

Design, simulation and analysis a microstrip antenna using PU-EFB substrate

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ABSTRACT

A low cost, light weight and easy to fabricate are the most important factor for future antennas. Microstrip patch antennas offer these advantages and suitable for communication and sensor application. This paper presents a design of simple microstrip patch antenna working on operating frequency of 2.4 GHz. The designed process has been carried out using MATLAB and HFSS software by entering 2.3 for the dielectric constant of PU-EFB. The results showed that high return loss, low bandwidth and good antenna radiation efficiency of which are -21.98 dB, 0.28 dB and 97.33%, respectively.

KEYWORDS:

Antenna radiation; MATLAB; Microwave antennas; Slot antennas