Abstracts

Nonlinear behavior of electromagnetic waves in the YIG film microstrip line

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The limiter and microwave soliton behavior were experimentally demonstrated in the microstrip line using the 20 /spl mu/m thick yttrium iron garnet film substrate at S band. These nonlinear phenomena were explained by the strong coupling between quasi-TEM and magnetostatic forward volume wave modes at magnetic resonance frequency of /spl gamma//spl mu//sub 0/H/sub 0//2/spl pi/ from an implicit dispersion relation of the stripline.

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