

# Abstracts

## A W-Band Monolithic Balanced Mixer (1985 [MCS])

*L.T. Yuan and P.G. Asher. "A W-Band Monolithic Balanced Mixer (1985 [MCS])." 1985 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 85.1 (1985 [MCS]): 71-73.*

A fully monolithic balanced mixer fabricated on a GaAs substrate for operation at W-Band (75 to 110 GHz) is described. The overall size of the mixer chip is 0.075" x 0.075" x 0.004". A minimum conversion loss of 4.6 dB has been measured at 91.1 GHz for narrow band operation. For broadband operation, a conversion loss of less than 8 dB has been achieved over an RF range of 73.6 to 83.6 GHz with a corresponding IF range of 8 to 18 GHz.

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