Abstracts

Analysis of an End Launcher for an X-Band Rectangular Waveguide

M.D. Deshpande, B.N. Das and G.S. Sanyal. "Analysis of an End Launcher for an X-Band Rectangular Waveguide." 1979 Transactions on Microwave Theory and Techniques 27.8 (Aug. 1979 [T-MTT]): 731-735.

The analysis of an end-launcher type, coaxial-to-rectangular waveguide transition, exciting dominant TE/sub 01/ mode in X-band rectangular waveguide is presented. Expressions for the real and imaginary parts of the input impedance seen by the coaxial line are derived for the general case of an offset launcher using self-reaction of an assumed current over the loop. The dimensions of the combined electric and magnetic loops having low input VSWR in the coaxial line are determined. There is satisfactory agreement between theoretical and experimental results.

❑ Return to main document.