Abstracts

Modeling and analysis of multilevel spiral inductors for RFICs

R.D. Lutz, Y. Hahm, A. Weisshaar, V.K. Tripathi, H. Wu and N. Kanaglekar. "Modeling and analysis of multilevel spiral inductors for RFICs." 1999 MTT-S International Microwave Symposium Digest 99.1 (1999 Vol. I [MWSYM]): 43-46 vol.1.

An accurate CAD-oriented modeling methodology for multilevel rectangular spiral inductors with enhanced inductance and/or quality factor is presented. The method is based on a distributed equivalent circuit model whose elements are computed using Spectral Domain and Partial Element Equivalent Circuit (PEEC) techniques. Examples of typical two layer spirals in BiCMOS and CMOS technologies are presented to illustrate the accuracy of the model as well as the enhanced performance of the multilevel structures.

❑ Return to main document.