

## One-Root Intervals of Dispersion Relations for a Resonator with Dielectric Sample (Short Papers)

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V. Bilik. "One-Root Intervals of Dispersion Relations for a Resonator with Dielectric Sample (Short Papers)." 1984 *Transactions on Microwave Theory and Techniques* 32.2 (Feb. 1984 [T-MTT]): 197-198.

A method is developed yielding intervals with analytically expressed bounds that contain only one root of the dispersion relation corresponding to any chosen mode of a cylindrical resonator with a dielectric sample, filling its cross section along part of the length of the resonator. A method for finding both the eigenfrequency and the sample permittivity is given.

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