

ABSTRACT

Microstrip antenna is made of three layers of material, the conductor layer, a dielectric substrate, and ground plane. Conductors are generally made of copper, aluminum, or gold. Made of low dielectric constant to increase the abundance that is useful in the field of radiation. Ground plane serves as a reflector that reflects unwanted signals.

In the last project entitled Design of Circular Microstrip Antenna On The frequency of 3.4 to 3.5 GHz using a sponge as a dielectric material. Microstrip antenna in the last project is to use a sponge as a dielectric because it has the advantages of lower cost and wider bandwidth value. Thus, microstrip antennas are expected to work at 3.4 GHz - 3.5 GHz with a VSWR 1.5 Gain 5 dBi, with specification of the desired bandwidth can reach 100 MHz or greater, have unidirectional radiation pattern which can provide performance Good for support in various applications. Design method in the last project is calculated using the equation to find the dimensions of the antenna. The results of the calculations is the input to the simulation process.

The results obtained in the design of the antenna above the VSWR obtained at center frequency is 1.46, the bandwidth of the measurement results of 100 MHz. form is obtained polaradiation unidirectional, form of elliptical polarization is obtained with AR= 17,418 dB, and the results for the antenna gain is 5,97 dBi measurement results.

Key words : *sponge, bandwidth, microstrip, dielectric Antena*