

# Abstracts

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

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*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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