# Abstracts

## A Highly Linear MESFET

*S.L.G. Chu, J. Huang, W. Struble, G. Jackson, N. Pan, M.J. Schindler and Y. Tajima. "A Highly Linear MESFET." 1991 MTT-S International Microwave Symposium Digest 91.2 (1991 Vol. II [MWSYM]): 725-728.*

A highly linear MESFET has been developed. This device incorporates a spike profile in its active channel, and was designed specifically for linearity. A third-order intercept (IP3) and a 1 dB compression power of 43 dBm and 19 dBm, respectively, have been measured on a 400 µm device at 10 GHz. The difference between these two numbers, 24 dB, is the largest yet reported for a MESFET. This device also dissipates only 400 mw of dc power, yielding a linearity Figure-of-Merit (FOM) (IP3/P/sub dc/) of 50.

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