

# Abstracts

## Analysis of Nonreciprocal Coupled Image Lines

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*D.B. Sillars and L.E. Davis. "Analysis of Nonreciprocal Coupled Image Lines." 1987  
Transactions on Microwave Theory and Techniques 35.7 (Jul. 1987 [T-MTT]): 629-635.*

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 ( $\epsilon_r = 2.56$ ), the other incorporating image lines consisting of high-dielectric-constant material ( $\epsilon_r = 9.8$ ). Results of dispersion characteristics, coupling parameters, and field distributions are presented.

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