

ABSTRACT

Dielectric measurements on an electronic component is necessary, this is due to the higher dielectric value of a component has a current-carrying means little or nothing, so we can know how good conductivity of an electronic component. Dielectric measurements can be performed with parallel plate method, breakdown voltage method, cavity method, and others.

At the end of the project will discuss the dielectric measurements of an object using the cavity method. Cavity is an object made of aluminum and shaped like small cans, but at the end of this project will be used as cavity cans. By using a tin can to cut expenses, because the price is very cheap. In practice, these cans will be linked to the VNA (Vector Network Analyzer), in which the VNA will display the measurement results of a measurement object.

The results of the final project in the form of hardware that can assist a person in performing the dielectric measurements of an object. Testing is done by performing direct measurements and compared the results with measurements using other methods. Additionally, it will be seen accuracy, resolution, and accuracy of the dielectric measurement methods.

Key Word : *cavity, dielectric, VNA (Vector Network Analyzer)*