

Square monopole antenna for microwave imaging, design and characterisation

ABSTRACT

A novel ultra-wideband (UWB) antenna is presented which has UWB characteristics in a medium same as breast. To optimise the antenna for its best operation, effect of variation in different parts of the antenna is analysed and presented. The antenna's characteristics are presented in simulation and experimental measurements. The results of the authors' study show that the antenna has excellent performance across 4 to more than 9 GHz.

Keyword: Square monopole antenna; Microwave; Ultra-wideband (UWB)