

Abstracts

Computation of the Impedance of an Infinitely Long Helical Transmission Line by Numerical Methods (Short Papers)

D.C. Wynn and C.T. Carson. "Computation of the Impedance of an Infinitely Long Helical Transmission Line by Numerical Methods (Short Papers)." 1974 Transactions on Microwave Theory and Techniques 22.5 (May 1974 [T-MTT]): 556-559.

A numerical method is given for the determination of the impedance of an infinitely long thin-wire helix. The propagation constant of the current for zero tangential electric field is found and used in a variational expression for impedance. Asymptotic values of resistance versus pitch are compared with resistances of infinitely long straight-wire antennas.

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