Abstracts

Phase Shift Calculations in Axially-Magnetized Ferrites Using the Finite Element Method

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A vector finite element solver is used to calculate the phase shift in uniform axially-magnetized gyromagnetic waveguides. Ferrite materials are characterized in the solver using standard material data, the applied field and the frequency. Calculations are compared with experimental results for two typical waveguide cross-sections: a quadrupally-ridged Faraday Rotation section and a reciprocal Reggia-Spencer section.

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