Abstract

In this paper a quad band circular patch antenna with fractal elements is proposed for S-band and C-band applications. The designed antenna operates at four different frequency bands such as 2.86GHz, 4.76GHz, 6.50GHz and 7.42GHz with bandwidth of 110MHz, 110MHz, 110MHz and 90GHz respectively of wireless applications with a return loss, VSWR and gain at acceptable level. The proposed antenna is fed by using inset line feeding technique. Antenna is designed by using low cost FR4 glass epoxy substrate having dimensions 35 X 44.92 X 1.6mm3 with a relative permittivity of 4.4. Proposed antenna is designed and simulated using High Frequency Structure Simulator (HFSS) Version 13 software and different antenna parameters are simulated and discussed in this manuscript.

References


**Index Terms**

Computer Science  
Circuits and Systems

**Keywords**

Fractal elements, gain, FR4, VSWR