

MULTILAYER COMBLINE BANDPASS FILTER

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In the name of ALLAH

Most Gracious and Most Merciful

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ABSTRACT

In this thesis, a bandpass filter using combline resonator is presented. The miniaturized band-pass filter is implemented using multilayer technique with broader bandwidth. It operates at centre frequency of 2.58GHz for satellite broadcasting application. The six-pole combline resonators were designed that give 7.9 % of bandwidth with return and insertion losses in the passband are -49.833 dB and -0.7878 dB respectively. The RO3003 substrate was used has 0.75mm thickness and a dielectric constant of 3. The circuit was simulated using Computer Simulation Technology, CST.

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