Abstracts

Field Measurements in a Small Cross Section Guide Loaded With Magnetized Ferrite (Correspondence)

M. Bujatti. "Field Measurements in a Small Cross Section Guide Loaded With Magnetized Ferrite (Correspondence)." 1965 Transactions on Microwave Theory and Techniques 13.3 (May 1965 [T-MTT]): 385-387.

By solving the Maxwell's equations for a rectangular guide partially filled with magnetized ferrite one finds that in particular conditions to be specified later for the geometry and the applied magnetic field only modes with phase velocity directed in one sense can propagate. This is the basis for the so-called thermodynamical paradox. The present work was carried cut in order to experimentally investigate the microwave em. field in such a structure and compare the results with the theoretical predictions which we summarize here briefly.

❑ Return to main document.