

新穎小型化寬頻微帶線Balun之設計

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摘要

本論文提出一種新型的小型化寬頻耦合微帶線balun，使用更為小型的高通缺陷地結構來取代較大的帶距缺陷地結構。按照所提出的三個設計步驟，最後所提出的架構尺寸只有最初尺寸的8.3%。另外，這最終的balun擁有對抗支撐材料影響的免疫力，再藉由模擬與實際量測充分顯示出小巧且寬頻的結果。最後，再設計一支寬頻及多頻的單端饋入天線，整合於先前所設計的balun，使其成為平衡式饋入天線。

關鍵詞：寬頻Balun、耦合線 Balun、缺陷地結構

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