Abstract

In this paper a rectangular microstrip patch antenna with a rectangular slot at the left side and a circle embedding in a square slot is proposed. The antenna is resonant at 9 GHz frequency. The antenna is good for directional applications. The antenna can be used for GPS application and for microwave virus sanitizer. The gain of the antenna is 9.059 dBi. The directivity of the antenna is 10.56 dBi. The return loss of the antenna is -16.6 dB. The antenna is designed for X band application. The dielectric substrate used is RT Duroid with dielectric constant 2.2 and loss tangent 0.0004.

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Microstrip patch antenna, square slot, gain, directivity, return loss, X band