To analysis and verify a synthesis method for dual-passband filters

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ABSTRACT

This thesis analyze a conversion formula to convert convertional band pass filter into dual-bandpass filter. Second, analyze the coupled resonance circuit theory and arrange the coupled resonance circuit theory to the type we want, last combine the to theory to calculate the coupling coefficient, As we know the coupling coefficient, we can use the conventional cross-coupling filters theory to reach FR4 realized. This successfully match the design theory and FR4 realized. Finally design a dual-bandpass filter. The passbands of the dual-passband filter are chosen to be 3.90 – 3.95 and 4.05 – 4.10 GHz using and using IE3D simulation to achieve to micorstrip structure.

Keywords : dual passband filter

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