DESIGN AND SIMULATION OF MULTILAYER BANDPASS FILTER FOR C-BAND APPLICATION

SITI ROHANA BINTI ABD JEMAN
2006130725

FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
MALAYSIA

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UNIVERSITI TEKNOLOGI MARA

UNIVERSITI TEKNOLOGI MARA

SITI ROHANA BINTI ABD SEMAN

Faculty of Electrical Engineering

UNIVERSITI TEKNOLOGI MARA

40450 SHAH ALAM

SELANGOR

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ABSTRACT

In this paper, a multilayer bandpass filters for C-band application has been proposed. The filter designed has a four pole interdigital resonators which was arranged in two layers separating each other. The operating frequency of multilayer bandpass filters are set to 5.85 GHz which is in range of C-band application and the fractional bandwidth is 37%. Based on the design, the size of filter is reduced and the result will better for Insertion loss S21 and Return loss S11. The performance of the multilayer bandpass filter was evaluated by using *CST* software and the simulation result of return loss S11 and insertion loss S21 would be present in a form of graph. Some parameters of the multilayer interdigital bandpass filter also was studied based on feeder width adjusted, feeder position adjusted and ground dimension adjusted. The results were compared in terms of return loss S_{11} and insertion loss S_{21}.

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