# Abstracts

## A Moment Method Analysis for Coplanar Waveguide Discontinuity Inductances

*C.-W. Chiu and R.-B. Wu. "A Moment Method Analysis for Coplanar Waveguide Discontinuity Inductances." 1993 Transactions on Microwave Theory and Techniques 41.8 (Sep. 1993 [T-MTT] (Special Issue on Modeling and Design of Coplanar Monolithic Microwave and Millimeter-Wave Integrated Circuits)): 1511-1514.*

Based on the concept of duality, the quasi-static equivalent inductance of a coplanar waveguide discontinuity is determined from the equivalent capacitance of its complementary structure, i.e., a coplanar strip discontinuity in the free space. For the capacitance calculation, an integral equation governing the excess charge distribution near the discontinuity is solved by the method of moments together with Galerkin's approach. Numerical results for the short end and symmetric step change are presented. The good agreement with the data available from the full-wave analyses reveals that this approach is simple, accurate, and very suitable in the CAD for MMIC.

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