Abstracts

Efficient power-combining of nonidentical double-diode waveguide oscillator-modules

S. Sarkar and B.V. Ramana Reddy. "Efficient power-combining of nonidentical double-diode waveguide oscillator-modules." 2000 Microwave and Guided Wave Letters 10.10 (Oct. 2000 [MGWL]): 418-420.

Power-combiner formed by cascading nonidentical double-diode waveguide oscillator modules is studied. Theoretical analysis shows that power reflection between the diode mounting planes of two immediately neighboring modules is reduced if the output side module of the two is of lower power output. Decrease in reflection increases power-combining efficiency. The relative positions of two neighboring nonidentical modules is therefore important for the combiner design. Results obtained from experimental studies confirm this.

❑ Return to main document.