

Abstract

In this paper, a new compact microstrip bandpass filter (BPF) employing two identical modified dumbbell-shaped defected ground structure (DGS) patterns and a pair of 50 Ω endcoupled microstrip lines is suggested. The proposed BPF has small size, a bandwidth of 0.52 GHz and an insertion loss of 3 dB. Furthermore, it has around -28-dB suppression level up to 6 GHz. Experimental data and simulation results are in good agreement