

Abstracts

Propagation Along a Coaxial Cable with a Helical Shield

D.A. Hill and J.R. Wait. "Propagation Along a Coaxial Cable with a Helical Shield." 1980 *Transactions on Microwave Theory and Techniques* 28.2 (Feb. 1980 [T-MTT]): 84-89.

A leaky coaxial cable is modelled by a dielectric coated conductor shielded by a finite number of unidirectional helical wires. A modal equation is derived and solved numerically for the propagation constants of both the monofilar and bifilar modes. Numerical results are also presented for the effective surface transfer impedance of the shield. This parameter is found to depend, in general, on the propagation constant.

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