

Abstracts

Eddy Current Power Dissipation at Sharp Corners

L.K. Warne. "Eddy Current Power Dissipation at Sharp Corners." 1994 *Transactions on Microwave Theory and Techniques* 42.2 (Feb. 1994 [T-MTT]): 283-290.

This paper develops corrections to the impedance per unit length when the conductor cross section includes sharp corners. The case of a right internal angle is treated in detail. Corrections are given for all real positive values of the ratio of internal to external magnetic permeabilities. Both the real and imaginary parts of the corrections are determined. Application of the results to a conductor of square cross section is given. Higher order terms are developed and compared to a numerical solution. These higher order terms are generalized to the conductor of rectangular cross section.

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