عنوان مقاله:

Designing and fabricating of dual-band E-shaped microstrip antenna

محل انتشار:

سومین کنفرانس ملی ایده های نو در مهندسی برق (سال: 1393)

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خلاصه مقاله:

The purpose of this paper is to present a thin,broadband E-shaped microstrip antenna which operates indual-band frequency in ranges of5.15-5.35GHz, 2.4-2.48GHz.This antenna is used for WLAN applications. Coefficient ofreflection is less than -21.5 dB in both frequency bands,VSWR<2 and maximum gains in both frequency bands are0.4dB and 3 dB. In designing this antenna, a RO4003 substratewith the height of 31mil and an air gap with the height of 0.8mm have been used. To increase the bandwidth, the edges of thehorizontal arms of the antenna have been widened and the tworectangular parts have been separated from the vertical arm ofthe E-shaped microstrip antenna. The antenna has beensimulated using HFSS10 software and then has been fabricatedand tested. There is a suitable matching between the resultsobtained from the simulation and the testing of the fabricatedantenna.

کلمات کلیدی:

dual-band, E-shaped microstrip Antenna,HFSS10 software