

## A compact-size microstrip spiral resonator and its application to microwave oscillator

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*Young-Taek Lee, Jong-Sik Lim, Chul-Soo Kim, Dal Ahn and Sangwook Nam. "A compact-size microstrip spiral resonator and its application to microwave oscillator." 2002 Microwave and Wireless Components Letters 12.10 (Oct. 2002 [MWCL]): 375-377.*

This letter presents a compact size microstrip spiral resonator and its application to a low phase noise oscillator. This resonator has stopband characteristics to be used in the series feedback oscillator topology. The whole circuit area of the proposed resonator is within  $1/10$  wavelength, which results in the reduction of the circuit area and cost. A 10-GHz oscillator incorporated with this resonator was designed, fabricated and measured. It shows low phase noise performance of  $-95.4\text{-dBc/Hz}$  at 100 kHz offset.

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