

Abstracts

Sandwich type ferromagnetic RF integrated inductor (2001 Vol. I [MWSYM])

M. Yamaguchi, R. Baba and K. Arai. "Sandwich type ferromagnetic RF integrated inductor (2001 Vol. I [MWSYM])." 2001 MTT-S International Microwave Symposium Digest 01.1 (2001 Vol. I [MWSYM]): 185-188 vol. 1.

The first microfabrication of a sandwich type ferromagnetic RF integrated spiral inductor for the 2 GHz range is demonstrated. The two ferromagnetic CoNbZr films sandwich the spiral to enhance the magnetic flux linkage across the coil current. The inductance, L, of 7.9 nH and the quality factor, Q, of 12.7 were obtained for a 200 /spl mu/m/spl times/400 /spl mu/m size 4-turn rectangular spiral at f=2 GHz. The inductance was better than that of an air core of the same coil size by 19%, and the Q was better by 23%.

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