Abstract

In this paper, a new miniaturized ultra-wideband bandpass filter is simulated. The structure of the new ultra-wideband bandpass filter is constructed using stepped-impedance resonator. The input admittance of the proposed filter is calculated and compared with the conventional structure. The frequency response of the filter is simulated by an EM simulator tool. The parameters of the proposed filter are optimized where this filter provides a ultra-wideband bandpass filter with a notch-band in the passband. Moreover, two transmission zeros exist on the lower and upper sides of the pass-band.

References

Index Terms
Computer Science     Signal Processing

Keywords
Band-notched  Ultra-wideband  Bandpass Filter  Stepped Impedance Resonator