Abstracts

Highly Accurate Design of Spiral Inductors for MMIC's with Small Size and High Cut-Off Frequency Characteristics (1984 [MWSYM])

M. Parisot, Y. Archambault, D. Pavlidis and J. Magarshack. "Highly Accurate Design of Spiral Inductors for MMIC's with Small Size and High Cut-Off Frequency Characteristics (1984 [MWSYM])." 1984 MTT-S International Microwave Symposium Digest 84.1 (1984 [MWSYM]): 106-110.

High precision experimental, theoretical procedures are presented for obtaining very compact inductors (diameter 80 to 200 µm) with values up to 5 nH, cut-off frequencies ranging from 20 to 100 GHz for L < 2 nH. The maximum phase and amplitude measurement error is of the order to ± 2 degrees and 1% respectively with typical measurement reproducibility of 0.1%. A new lumped element theory is presented predicting the electrical characteristics of spiral inductors with a maximum error of only 5%.

❑ Return to main document.