

ABSTRACT

At this time the number of mobile phone users is increasing. This is evidenced by the large number of mobile phones in circulation in society both in urban and rural communities. Because the mobile phone has become a staple for the community to support their day-to-day activities. But keep in mind, the use of mobile phones is strictly prohibited in certain places. As in the mosque, classrooms, study rooms, and meeting rooms. Because the sound of a cell phone call can disrupt concentration and seriousness of the current activities lasts at such places. From this emerged the idea to create a tool to block the signals that would go into cell phones so no calls ringing on the mobile phone. The tool is Jammer.

The Jammer is a mobile jammer for signal UMTS 2100 MHz and EVDO 800 MHz which consists of three parts: Power supply, IF-and RF-Stage Stage. At this project will only made the RF-Stage which is signal generator of block jamming. There are three main tools in this section, namely: VCO (Voltage Controlled Oscillator), RF amplifier (power amplifier IC), and the omnidirectional antenna. VCO produces a triangular waveform signal and the power of 0 dBm. Then the power output of the VCO is amplified by the RF amplifier and emitted through an antenna in accordance with the frequency of 2100 MHz UMTS and EVDO 800 MHz.

After designing the jammer is found that the range of the instrument 10 meters. However, after testing found the maximum range is only 4 meters. It is caused by one of the devices on the RF-Stage RF amplifier having sort between the DC input power to the ground so make the output of these devices can not be maximal.

Keywords: Jammer, UMTS, EVDO