# Abstracts

## Triangular-Domain Basis Functions for Full-Wave Analysis of Microstrip Discontinuities

*R. Kipp and C.H. Chan. "Triangular-Domain Basis Functions for Full-Wave Analysis of Microstrip Discontinuities." 1993 Transactions on Microwave Theory and Techniques 41.6 (Jun./Jul. 1993 [T-MTT] ): 1187-1194.*

A numerical technique for computing the S-parameters of arbitrarily shaped microstrip discontinuities and interconnects is presented. The microstrip conducing surface is rendered in a triangular discretization. Unknown currents are expanded with triangular-domain basis functions in a method of moments solution to the mixed-potential integral equation (MPIE). Triangular basis functions offer several advantages over rectangular subdomain functions, including their ability to conform readily to arbitrary geometries without "staircase" effect. Examples comparing triangular-domain modeling with rectangular-domain modeling and experiment are given.

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