Abstracts

The Characteristic Impedance of Rectangular Coaxial Line with Ratio 2:1 of Outer-to-Inner Conductor Side Length (Letters)

R. Terakado. "The Characteristic Impedance of Rectangular Coaxial Line with Ratio 2:1 of Outer-to-Inner Conductor Side Length (Letters)." 1976 Transactions on Microwave Theory and Techniques 24.2 (Feb. 1976 [T-MTT]): 124-125.

Recently, Riblet has given the exact dimensions of a family of rectangular coaxial lines with given impedance by conformal mapping. Before then the same problem was treated in [3], [4]. However, the previous literature does not include the case when the side of the outer and inner rectangle are in the ratio 2:1 both in width and in height: if in [1, eq. (11)] we put /overbar OA/ = /overbar DE/ or /overbar EO/ = /overbar AB/, modulus k coincides with modulus lambda and the rectangular line becomes a square coaxial section, which is a special case of Bowman.

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