

Abstracts

Generalized Dispersion Analysis and Spurious Modes of 2-D and 3-D TLM Formulations

J.S. Nielsen and W.J.R. Hoefer. "Generalized Dispersion Analysis and Spurious Modes of 2-D and 3-D TLM Formulations." 1993 Transactions on Microwave Theory and Techniques 41.7 (Aug. 1993 [T-MTT]): 1375-1384.

The general dispersion relations are derived for the 2-D TLM shunt and series meshes and the 3-D TLM expanded and condensed node meshes. Implicit in the resulting dispersion relations are both their physical and spurious modal solutions. It is demonstrated that of the four schemes, only the 3-D expanded node mesh is free of detrimental spurious solutions.

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