

## On the Measurement of the Complex Permittivity of Materials by an Open-Ended Coaxial Probe

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*D. Misra. "On the Measurement of the Complex Permittivity of Materials by an Open-Ended Coaxial Probe." 1995 Microwave and Guided Wave Letters 5.5 (May 1995 [MGWL]): 161-163.*

A number of papers have appeared on the characterization of materials using a coaxial probe, In most cases, approximate admittance models have been used for this purpose. The present work compares two rigorous mathematical models for the aperture admittance. One of these relations is based on the variational principle while the other utilizes the method of moments. Muller's method is then used to determine the complex permittivity of materials. The two procedures have been tested in the frequency range of 1-18 GHz.

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