Abstracts

Full wave modeling of electric coupling probes in combline resonators and filters

Chi Wang and K.A. Zaki. "Full wave modeling of electric coupling probes in combline resonators and filters." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1649-1652.

The electric coupling probe for combline resonators and filters is rigorously modeled by the full-wave mode matching method for the first time. The coupling structure is considered as a cascaded network of the resonator and stripline discontinuities, and is solved by cascading the generalized scattering matrices of all the discontinuities. As a result, the electric probe couplings of both rectangular and cylindrical combline resonators and filters can be accurately determined. The validation and accuracy of the method are verified by comparing the numerical results with the measured data and shown to be in good agreement.

❑ Return to main document.