Abstracts

Quasi-static analysis of an optically illuminated directional coupler

A.M.E. Safwat, D.A.M. Khalil, H. Elhennawy and H.F. Ragaie. "Quasi-static analysis of an optically illuminated directional coupler." 1997 Transactions on Microwave Theory and Techniques 45.8 (Aug. 1997, Part II [T-MTT]): 1351-1357.

In this paper, we present the analysis of an optically illuminated directional coupler using a quasi-static technique. Closed-form expressions of the matching conditions in both the dark and illuminated states are developed. The results obtained by our analytical model are in good agreement with the experimental results as well as those obtained by the monolithic microwave integrated circuit analysis and design simulator (MMICAD). A discussion of the effects of the parameter variations are also included.

❑ Return to main document.