

Abstracts

The Characteristic Impedance of a Slotted Coaxial Line

R.E. Collin. "The Characteristic Impedance of a Slotted Coaxial Line." 1956 Transactions on Microwave Theory and Techniques 4.1 (Jan. 1956 [T-MTT]): 4-8.

The propagation of a second type of TEM mode in a slotted coaxial line is analyzed. The characteristic impedance of the slotted line is evaluated by means of variational expressions giving upper and lower bounds to the true value. A two term approximation to the charge distribution and a one term approximation to potential distribution give results accurate to within ± 2 per cent. Curves of characteristic impedance against angular slot width are presented.

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