Abstracts

Electromagnetic Field Plot of an Inductive Window by the Moment Method

J.R. Natzke, M.R. Wolski and T.K. Ishii. "Electromagnetic Field Plot of an Inductive Window by the Moment Method." 1991 Transactions on Microwave Theory and Techniques 39.8 (Aug. 1991 [T-MTT]): 1296-1297.

A moment method is used to plot the electromagnetic field of an inductive window in a TE/sub 10/ -mode rectangular waveguide. Green's dyadic functions are derived based on Tai's approach, which is a modified form of Hansen's vector wave functions. Based on the computed electric fields, the S matrix and the equivalent aperture reactance of the waveguide window are calculated. This calculation agrees with the previously published closed-form results of Marcuvitz.

❑ Return to main document.