

Accuracy of Coupling Computations and its Application to DR Filter Design

H.-W. Yao, J.-F. Liang and K.A. Zaki. "Accuracy of Coupling Computations and its Application to DR Filter Design." 1994 MTT-S International Microwave Symposium Digest 94.2 (1994 Vol. II [MWSYM]): 723-726.

Coupling of two circular cavities by a rectangular iris computed by the improved large aperture theory and by full wave mode matching technique are compared. It is found that the improved large aperture approximation provides reasonable accuracy for a wide range of coupling values. The approximation is applied to design dielectric resonator (DR) filters in which rigorous computation of the couplings by full wave mode matching method is quite difficult and time consuming. Excellent DR filter response is obtained with no adjustment of the coupling iris.

 [Return to main document.](#)