

## Scattering Matrix of Dielectric Resonator Coupled with Two Microstrip Lines

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*S. Verdeyme and P. Guillon. "Scattering Matrix of Dielectric Resonator Coupled with Two Microstrip Lines." 1991 Transactions on Microwave Theory and Techniques 39.3 (Mar. 1991 [T-MTT]): 517-520.*

The coupling between a dipolar, TE/sub 01delta/ cylindrical dielectric resonator and two microstrip lines terminated by different loads is modeled by a lumped equivalent circuit. A three-dimensional finite element method is used to determine the resonant frequency, quality factor, and coupling coefficients as a function of the electromagnetic parameters of the structure.

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