

Abstracts

Analysis of Edge-Coupled Shielded Strip and Slabline Structures

S.M. Perlow. "Analysis of Edge-Coupled Shielded Strip and Slabline Structures." 1987 *Transactions on Microwave Theory and Techniques* 35.5 (May 1987 [T-MTT]): 522-529.

A method for the analysis of edge-coupled strip and slabline structures is presented which uses relatively simple algebraic expressions. The described procedure can be used to analyze directional couplers, interdigitated and comb line filters, and any other structures formed by an array of rectangular edge-coupled transmission lines, of arbitrary thickness, situated between two parallel plates. The analysis is complete in that it allows the conversion of the physical dimensions of the structure into a set of admittance parameters which completely describes its electrical behavior, including both conductor and dielectric losses.

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