

Abstracts

A Broadband, Planar, Doubly Balanced Monolithic Ka-Band Diode Mixer (1993 [MCS])

S.A. Maas and K.W. Chang. "A Broadband, Planar, Doubly Balanced Monolithic Ka-Band Diode Mixer (1993 [MCS])." 1993 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 93.1 (1993 [MCS]): 53-56.

This paper describes a planar monolithic diode mixer achieving 5-10 dB conversion loss and very low distortion and spurious responses over a 26- to 40-GHz RF and LO bandwidth and dc-10 GHz IF. The diodes are the gate-to-channel junctions of $0.2 \times 80 \mu\text{m}$ InGaAs HEMTs, and the baluns are Marchand-like coplanar structures.

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