

## Asymmetrical Three-Line with Anisotropic Coupled Striplines Substrates

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*T. Kitazawa and Y. Hayashi. "Asymmetrical Three-Line with Anisotropic Coupled Striplines Substrates." 1986 Transactions on Microwave Theory and Techniques 34.7 (Jul. 1986 [T-MTT]): 767-772.*

Analytical methods are presented for the general structure of three-line coupled striplines with anisotropic media for the first time. Two approaches are included one gives variational expressions for the quasistatic parameters of the cases with the uniaxially anisotropic substrates cut with their planar surface at an arbitrary angle to the optical axis, the other gives the rigorous hybrid-mode formulation for the cases with the uniaxially anisotropic substrates cut with their surface perpendicular to the optical axis. Accurate numerical results are presented for the propagation constants as well as the characteristic impedances of various types of three-line coupled striplines with anisotropic media.

 [Return to main document.](#)