



Numerical and Experimental Investigations of Defected Ground Triangular Shaped Power Divider for C-Band Applications

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Abstract:

In this letter, the numerical and experimental investigation of triangular-shaped microstrip power divider is designed for C-band applications using defected ground structure (DGS). Numerical simulations are carried out using different computer-aided design tools based on different numerical techniques, i.e., Ansoft HFSS and CST Microwave Studio. Good agreement is found between the calculated results using both HFSS and CST. A parametric study is carried out to address the effect of DGS parameters on the performance of the proposed triangular-shaped microstrip power divider. A power divider prototype is fabricated and tested experimentally. Measured results agree well with numerically calculated results.

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