

METHOD OF COMPLEX REFLECTION PARAMETERS MEASUREMENT OF TRANSISTOR LOADS USING A SIMULATOR-ANALYZER OF MICROWAVE AMPLIFIERS AND OSCILLATORS

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The article considers a simulator/analyzer that provides simulation modeling of microwave amplifiers and oscillators in accordance with their technical specifications, followed by the measurement of complex load reflection coefficients of the active component of these devices for their design. It also considers a method of measurement of these parameters and a method of calibration of the simulator/analyzer providing transfer of measurement results from the coaxial measuring line of the simulator-analyzer to the microstrip line. In addition, the article considers a method for analyzing the stability of the active component in the space of complex reflection coefficients of its loads, which facilitates their selection in the simulation of amplifiers and oscillators.

Keywords: simulator/analyzer, calibration, measurement technique, complex reflection coefficient and its normalization, stability analysis method

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Received 16.09.2020

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