

Abstracts

Influence of Surface Metallization on the Propagation Characteristics of Surface Magnetostatic Waves in an Axially Magnetized Rectangular YIG Rod

K. Kawasaki and M. Umeno. "Influence of Surface Metallization on the Propagation Characteristics of Surface Magnetostatic Waves in an Axially Magnetized Rectangular YIG Rod." 1974 Transactions on Microwave Theory and Techniques 22.4 (Apr. 1974 [T-MTT]): 391-394.

It has been shown that the boundary conditions strongly influence the propagation characteristics of surface magnetostatic waves propagating in the direction of the external dc magnetic field; the frequency spectrum narrows and the cutoff wavenumber decreases continuously as the gap between the sample surfaces and metal walls increases in the direction in which the magnetic potential decays exponentially. Experimental results obtained at X band agree well with the theoretical estimates.

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