●	●	●	●			22

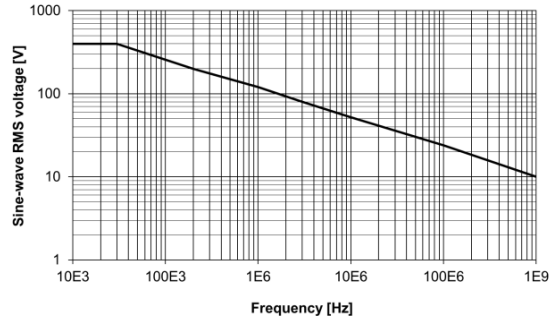
- recommended extra
- possible accessory, with limited functionality of probe or base unit

## R&S®RT-ZP03 passive probe

All parameters are valid when the probe is connected to an appropriate Rohde & Schwarz oscilloscope with an input impedance of 1 M $\Omega$ . See table on page 4 and Rohde & Schwarz oscilloscope operating manual for more details.

		<b>R&amp;S®RT-ZP03</b>	
<b>Attenuation setting</b>		<b>1:1</b>	<b>10:1</b>
<b>Step response</b>			
Rise time	system, 10 % to 90 %	35 ns (meas.)	1.15 ns (meas.)
<b>Frequency response</b>			
Bandwidth	system, -3 dB, starting at DC	> 10 MHz (meas.)	> 300 MHz (meas.)
<b>Input impedance</b>			
DC input resistance	system	1 M $\Omega$	10 M $\Omega$
Input capacitance	system	82 pF (meas.)	12 pF (meas.)
<b>DC characteristics</b>			
Attenuation error			$\pm 3$ % (meas.)
<b>Maximum rated input voltage</b>			
Continuous voltage	derated, see figure on page 6	55 V (RMS)	400 V (RMS)
Transient overvoltage			$\pm 600$ V
<b>Base unit</b>			
Use with		R&S®RTC1000, R&S®RTB2000	
Input coupling	AC/DC	1 M $\Omega$	

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*R&S®RT-ZP03 maximum rated sine-wave root mean square voltage versus frequency (CAT I)*

**General data**

<b>Temperature</b>		
Temperature loading	operating temperature range	0 °C to +40 °C
Climatic loading		80 % relative humidity without condensation
Altitude	operation	up to 2000 m
<b>Safety</b>		in line with Low Voltage Directive 2006/95/EC, IEC/EN 61010-31 (pollution degree 2)
<b>RoHS</b>		in line with EN 50581
<b>Mechanical data</b>		
Dimensions	diameter of probe tip	approx. 5 mm (0.2 in)
	cable length	approx. 1.2 m (47 in)
Weight	probe only	approx. 60 g (0.13 lb)
<b>Probe interface</b>		
Connector		BNC















































