Abstracts

Analysis and Design of a Novel Microstrip-to-Waveguide Transition/Combiner

D.I. Stones. "Analysis and Design of a Novel Microstrip-to-Waveguide Transition/Combiner." 1994 MTT-S International Microwave Symposium Digest 94.1 (1994 Vol. I [MWSYM]): 217-220.

This paper describes the analysis and design of a microstrip-to-waveguide transition/combiner that is eminently suitable for millimeter wave power amplifier application. Analytical and experimental work at Ka band on a two-way combiner showed an insertion loss of 0.5 dB. The port VSWR's were less than 1.6:1 and the input-to-input port isolation was greater than 16 dB over a 3 GHz band. This novel design is highly manufacturable and compatible with integration of monolithic amplifiers and other circuits.

❑ Return to main document.