Abstracts

Electromagnetic Wave Propagation in Lossy Ferrites

F.J. Rosenbaum. "Electromagnetic Wave Propagation in Lossy Ferrites." 1964 Transactions on Microwave Theory and Techniques 12.5 (Sep. 1964 [T-MTT]): 517-528.

The square of the complex transverse propagation constant in a lossy, magnetized ferrite is found to be described approximately by a circle in the complex plane when the magnetic field is varied. A graphical method for obtaining approximate values for the transverse propagation constant when the wave number in the direction of the applied field is given and real is derived here. This method is used to find The power absorbed from an incident plane wave by A semi-infinite ferrite as a function of the magnetizing field amplitude.

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