

# Abstracts

## A 30-GHz Monolithic Receiver

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*L.C.T. Liu, C.S. Liu, J.R. Kessler, S.-K. Wang and C.-D. Chang. "A 30-GHz Monolithic Receiver." 1986 Transactions on Microwave Theory and Techniques 34.12 (Dec. 1986 [T-MTT] (1986 Symposium Issue)): 1548-1552.*

Several monolithic integrated circuits have been developed to make a 30-GHz receiver. The receiver components include a low-noise amplifier, an IF amplifier, a mixer, and a phase shifter. The LNA has a 7-dB noise figure with over 17 dB of associated gain. The IF amplifier has a 13-dB gain with a 30-dB control range. The mixer has a conversion loss of 10.5 dB. The phase shifter has a 180° phase shift control and a minimum insertion loss of 1.6 dB.

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