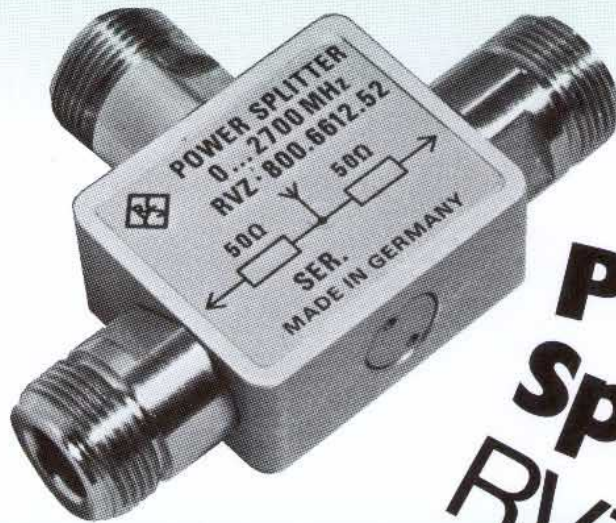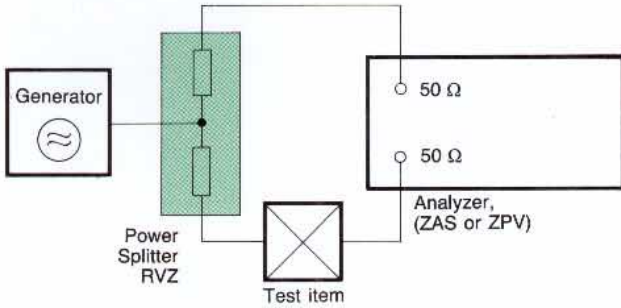# ROHDE & SCHWARZ

Power Splitter RVZ

POWER SPLITTER RVZ

Characteristics and uses

The **Power Splitter RVZ** is intended for use in test setups in which two signal paths are to be fed with the same waves, e.g.
- test item and power control, or
- test item and reference signal input.

An example is shown in the following diagram.

Test setup for transmission measurements

This kind of test setup calls for a power splitter like the RVZ which comprises two 50-Ω resistors. This is the only way to ensure that the incident wave to the test item is exactly identical to the wave in the reference channel. Consequently, with the incident wave being used as reference, always the correct transmission factor is measured independent from a possible mismatch of the test item or the frequency response of the signal source. This requirement is not met by a three-port junction box like the DVU 3 which uses three $16^2/_3$-Ω resistors. For this reason, it should only be employed for symmetrical splitting of power with matched load impedance.

Description

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

Input and outputs of the Power Splitter RVZ are fitted with N connectors.

Specifications

Frequency range	0 to 2700 MHz
Characteristic impedance	50 Ω
VSWR (input)	≤ 1.1
Equivalent VSWR of outputs*)	≤ 1.1
Level deviation of outputs	≤ 0.1 dB
Phase deviation of outputs	≤ 2°
Insertion loss	
from input to each output	6 dB − 0.1 / + 0.5 dB
Power-handling capacity	1 W

General data

Connectors	input: female N
	outputs: female N
Nominal temperature range	0 to + 55 °C
Storage temperature range	− 40 to + 75 °C
Dimensions	47 mm × 70 mm × 16 mm
Weight	100 g

Ordering information

Order designation	▶ Power Splitter RVZ
	800.6612.52

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