Abstracts

Full-Wave Analysis of a Two Slot Microstrip Filter Using a New Algorithm for Computation of the Spectral Integrals

U.V. Gothelf and A. Ostergaard. "Full-Wave Analysis of a Two Slot Microstrip Filter Using a New Algorithm for Computation of the Spectral Integrals." 1993 Transactions on Microwave Theory and Techniques 41.1 (Jan. 1993 [T-MTT]): 101-108.

An integral equation is formulated in the spectral domain for a two slot microstrip filter using the exact Green's function for the grounded dielectric substrate. Using a moment method (MM) procedure, the integral equation has been discretized. The elements of the impedance matrix and the excitation vector are given by two dimensional Sommerfeld type integrals in closed form. An efficient and accurate numerical integration scheme for computation of the elements is presented. The S parameters obtained from the MM procedure have been found to be in excellent agreement with measurements.

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