

# Abstracts

## Q- and V-Band MMIC Chip Set Using 0.1 $\mu\text{m}$ Millimeter-Wave Low Noise InP HEMTs

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*R. Isobe, C. Wong, A. Potter, L. Tran, M. Delaney, R. Rhodes, D. Jang, L. Nguyen and M. Le. "Q- and V-Band MMIC Chip Set Using 0.1  $\mu\text{m}$  Millimeter-Wave Low Noise InP HEMTs." 1995 MTT-S International Microwave Symposium Digest 95.3 (1995 Vol. III [MWSYM]): 1133-1136.*

A MMIC chip set for millimeter-wave (mmW) communication systems has been developed. The highlights are a 3-stage Q-band LNA with 2.0 dB NF/ 22 dB of gain and a 2-stage V-band LNA with 2.3 dB NF/ 15 dB of gain. Altogether, 7 MMIC chips (2 LNAs, 2 mixers, 2 downconverters, and 1 LO amplifier) make up this effort to develop low noise mmW building block functions in the InP HEMT technology.

 [Return to main document.](#)