

MULTILAYER BANDPASS FILTER USING HARPIN RESONATOR
FOR DIGITAL BROADCASTING

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ABSTRACT

This project presents 12.2-12.75 GHz bandpass filter using multilayer hairpin resonator for digital broadcasting applications. The multilayer coupled resonator RF filter shows a significant size reduction and increase the bandwidth have been designed with the five-pole resonator centered at 12.475 GHz with bandwidth of 550 MHz .This filter is simulated on RO3003 substrate with dielectric 3 using Computer Simulation Technology software (CST) .The analyses such as increase the lenght of the resonators and the width have been done to obtain the behaviour of the filter when one of the parameters is change.

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