

# Abstracts

## A Novel MMIC Approach to Sampling Phase/Frequency Detection for Microwave Quartz-Lock Oscillators

---

*T. Nakagawa, T. Hirota and T. Ohira. "A Novel MMIC Approach to Sampling Phase/Frequency Detection for Microwave Quartz-Lock Oscillators." 1992 MTT-S International Microwave Symposium Digest 92.3 (1992 Vol. III [MWSYM]): 1301-1304.*

A novel concept in sampling phase/frequency detection for microwave quartzlock oscillators is proposed, and its prototype is developed in a GaAs MMIC. It is found out experimentally that the proposed detector provides drastic improvement over conventional sampling phase detectors in pull-in range.

 [Return to main document.](#)