COPLAN. R WAVEGUIDE STOP FILTER AT 1.8GHz, 5RD ORDER.

AMIR JOHARI BIN MOHAMED

FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
MALAYSIA

COPLANAR WAVEGUIDE STUB FILTER AT 1.8GHz, 3RD ORDER

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AMIR JOHARI BIN MOHAMED

2006685854

Faculty of Electrical Engineer

Universiti Teknologi MARA

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ABSTRACT

This paper deals with the design of 3rd order coplanar waveguide stub filter. The filter is centered at frequency 1.8GHz. The stub filter is designed on FR4 substrate with dielectric permittivity ε_r=5.4 and substrate thickness H= 1.6mm. Simulations parts are proposed right the way through the paper in order to demonstrate the possibilities/potential offered by theoretical concept idea. Besides, optimization procedure is needed to tune the filter theoretically, such a very fast design method is necessary. Simulated and experimental results are presented and compared throughout the report in order to validate the idea.

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