Abstracts

A Printed Circuit Stub Tuner for Microwave Integrated Circuits (Short Papers)

B.J. Minnis. "A Printed Circuit Stub Tuner for Microwave Integrated Circuits (Short Papers)." 1987 Transactions on Microwave Theory and Techniques 35.3 (Mar. 1987 [T-MTT]): 346-349.

A novel microwave tuning eIement capable of continuous adjustment has been realized in the form of a planar printed circuit. As such, it is suitable for incorporation into microwave integrated circuits (MIC's), where it can be used for fine-tuning the impedance match between two parts of a circuit when the two parts are either subject to variations due to manufacturing tolerances or are difficult to model. In either case, the tuner is a compact on-circuit tuning facility which does not have to be removed after use. The tuner has been shown to have unique impedance-transforming properties, being capable of matching any realizable impedance to a 50-Omega load. Its main part consists of a coupled-line section and across the gap in the sectiou at different places along its length are positioned two short-circuit bridge conductors. Movement of these bridges produces the variation in impedance transfomration.

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