Abstracts

A 0.5-4.0-GHz Tunable Bandpass Filter Using YIG Film Grown by LPE (Dec. 1987 [T-MTT])

Y. Murakami, T. Ohgihara and T. Okamoto. "A 0.5-4.0-GHz Tunable Bandpass Filter Using YIG Film Grown by LPE (Dec. 1987 [T-MTT])." 1987 Transactions on Microwave Theory and Techniques 35.12 (Dec. 1987 [T-MTT] (1987 Symposium Issue)): 1192-1198.

A tunable bandpass filter using YIG film grown by liquid phase epitaxy (LPE) has been developed. Taking advantage of the very low resonance frequency in the perpendicular resonance of YIG film, an operation frequency of 0.5 GHz has been achieved. In order to make this filter operate up to 4.0 GHz, a new technique for multioctave tuning has been developed and applied to the filter. Over the wide tuning range from 0.5 GHz to 4.0 GHz, low insertion loss and high spurious suppression have been achieved. The performance of this filter satisfies the requirements for use as a tracking preselector in a microwave spectrum analyzer.

❑ Return to main document.