

Abstract

In this article, a compact dual band bandpass filter using V- and W-shaped microstrip open lines is developed and analyzed. An equivalent lumped elements circuit, derived from the designed structure is presented and its elements are calculated based on its transfer function. The obtained equivalent circuit is interpreted with the geometric tuning results in particular the transmission zero relocations. The measurement results of the fabricated prototype agree with the simulations and confirm the design theory. The design can suit WLAN application.