

120. Title: Reconstruction of the Spectrum of the Relative Permittivity of the Plane-Parallel Plate from the Angular Dependences of Its Transmission Coefficients

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Abstract: A method for unambiguously determining the frequency dependence of the relative permittivity of a homogeneous medium has been proposed and implemented from the measured angular dependences of the complex transmission spectra of pulsed terahertz radiation through a plane-parallel plate. It has been shown experimentally that the proposed method makes it possible to reconstruct the dielectric parameters of the plane under investigation, even in the presence of time overlapping of waves rereflected from the medium boundaries.