Abstract

In this paper, a stacked layer aperture coupled E-shaped antenna has been presented. The proposed antenna has been designed for Ultra Wide Band (UWB) applications with a notch at 5-6GHz frequency band. The proposed antenna is having an E-shaped top patch and is fed by aperture coupled feed technique, and to realize the band notching function, the shape of the ground has been modified. Roger RT/Duroid 5880 of dielectric constant 2.2mm has been used
as substrate layers of antenna with 0.38mm thickness of each substrate layer. There are two air gaps named as Air Gap1 and Air Gap2, inserted between the substrate layers and having thickness of 0.5mm and 2mm respectively. An &apos;I&apos; shape of aperture has been introduced to design the antenna. The proposed antenna has been shown a low return loss within the UWB frequency band, excepting for the notched band from 5 to 6 GHz which is assigned to the wireless local area network systems.

References

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Index Terms

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Keywords
Uwb  E-shaped  Aperture Coupled Feeding  Stacking