Abstracts

Decoupling Between Two Conductor Microstrip Transmission Line

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A numerical analysis of two-conductor transmission line with a rectangular notch in the dielectric between the strips is presented. Three media integral equations are derived and solved for the charge distributions. The decoupling between such two-conductor coupled microstrip transmission line is investigated for asymmetric conductors. It is found that the coupling between two conducting lines can be reduced significantly by removing dielectric material between the lines which has a rectangular shape. For best decoupling, the width should be as wide as possible between the conducting lines but the depth should have an optima somewhere in the base dielectric substrate.

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