

# Abstracts

## Resonant Frequency of Cylindrical Dielectric Resonator Placed in an MIC Environment (Short Papers)

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*R.K. Mongia. "Resonant Frequency of Cylindrical Dielectric Resonator Placed in an MIC Environment (Short Papers)." 1990 Transactions on Microwave Theory and Techniques 38.6 (Jun. 1990 [T-MTT]): 802-804.*

In this paper, an effective dielectric constant technique has been used to determine the resonant frequency of the TE/sub 01delta/ mode of a cylindrical dielectric resonator placed in an MIC environment. A suitable expression for epsilon/sub eff/ has been reported which makes it possible to obtain results that compare favorably with rigorous methods. A large number of experimental results are also reported to demonstrate the validity of the method. Finally, for a given resonant frequency, closed-form expressions are given for computing the height of the resonator.

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