Abstracts

Dispersion Characteristics of Curved Microstrip Transmission Lines (Short Papers)

J.S. Roy, D.R. Poddar, A. Mukherjee and S.K. Chowdhury. "Dispersion Characteristics of Curved Microstrip Transmission Lines (Short Papers)." 1990 Transactions on Microwave Theory and Techniques 38.9 (Sep. 1990 [T-MTT] (Special Issue on Multifunction MMIC's and their System Applications)): 1366-1370.

In this paper, an empirical expression for the effective dielectric permittivity of curved microstrip transmission lines is derived. Considering a rectangular line as a curved line of infinite radius, the closed-form expression for the frequency dependence of the effective dielectric permittivity of rectangular microstrip line is compared with other available results. This expression for the frequency dependence of the effective dielectric permittivity of curved microstrip transmission lines is very general, simple, and accurate and is suitable for CAD implementation.

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