# Abstracts

## Discontinuities in Symmetric Striplines Due to Impedance Steps and Their Compensations

*V. Nalbandian and W. Steenaart. "Discontinuities in Symmetric Striplines Due to Impedance Steps and Their Compensations." 1972 Transactions on Microwave Theory and Techniques 20.9 (Sep. 1972 [T-MTT]): 573-578.*

The theoretically known magnitude of the series lumped reactance, as a function of impedance step ratio, resulting from an impedance step discontinuity in symmetric stripline is confirmed, and an alternative expression for the inductance is given. A reduction of this reactance has been achieved by splitting the narrower strip at the impedance step junction into a multistrip configuration, while retaining the total characteristic impedance value. A way of compensating the effect of the reactance on the pass-band characteristics of quarter-wave impedance transformers and filters is developed. This is achieved by the introduction of a lumped series capacitance at the impedance step discontinuity.

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