Abstract:

In this paper, an ultra-wide rejection bandwidth compact microstrip low-pass filter with low insertion loss using two identical etched shapes in the ground plane and a compensated line is investigated. Its circuit model is as well presented. The proposed filter offers a low insertion loss of 0.1 dB and ultra-wide rejection bandwidth of more than 20 dB up to 20 GHz. The simulated results are found to be in good agreement with the measured ones.