Abstracts

Integral Equation Solution to the Skin Effect Problem in Conductor Strips of Finite Thickness

J.-F. Kiang. "Integral Equation Solution to the Skin Effect Problem in Conductor Strips of Finite Thickness." 1991 Transactions on Microwave Theory and Techniques 39.3 (Mar. 1991 [T-MTT]): 452-460.

The skin effect of single and coupled conductor strips of finite thickness is analyzed using the dyadic Green's function and the integral equation formulation. Galerkin's method is used to solve the integral equation for the dispersion characteristics. The effects of the geometrical and electrical parameters on the conductor loss are investigated. Results are compared with the literature and shown to be in good agreement. This approach is very useful for analyzing the electrical properties of interconnects in high-performance computer circuitries.

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