

BUTTERWORTH BAND-PASS FILTER USING PARALLEL COUPLED LINE

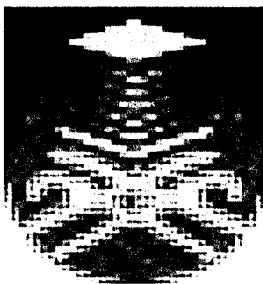
Presented in partial for the awards of

Bachelor of Engineering (Hons) (Electrical)

Universiti Teknologi MARA

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06 MAY 2009

ACKNOWLEDGEMENT

In the name of Allah S.W.T, The most beneficial and the most merciful. It is with deepest serve gratitude of the A-Mighty that gives strength and ability to complete this project.

I would like to take this opportunity to express special thanks to my project supervisor, Pn. Suhana Sulaiman and Pn. Kamariah Ismail for her guidance, advice, kindness and also being helpful to guide me throughout the development of this project. My appreciation also goes to and all her team of researcher from the Microwave Technology Center at Universiti Teknologi MARA for their cooperation.

Finally, I would like to express my special thanks to my beloved parents for their support and unending prayers and also to all my friends who had help me directly or indirectly in successful completion of my project

ABSTRACT

This thesis presents the design, simulation and analysis of a Butterworth Band-pass filter using parallel coupled line for microwave application. Butterworth approach was used in designing the filter and the simulation was carried out using two commercial simulation software. The performance of the filter was simulated based on low-k and high-k material with different dielectric substrate (ϵ_r). The operating frequency range is 4 - 6 GHz with cut-off frequency of 5 GHz with the consideration of 40 % fractional bandwidth. It was observed that both the simulated and measured values were very close except for the insertion loss

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