

Abstracts

Analysis and Design of Microwave Balanced Mixers

B. Schuppert. "Analysis and Design of Microwave Balanced Mixers." 1986 Transactions on Microwave Theory and Techniques 34.1 (Jan. 1986 [T-MTT]): 120-128.

Based on the theory given in [1], planar balanced mixers are analyzed for fundamental and harmonic mixing, mixing product recovery, and the effect of circuit and diode parameters on the conversion loss. The successful incorporation of the proposed method in a CAD procedure is demonstrated through the development of a multioctave balanced mixer with $L = 6 \text{ dB} \pm 1 \text{ dB}$ from 1.5 to 12.75 GHz.

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