

# Abstracts

## Monolithic 2-18 GHz Matrix Amplifiers (Short Papers)

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*A.P. Chang, K.B. Niclas, B.D. Cantos and W.A. Strifler. "Monolithic 2-18 GHz Matrix Amplifiers (Short Papers)." 1989 Transactions on Microwave Theory and Techniques 37.12 (Dec. 1989 [T-MTT] (1989 Symposium Issue)): 2159-2162.*

The designs and performances of two different monolithic 2-18 GHz matrix amplifiers are discussed. The first module, optimized for gain and return loss, yields gains of  $G = 15.5 \pm 0.9$  dB and a maximum return loss of  $RL = -12.0$  dB. When cascading these modules to form a two- or three-stage amplifier, gains of  $G = 31.4 \pm 1.4$  dB and  $G = 43.2 \pm 1.8$  dB are measured. With the second unit, designed for low noise and gain, noise figures of  $NF = 4.15 \pm 0.85$  dB and gains of  $G = 17.1 \pm 1.25$  dB were achieved.

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