

Abstracts

Conditions for Maximum Power Transfer (Comments)

H.F. Mathis. "Conditions for Maximum Power Transfer (Comments)." 1963 Transactions on Microwave Theory and Techniques 11.5 (Sep. 1963 [T-MTT]): 453-453.

In recent correspondences by Shulman Castaguetto and IMatheau, there are discussions of the conditions for maximum power transfer. In Shuhnan's notation, the source impedance is $Z_s = R_s + jX_s = R_s/(1 + jx_s)$, the load impedance is $Z = R + jX = R/(y + jx)$, P is the power delivered to the load, and P_0 is the maximum power available from the source. A very simple procedure is to plot $Z' = r + j(x + x_s)$ on a Smith Chart. Maximum power transfer occurs when Z' is the closest to the center of the chart.

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