# Abstracts

## On Wave Propagation in Periodic Media Containing Ferrite

*J.E. Goell. "On Wave Propagation in Periodic Media Containing Ferrite." 1967 G-MTT International Microwave Symposium Program and Digest 67.1 (1967 [MWSYM]): 121-124.*

Periodic structures are used as filters and as interaction structures in microwave tubes. In this paper some of the effects of anisotropic loading are discussed. It is shown that plane structures can be used for separating modes and that proper loading of waveguide circuits with anisotropic media causes their omega - beta plots to be shifted. A ring circuit is discussed which has the nonreciprocal property that the phase shift from one port to another is the negative of the phase shift in the reverse direction. In all cases the medium is assumed to be lossless ferrite; however, the conclusions also apply to plasmas and optically active media.

❑ Return to main document.