Abstracts

Impedance Transformation Equations for Exponential, Cosine-Squared, and Parabolic Tapered Transmission Lines (Short Papers)

M.J. Ahmed. "Impedance Transformation Equations for Exponential, Cosine-Squared, and Parabolic Tapered Transmission Lines (Short Papers)." 1981 Transactions on Microwave Theory and Techniques 29.1 (Jan. 1981 [T-MTT]): 67-68.

Closed-form equations that give the value of an arbitrary complex impedance transformed through a length of dissipationless, nonuniform transmission line with exponential cosine-squared, and parabolic taper are presented. These equations are obtained by a second order nonlinear differential (Riccati) equation relating impedance, the nonuniform line impedance and the line length. The results presented should be useful in solving impedance matching problems.

❑ Return to main document.