Abstracts

Analysis of a Wire in a Rectangular Cavity

H. Rahman and J. Perini. "Analysis of a Wire in a Rectangular Cavity." 1983 MTT-S International Microwave Symposium Digest 83.1 (1983 [MWSYM]): 230-232.

An efficient method of analyzing a loaded wire enclosed within a rectangular cavity is developed. The wire and the cavity interior are excited by electromagnetic sources exterior to the cavity. The formulation of the problem makes use of the theory of Fourier series expansion to approximate the waveform of unknown currents excited on the wire. This method bypasses the dyadic Green's function approach thereby leading to a solution which is computationally easier to handle.

❑ Return to main document.