

Design Considerations for an Integrated 1.8-GHz Parametric Amplifier

P. Bura, R. Camisa, W.Y. Pan, S. Yuan and A. Block. "Design Considerations for an Integrated 1.8-GHz Parametric Amplifier." 1968 Transactions on Microwave Theory and Techniques 16.7 (Jul. 1968 [T-MTT] (Special Issue on Microwave Integrated Circuits)): 424-428.

A hybrid-integrated parametric amplifier has been fabricated in a microstrip transmission-line configuration. General design considerations and their implementation in a microstrip medium are discussed. The amplifier exhibited a power gain of 10 dB and 50-MHz half-power bandwidth with a noise figure of 2.0 dB. It was pumped at X-band frequency and required only 10 mW of pump power. The integrated pump source consisted of the transistor oscillator and a varactor quadrupler stage.

 [Return to main document.](#)