

Closed-Form Expressions for the Design of Microstrip Lines with Two Substrate Layers

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A simple closed-form expression for the effective dielectric constant of a microstrip on a two-layer substrate is presented. Results for single layer cases are incorporated in the formula to simplify it and increase the accuracy. The formula is curve-fitted from results computed with the Spectral Domain approach and is accurate to within three percent relative error over a wide range of parameters.

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