

Effect on Bandwidth of Using Double Substrates Based Metamaterial Planar Antenna

Authors : Smrity Dwivedi

Abstract : The present paper has revealed the effect of double substrates over a bandwidth performance for planar antennas. The used material has its own importance to get minimum return loss and improved directivity. The author has taken double substrates to enhance the efficiency in terms of gain of antenna. Metamaterial based antenna has its own specific structure which increased the performance of antenna. Improved return loss is -20 dB, and the voltage standing wave ratio (VSWR) is 1.2, which is better than single substrate having return loss of -15 dB and VSWR of 1.4. Complete results are obtained using commercial software CST microwave studio.

Keywords : CST microwave studio, metamaterial, return loss, VSWR

Conference Title : ICAP 2017 : International Conference on Antennas and Propagation

Conference Location : New York, United States

Conference Dates : June 04-05, 2017