Abstracts

A tunable all-pass MMIC active phase shifter

D. Viveiros, Jr., D. Consonni and A.K. Jastrzebski. "A tunable all-pass MMIC active phase shifter." 2002 Transactions on Microwave Theory and Techniques 50.8 (Aug. 2002 [T-MTT]): 1885-1889.

This paper describes a novel structure for a monolithic-microwave integrated-circuit active phase shifter based on a bridge all-pass network. The design procedure has been developed, leading to a fixed-frequency circuit with large tunable phase variation, associated to a low-gain ripple, and requiring nearly no design optimization. Simulated results predicted an analog tunable 180/spl deg/ phase variation, at 5-GHz operation frequency. The circuit was implemented using GEC-Marconi pseudomorphic high electron-mobility transistor H40 technology, and measured results validated the proposed design method and circuit structure.

❑ Return to main document.