

Abstracts

Surface Electromagnetic Modes of a Ferrite Slab

T.J. Gerson and J.S. Nadan. "Surface Electromagnetic Modes of a Ferrite Slab." 1974 Transactions on Microwave Theory and Techniques 22.8 (Aug. 1974 [T-MTT]): 757-763.

The dispersion relationship describing the propagation of electromagnetic (EM) surface modes supported by a ferrite slab of finite thickness magnetized parallel to the planes of its air-ferrite-air or air-ferrite-metal interfaces is investigated. Surface wave propagation at frequencies greater than the ferrite-metal mode resonance is predicted for thick grounded ferrite slabs thereby clarifying prior results based upon semi-infinite and magnetostatic analyses. The relative energy densities of the electromagnetic surface modes is examined at the air-ferrite interfaces of an ungrounded slab.

 [Return to main document.](#)