Abstracts

Phase Shifter C-, X-, and Ku-Bands Using Segregated-Mode Resonance in Single Crystal YIG (Correspondence)

M.E. Hines and K.K. Chow. "Phase Shifter C-, X-, and Ku-Bands Using Segregated-Mode Resonance in Single Crystal YIG (Correspondence)." 1967 Transactions on Microwave Theory and Techniques 15.3 (Mar. 1967 [T-MTT]): 181-183.

Single crystal YIG has long been regarded as an ideal material for ferromagnetic resonance type devices. However, the performance of all such devices is far from ideal due to excitation of spin-waves at moderate power levels. The excitation of these spurious responses limits the device's power handling capability, as well as degrades its performance, such as insertion loss, noise figure, etc. In order to extend the usefulness of this material, it is necessary, either to suppress all spin-waves, or to segregate one resonant mode out of the manifold.

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