

Abstracts

Analysis of Nonreciprocal Coupled Image Lines

*D.B. Sillars and L.E. Davis. "Analysis of Nonreciprocal Coupled Image Lines." 1987
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The effective dielectric constant method is used to analyze the nonreciprocal coupling properties of coupled image lines separated by a longitudinally magnetized ferrite slab. Two structures are considered, one incorporating low-dielectric-constant image lines ($\epsilon_{\text{sub r}} = 2.56$), the other incorporating image lines consisting of high-dielectric-constant material ($\epsilon_{\text{sub r}} = 9.8$). Results of dispersion characteristics, coupling parameters, and field distributions are presented.

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