

# Abstracts

## Micro-Machining in Submillimeter-Wave Circuits

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*D. Rutledge. "Micro-Machining in Submillimeter-Wave Circuits." 1996 MTT-S International Microwave Symposium Digest 96.3 (1996 Vol. III [MWSYM]): 1889-1892.*

Micro-machining technology has been used in submillimeter-wave circuits for more than ten years, but it is just beginning to appear in receivers on radio telescopes. A variety of rod, membrane, slot, and horn antennas have been demonstrated, together with hollow-metal guides and sliding shorts. Recently, a micro-machined waveguide receiver with a SIS junction on a 1- $\mu\text{m}$  membrane has been demonstrated at 850 GHz with a DSB noise temperature of 450 K.

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