Abstract

The design of micro strip antenna is vital study for today's wireless communication system to achieve compatibility. Research and development in micro strip antenna, exploiting their advantages such as low weight, low volume, and low cost, conformal configuration compatibility with integrated circuits. This paper presents a proposed design for Rectangular micro-strip patch antenna by cutting a rectangular slot of (2*30) in the Rectangular patch which operates at two central frequencies 1.4, 2.37GHz. Field generated by this slot should be additive in the nature so that we are able to radiate electromagnetic radiation properly, which is a new dual frequency micro strip antenna. Basically micro strip patch is having small bandwidth and can be operated at single frequency. Return loss, VSWR and bandwidth has been found by different micro strip feeding technique. All available feeding technique are micro strip, aperture coupled, proximity feed etc. For the design of the micro strip antenna FR-4 substrates which have permittivity of 4.4 and thickness 3.2, loss tangent is 0.02 has been used. We are using FEKO simulation software for designing and analysis. We have observed that using slotted patch antenna and using micro strip at proper location we can get better return loss, VSWR bandwidth and multiband.
Design and Simulation of Rectangular Micro-strip Dual Band Single Slot Patch Antenna

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Index Terms

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Keywords

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