

# Abstracts

## Performance Characteristics of an Automated Broad-Band Bolometer Unit Calibration System

---

*E.L. Komarek. "Performance Characteristics of an Automated Broad-Band Bolometer Unit Calibration System." 1977 Transactions on Microwave Theory and Techniques 25.12 (Dec. 1977 [T-MTT] (1977 Symposium Issue)): 1122-1127.*

The arbitrary six-port reflectometer concept has been applied to an automated broad-band system in the 1-18-GHz frequency range for the calibration of bolometer units. Performance evaluation results show an improvement in precision over other automated and manually operated measurement systems used at the National Bureau of Standards. Initial evaluation results reported here show a single measurement standard deviation of 0.02 to 0.41 percent from 2-18 GHz. The system is currently used for the calibration of coaxial and waveguide bolometer unit effective efficiency.

[Return to main document.](#)