Abstracts

A passive double-layer microstrip array for the construction of millimeter-wave spatial power-combining amplifiers

T. Ivanov, S. Ortiz, A. Mortazawi, E. Schlecht and J. Hubert. "A passive double-layer microstrip array for the construction of millimeter-wave spatial power-combining amplifiers." 1997 Microwave and Guided Wave Letters 7.11 (Nov. 1997 [MGWL]): 365-367.

A passive double-layer microstrip array for the construction of millimeter-wave quasioptical amplifiers has been demonstrated. A total insertion loss of 3.1 dB was measured for a 138 element divider/combiner at 35.1 GHz. The 3-dB bandwidth is larger than 1 GHz. The array incorporates microstrip-slot-microstrip transitions with an insertion loss of 0.2 dB at the design frequency and microstrip patch antennas with an estimated efficiency of approximately 72%.

❑ Return to main document.