

IMPROVED ROUTINE OF COMPLEX PERMITTIVITY AND PERMEABILITY EVALUATION FROM THE MEASURED MICROWAVE SCATTERING PARAMETERS

The purpose of the work is to propose an improved procedure of both material parameters (complex permittivity ϵ and permeability μ) determination from the measured microwave scattering parameters. A qualitative analysis revealed that analytical methods give inaccurate and unphysical results in the resonance regions. Nowadays there exist a couple of improved only permittivity determination algorithms. It is shown the possible routine of both permittivity and permeability evaluation from the measured data using VNA.

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