Abstracts

Hybrid Wave Propagation in Circularly Shielded Microslot Lines

I.O. Vardiambasis, J.L. Tsalamengas and J.G. Fikioris. "Hybrid Wave Propagation in Circularly Shielded Microslot Lines." 1995 Transactions on Microwave Theory and Techniques 43.8 (Aug. 1995 [T-MTT]): 1960-1966.

Hybrid wave propagation in circularly shielded, single or coupled microslot lines is studied by combining singular integral equation (SIE) with Green's function techniques. Discretization of these SIE's by recently developed algorithms leads to linear algebraic systems whose matrix elements assume exponentially converging, numerically very stable analytical expressions. Dispersion characteristics, modal currents, and cut-off frequencies are presented for several cases. The algorithm converges rapidly requiring a few expansion functions per wave-length.

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