Abstracts

Millimeter-Wave Power Combiner Using Quasi-Optical Techniques

L. Wandinger and V. Nalbandian. "Millimeter-Wave Power Combiner Using Quasi-Optical Techniques." 1983 Transactions on Microwave Theory and Techniques 31.2 (Feb. 1983 [T-MTT] (Special Issue on Millimeter-Waves)): 189-193.

A millimeter- or submillimeter-wave combiner using a quasi-optical open resonator to effectively combine the power output of several solid-state oscillators to a single-frequency is described. The combiner makes use of a symmetrical concave spherical resonator with dielectric wedge launchers as energy couplers. To demonstrate feasibility of this concept, experiments were carried out by using two InP Gunn oscillators at 60 GHz, and a combining efficiency of 54 percent has been achieved.

❑ Return to main document.