

Abstracts

Impedance Matching (Correspondence)

N. Balabanian. "Impedance Matching (Correspondence)." 1955 Transactions on Microwave Theory and Techniques 3.4 (Jul. 1955 [T-MTT]): 53-54.

Matching an impedance to a transmission line by the use of a cascaded section of line is a well-known process. However, the range of terminating impedance that can be matched by this method, I believe, is not so well-known. Consider a lossless line of characteristic impedance $R_{sub 0}$ to which is to be matched an arbitrary impedance $\bar{Z} = R + jX$ by means of another lossless line of length d and characteristic impedance $R_{sub 1}$ cascaded between the first line and the load as shown schematically in Fig. 1. The problem is to determine for what range of values of \bar{Z} a match can be thus obtained for any values of $R_{sub 1}$, and d .

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