Abstracts

Design of 2-Pole Band Pass Filters Using Closed Loop Resonator and Coupled Lines

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In this paper, a new design method of band pass filters which have improved stop band characteristics, using closed loop resonator and coupled lines, is presented. The stepped impedance line has been used in resonator structure for improving the performance and reducing physical size of band pass filters. The connections between in/output ports and resonator has been realized with microstrip coupled lines. In order to show the excellence of design method presented here, we have designed and fabricated a 2-pole band pass filter with a 25-mil-thick microstrip substrate (/epsilon/, = 10.2) at 1.885 - 1.905 frequency bands. The measured results are in good agreement with the simulated performances.

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