Abstracts

Wide-Band Phase Locking and Phase Shifting Using Feedback Control of Oscillators (Short Papers)

D. Rubin. "Wide-Band Phase Locking and Phase Shifting Using Feedback Control of Oscillators (Short Papers)." 1972 Transactions on Microwave Theory and Techniques 20.4 (Apr. 1972 [T-MTT]): 286-289.

Two Yig-tuned Gunn oscillators have been frequency locked over a 3-GHz range in X-band. Injected power into the locked oscillator was approximately 10 dB below its output power. Analog frequency-tracking circuitry was used together with phase-comparator feedback to achieve output phase which remained within ±10° over a 1.2 GHz bandwidth. Controlled phase shifting was obtained by applying dc voltages within the feedback loop.

❑ Return to main document.