

# Abstracts

## E-plane symmetrical five-port waveguide junction with oversized central cavity

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L. Qiao, J. Shi and S.P. Yeo. "E-plane symmetrical five-port waveguide junction with oversized central cavity." 1999 *Microwave and Guided Wave Letters* 9.9 (Sep. 1999 [MGWL]): 336-338.

The mathematically rigorous least-squares boundary residual method is used to develop a reliable model of a symmetrical five-port waveguide junction that has an oversized central cavity loaded with metallic rod and dielectric sleeve. Tests on a prototype junction yield measured scattering-coefficient results that are in excellent agreement with the predicted values over the entire WR90 bandwidth.

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