

Abstracts

Rectangular Waveguides with Impedance Walls (Further Comments)

M.S. Narasimhan and V.V. Rao. "Rectangular Waveguides with Impedance Walls (Further Comments)." 1974 *Transactions on Microwave Theory and Techniques* 22.11 (Nov. 1974 [T-MTT]): 973-973.

In the above paper, some comments seem to be necessary on the impedance compatibility relation $Z_{sub 1}Z_{sub 3} - Z_{sub 2}Z_{sub 3} + Z_{sub 2}Z_{sub 4} = 0$ where $Z_{sub 1}$, $Z_{sub 2}$, $Z_{sub 3}$, and $Z_{sub 4}$ have been defined. This relation was derived for obtaining a separable modal solution of fields. Though (1) appears to be mathematically correct, controversies arise when it is used for square or rectangular waveguides with all the four walls corrugated transversely to the direction of propagation.

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