

COPLANAR WAVEGUIDE STOP FILTER AT 1.8GHz, 5th ORDER

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COPLANAR WAVEGUIDE STUB FILTER AT 1.8GHz, 3RD ORDER

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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 $\epsilon_r=5.4$ and substrate thickness $H= 1.6\text{mm}$. 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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