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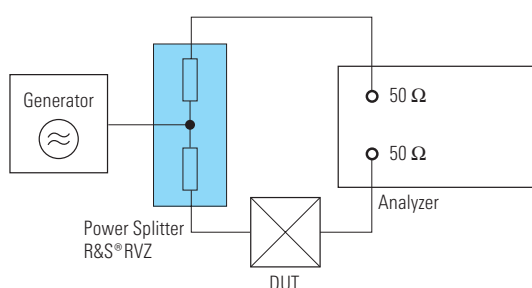
Power Splitter R&S®RVZ

Characteristics and uses

The Power Splitter R&S®RVZ is designed for use in test setups in which two signal paths are to be fed with the same waves, e.g.

- ◆ DUT and power control, or
- ◆ DUT and reference signal input.

An example is shown in the diagram.



This kind of test setup calls for a power splitter like the R&S®RVZ with two 50 Ω resistors. This is the only way to ensure that the incident wave to the DUT is exactly identical to the wave in the reference channel. Since the incident wave is being used as the reference, always the correct transmission factor is measured independent of a possible mismatch of the DUT or the frequency response of the signal source. This requirement is not met by a three-port junction box like the R&S®DVU3 which

uses three $16\frac{2}{3} \Omega$ resistors. For this reason, it should only be employed for symmetrical splitting of power with matched load impedance.

Description

The Power Splitter R&S®RVZ essentially consists of two integrated, high-precision 50 Ω thin-film resistors accommodated in a sturdy housing. This ensures excellent RF characteristics as well as a high power-handling capacity.

Input and outputs of the Power Splitter R&S®RVZ are fitted with N connectors.

Test setup for transmission measurements

Specifications

Frequency range	0 Hz to 2700 MHz
Impedance	50 Ω
SWR (input)	≤1.1
Equivalent SWR of outputs ¹⁾	≤1.1
Output level deviation	≤0.1 dB
Output phase deviation	≤2°
Insertion loss from input to each output	6 dB –0.1/+0.5 dB
Power-handling capacity	1 W

General data	
Connectors	N female
Operating temperature range	0 °C to +55 °C
Storage temperature range	–40 °C to +75 °C
Dimensions (W × H × D)	47 mm × 70 mm × 16 mm
Weight	100 g

Ordering information

Designation	Type	Order No.
Power Splitter	R&S®RVZ	0800.6612.52

¹⁾ The equivalent output SWR determines symmetry and absolute accuracy of the two paths in the power splitter. For error assessment, it may be regarded as the output SWR of a generator in a test setup without power splitter (measurement using the substitution method: comparison of measurements with DUT and without DUT).



More information at
www.rohde-schwarz.com
 (search term: RVZ)



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