# Abstracts

## A 44-60 GHz Monolithic pHEMT Grid Amplifier

*M.P. De Lisio, S.W. Duncan, D.-W. Tu, S. Weinreb, C.-M. Liu and D.B. Rutledge. "A 44-60 GHz Monolithic pHEMT Grid Amplifier." 1996 MTT-S International Microwave Symposium Digest 96.2 (1996 Vol. II [MWSYM]): 1127-1130.*

We present a 36-element monolithic millimeter-wave grid amplifier. The grid operates in the U-band, using pseudomorphic High Electron Mobility Transistors (pHEMT's) as the active devices. The grid has a peak gain of 6.5 dB at 44 GHz. The grid can be tuned to operate from 44 GHz to 60 GHz by changing the positions of external polarizers and tuning slabs. At 60 GHz, the grid has a peak gain of 2.5 dB. Gain and tuning curves are consistent with theoretical predictions.

❑ Return to main document.