Abstracts

Scattering Optimization Method for the Design of Compact Mode Converters for Waveguides

T. ul Haq, K.J. Webb and N.C. Gallagher. "Scattering Optimization Method for the Design of Compact Mode Converters for Waveguides." 1995 Transactions on Microwave Theory and Techniques 43.3 (Mar. 1995 [T-MTT]): 559-565.

A method for the design of compact and efficient mode converters for waveguides is presented. The required mode converter is modeled in the form of a scatterer placed in the waveguide and then its surface profile is optimized for maximum excitation of power in the required mode. Design examples are provided which show that such converters can achieve efficiencies of above 98%, while keeping the length of the converter less than that of the conventional mode converters.

❑ Return to main document.