

# Abstracts

## Higher Order Frequency Multipliers -- A Solution for mm- and Submm-Wave Local Oscillator Signal Generation

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*T. Tolmunen, A. Raisanen and M. Sironen. "Higher Order Frequency Multipliers -- A Solution for mm- and Submm-Wave Local Oscillator Signal Generation." 1989 MTT-S International Microwave Symposium Digest 89.3 (1989 Vol. III [MWSYM]): 1223-1226.*

A frequency quadrupler for 140 GHz and frequency doublers for 183 GHz and 230 GHz have been analyzed both theoretically and experimentally. A theoretical comparison of generation of 345 GHz signal using a doubler, tripler, quadrupler or two cascaded doublers, and generation of 460 GHz signal using a doubler, quadrupler or two cascaded doublers has also been carried out.

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