Abstracts

Computer Aided Design of Square Spiral Transformers and Inductors

E. Frlan, S. Meszaros, M. Cuhaci and J.S. Wight. "Computer Aided Design of Square Spiral Transformers and Inductors." 1989 MTT-S International Microwave Symposium Digest 89.2 (1989 Vol. II [MWSYM]): 661-664.

A simple, yet accurate, lumped element model for four-port planar rectangular spiral structures has been developed. Closed form expressions were used to generate frequency dependent parameter values, resulting in an equivalent circuit which is easily incorporated into existing analysis packages. The technique has been applied to standard and centre-tapped transformer configurations, and has also been modified to accurately analyze spiral inductors to 20 GHz. Comparison with measured results has shown good agreement up to the first resonant frequency of the structures.

❑ Return to main document.