Abstracts

Microwave Circuit Optimization Employing Exact Algebraic Partial Derivatives (Short Papers)

G.R. Branner. "Microwave Circuit Optimization Employing Exact Algebraic Partial Derivatives (Short Papers)." 1974 Transactions on Microwave Theory and Techniques 22.3 (Mar. 1974 [T-MTT] (Special Issue on Computer-Oriented Microwave Practices)): 336-339.

A technique for the optimization and sensitivity analysis of broad classes of electrical networks is illustrated. The method utilizes the exact algebraic partial derivatives of functions with respect to any desired independent variable. This completely automated technique has the obvious advantage that the derivatives of any circuit response function with respect to any desired component parameter may be obtained with no additional analytical effort on the part of the designer. Several examples are given to illustrate the procedure.

❑ Return to main document.