Abstracts

A 94-GHz Diode-Based Single Six-Port Reflectometer (Short Papers)

H.M. Cronson and R.A. Fong-Tom. "A 94-GHz Diode-Based Single Six-Port Reflectometer (Short Papers)." 1982 Transactions on Microwave Theory and Techniques 30.8 (Aug. 1982 [T-MTT]): 1260-1264.

This paper describes design considerations and gives measurement results for a single six-port reflectometer constructed from WR-10 waveguide with silicon Schottky diode detectors. Tradeoffs between various types of power detectors are discussed along with criteria for six-port junction design. The merits of two calibration procedures are compared. Measurements at 94 GHz indicate good agreement between expected and experimental values of q-points and of a sliding mismatch with nominal 0.1 reflection coefficient.

❑ Return to main document.