Abstracts

Microwave Oscillator Noise Measuring System Employing a YIG Discriminator (Short Papers)

K. Watanabe and I. Takao. "Microwave Oscillator Noise Measuring System Employing a YIG Discriminator (Short Papers)." 1974 Transactions on Microwave Theory and Techniques 22.4 (Apr. 1974 [T-MTT]): 444-446.

A microwave oscillator noise measuring system employing a YIG discriminator has been developed. The resonant frequency of the YIG discriminator is automatically tuned to follow the drift of the carrier frequency of the oscillator under test. This arrangement permits an accurate measurement of FM noise spectra near the carrier frequency as close as several tens of Hz off the carrier. The drift of the carrier frequency is measured over a wide range by monitoring fluctuations of the feedback current in the compensation coil that supports a part of the biasing magnetic field for the YIG discriminator.

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