

Miniature Millimeter-Wave Integrated Circuit Wideband Downconverters

A. Grote, R.S. Tahim and K. Chang. "Miniature Millimeter-Wave Integrated Circuit Wideband Downconverters." 1985 MTT-S International Microwave Symposium Digest 85.1 (1985 [MWSYM]): 159-162.

The miniature millimeter-wave integrated circuit LO/mixer assembly was developed with over the full waveguide band coverage and good temperature stability. A conversion loss of less than 7 dB was achieved over 16 GHz instantaneous IF frequency with the RF swept from 30 to 46 GHz and the LO at 48 GHz. With another mixer, when the RF was swept from 18 to 30 GHz and the LO was at 32 GHz, similar results were achieved. Using resonant stub and dielectric temperature compensation produced good temperature stability.

 [Return to main document.](#)