Abstracts

Cryogenic All Solid-State Millimeter-Wave Receivers for Airborne Radiometry (Dec. 1983 [T-MTT])

B. Vowinkel, K. Gruener and W. Reinert. "Cryogenic All Solid-State Millimeter-Wave Receivers for Airborne Radiometry (Dec. 1983 [T-MTT])." 1983 Transactions on Microwave Theory and Techniques 31.12 (Dec. 1983 [T-MTT] (1983 Symposium Issue)): 996-1001.

Cryogenic receiver modules for 90 and 140 GHz have been developed that are part of an airborne imaging system. They consist of Schottky-barrier mixers followed by GaAs-FET IF amplifiers. The DSB receiver noise temperatures are 210 K for the 90-GW and 250 K for the 140-GHz system. The instantaneous bandwidth is 2.5 GHz for both front ends. Results of some flight tests are presented.

❑ Return to main document.