

# Abstracts

## Faraday Optical Isolator/Gyrator Design in Planar Dielectric Waveguide Form

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J. Warner. "Faraday Optical Isolator/Gyrator Design in Planar Dielectric Waveguide Form." 1973 *Transactions on Microwave Theory and Techniques* 21.12 (Dec. 1973 [T-MTT] (1973 Symposium Issue)): 769-775.

The possibilities of using the magnetic Faraday effect to provide a planar dielectric waveguide isolator or circulator are studied. At least two active elements which couple the TE and TM waveguide modes are required. One of these is magnetooptic. Preliminary design data for a dielectric waveguide isolator in which the mode-converting media forms the substrate and top layer of a single waveguide structure are reported. This design should prove more practical than the optical tandem structures proposed previously.

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