# Abstracts

## Improvements in the Millimeter-Wave System for Josephson Junction Array Voltage Standard Systems

*H. Yoshida, Y. Sakamoto, U. Klein and T. Endo. "Improvements in the Millimeter-Wave System for Josephson Junction Array Voltage Standard Systems." 1993 MTT-S International Microwave Symposium Digest 93.1 (1993 Vol. I [MWSYM]): 389-392.*

Improvements in the millimeter-wave system have been accomplished in order to generate higher and more accurate Josephson voltages directly. The 94-GHz oscillator output power has been increased to 90 mW by incorporating a new InP Gunn diode, and a low-loss dielectric waveguide has been installed in liquid helium in order to increase the millimeter-wave power available at the input of the Josephson junction array chip. The stability of the millimeter-wave frequency has been improved to the order of 10/sup -11/. The losses of the waveguide-to-microstrip transition have been investigated but remain a matter of further improvements.

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