

## Analysis of E-Plane Waveguide Junction with Partial Height Dielectric and Ferrite Inserts

---

Y.Y. Tsai and A.S. Omar. "Analysis of E-Plane Waveguide Junction with Partial Height Dielectric and Ferrite Inserts." 1992 MTT-S International Microwave Symposium Digest 92. 1 (1992 Vol. 1 [MWSYM]): 309-312.

A method is presented to treat a three port E-plane waveguide junction with partial height dielectric and ferrite inserts without finding the propagation constants of the guided modes in the dielectric and ferrite inserts. It is shown that in order to completely describe the fields in the junction some nonphysical terms have to be included in the irrotational set. The numerical results are compared with the experimental results for the E-plane waveguide junction with partial height dielectric and ferrite inserts.

 [Return to main document.](#)