

Abstracts

Radial-Line to Coaxial-Line Junction with a Dielectrically Sheathed Post

R.B. Keam and A.G. Williamson. "Radial-Line to Coaxial-Line Junction with a Dielectrically Sheathed Post." 1992 Microwave and Guided Wave Letters 2.3 (Mar. 1992 [MGWL]): 102-104.

An analysis of a coaxial line/radial line junction is presented for the case where the centre conductor of the coaxial line extends the full width across the radial line and is completely sheathed in a lossless dielectric. The problem is analyzed by the Fourier transform method using a realistic model for the coaxial excitation. Expressions for the current distribution on the post and the admittance of the junction are deduced. Comparison of theoretical and experimental results show the theory to be very accurate.

 [Return to main document.](#)