Abstract

The concept of microstrip antenna[1] was first proposed by Deschamps in 1953. The microstrip antennas differ from others in a way that they radiate from a microstrip patch or a modified TEM line or slot in the ground plane. The active microstrip antenna[6] has become prominent now a day in the field of microwave communication because of their numerous advantages such as light weight, low volume, easy fabrication, low profile and suitability for mass production.

Tremendous research and development in the field of microstrip antenna has taken place all over the world due to use in the guided weapons satellite communications and other strategic defense equipments owing to their inherent advantage over conventional microwave antennas, such as light weight, low volume and compatibility with microwave integrated circuits and solid state devices. However the major problem of microstrip antenna is their narrow bandwidth. The circular patches are probably the most extensively used which have very limited bandwidth so that it has very limited applications in the practical case. In this paper the microstrip antenna is designed which is loaded with MOS capacitance and analyze the input impedance, VSWR,
reflection coefficient etc., first for unloaded circular patch microstrip antenna[2] and then for the loaded antenna with MOS capacitor[3].

References


4. Sachin rai and D.K Srivastav “Analysis and design of circular shape microstrip antenna for wireless communication system”, international conference (ACCTA-2010), VOL .1 Issue 2,3,4;2010,PP 331-337.


Index Terms

Computer Science

Wireless

Keywords

Microstrip