

Study of the Suppression of Spurious Emissions from the Spiral Inductors on FR4 Substrate

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ABSTRACT

In this thesis, we propose inserting a band-stop frequency selective surface(FSS) into a planar spiral inductor to suppress its spurious emissions, which are especially serious when the spiral inductor has a wide impedance-matching band. The inserted FSS is designed to reduce this bandwidth without sacrificing the electrical performance of spiral inductor in its working band, such as self-resonant frequency(SRF), series inductance, and quality factor (Q factor)

Keywords : spiral inductor、 frequency selective surface、 spurious emissions

Table of Contents

封面內頁 簽名頁 授權書	iii	中文摘要	iii
.	iv	英文摘要	v
.	vi	目錄	vii
.	ix	第一章 緒論 1.1 研究動機	ix
.	1	1.2 研究目的	2
.	2	第二章 平面螺旋型電感模型建立與電氣特性 2.1 電感基本原理	2
.	3	2.2 平面螺旋型電感建立模型	6
.	6	2.3 藉由插入平面金屬抑制螺旋型電感的假性輻射	11
.	11	2.4 插入平面金屬後螺旋型電感的電氣特性	12
.	14	第三章 頻率選擇面 3.1 頻率選擇面設計背景	15
.	15	3.2 週期性結構分析	19
.	15	3.3 頻率選擇面性質概述	19
.	23	3.4 頻率選擇面元件型式	26
.	23	3.5 頻率選擇面元件模擬方式	26
.	32	3.6 頻率選擇面穿透率測試	33
.	32	3.7 結語	33
.	34	第四章 實驗結果與討論 4.1 插入頻率選擇面後螺旋型電感的輻射特性	34
.	34	4.2 插入頻率選擇面後螺旋型電感的電氣特性	36
.	38	第五章 總結	39
.	38	參考文獻	39

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