URN etd-0407109-183718-1439
Author Sheng-Che Wu
Author's Email Address No Public.
Statistics This thesis had been viewed 49 times. Download 16 times.
Department
Year 2005
Semester 2
Degree Master
Type of Document Master's Thesis
Language zh-TW.Big5 Chinese
Title The New Design of the Printed Antenna with Ultra-Wideband Operation
Date of Defense 0000-00-00
Page Count 82

Keyword
printed monopole antenna
ultra-wideband
microstrip-line-feed
coplanar-waveguide feed

Abstract
In this paper, the designs and characteristics of printed monopole antenna for ultra-wideband applications are proposed and investigated. In the context, the designs of printed antennas adopt the feed structure of microstrip-line-feed and coplanar-waveguide feed, and the configuration of the proposed antennas is heart shape. A shape of the heart monopole antenna consists of a big half-disk and two small half-disks. In the first instance the CPW fed printed heart antenna for ultra-wideband applications, the fitting feed gap is key parameter, which due to the sensitivity of the impedance matching. As a result of the structure, the impedance bandwidth of the proposed antenna can achieve 137% and have the advantages of ultra-wideband, good antenna gain and good radiation pattern. In the next instance we propose the printed heart antenna with a ring-section slot that reject the 5.15 to 5.825 GHz frequency band. In the final instance we propose the microstrip-line-feed printed heart antenna that can also achieve the requirement of the ultra-wideband application. And the impedance bandwidth of the proposed antenna can achieve 131%. The antenna performance we design not only fit the regular frequency band, but also show good radiation pattern and gain.
Advisory Committee Wen-Shan Chen - advisor

Kai-Nan Yang - advisor

Files etd-0407109-183718-1439-001.pdf

indicate access worldwide
Date of Submission 2006-07-31