Abstracts

Compact high-order planar ring-resonator filters optimized in noise in coplanar technology

L. Nenert, L. Billonnet, B. Jarry, P. Guillon, C. Quendo, E. Rius and G. Tanne. "Compact high-order planar ring-resonator filters optimized in noise in coplanar technology." 2001 MTT-S International Microwave Symposium Digest 01.3 (2001 Vol. III [MWSYM]): 1441-1444 vol.3.

This paper deals with technological considerations for the compact design of general planar ring-resonator structures that use active elements for frequency tuning and losses compensation. With our approach, noise performance optimization is simultaneously led by purely analytical means. The technique is first applied to a one-pole tunable ring-resonator structure for which we discuss both microstrip and coplanar implementations. We underline the ease in implementing such structures in coplanar technologies and validate our approach with measured results of a two-pole version.

❑ Return to main document.