Abstracts

Wire-Grid Waveguide Bolometers for Multimode Power Measurement

B.M. Schiffman, L. Young and R.B. Larrick. "Wire-Grid Waveguide Bolometers for Multimode Power Measurement." 1965 Transactions on Microwave Theory and Techniques 13.4 (Jul. 1965 [T-MTT]): 427-431.

A grid of many fine wires connected in parallel, which completely fills the waveguide cross section, is shown to be useful as a multimode waveguide bolometer. Two such grids with wires that are perpendicular to each other are capable of sampling the power in all modes of propagation below some upper frequency limit determined by the wire spacing. In one case the "wires" consisted of metallized glass fibers, and in a second case they consisted of Wollaston wire wrapped tround supporting glass fibers. The wire-grid configuration which evolved from the thin-film bolometer of the same effective area is more stable and reproducible than the latter.

❑ Return to main document.