

# Abstracts

## Ka-Band Monolithic GaAs Balanced Mixers (1982 [MCS])

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A. Contolatis, C. Chao, S. Jamison and C. Butter. "Ka-Band Monolithic GaAs Balanced Mixers (1982 [MCS])." 1982 *Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest* 82.1 (1982 [MCS]): 28-30.

A monolithic GaAs balanced mixer chip has been optimized and integrated with a hybrid MIC IF preamplifier in a wafer-type package with significant improvement in RF bandwidth and reduction in chip size. A double sideband noise figure of less than 6 dB has been achieved over a 31 to 39 GHz frequency range with a GaAs chip size of only .05 X .43 inches. This includes the contribution of a 1.5 dB noise figure due to IF preamplifier (5-500 MHz).

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