

Abstracts

A High-Power Rotary Waveguide Joint

P.H. Smith and G.H. Mongold. "A High-Power Rotary Waveguide Joint." 1964 Transactions on Microwave Theory and Techniques 12.1 (Jan. 1964 [T-MTT]): 55-58.

A conceptually new type of contactless multichannel rotary waveguide joint is described. Power handling capability without pressurization exceeds that of the associated waveguides. Electrical features include elimination of impedance and phase variations with rotation, exceptionally low loss and power leakage. Operation is possible over a 10 per cent frequency band with a maximum VSWR of 1.15. Experimental results on a C-band model are given. Both electrical and mechanical design features are presented for a compactly folded design for operation at multimewatt peak powers.

 [Return to main document.](#)